



भारतीय विमानपत्तन आर्थिक विनियामक प्राधिकरण
सफदरजंग एयरपोर्ट, नई दिल्ली-110003

प्राप्त
हायरी न. 1786/
तारीख..... 22/9/2023

भारतीय विमानपत्तन प्राधिकरण
AIRPORTS AUTHORITY OF INDIA

AAI/Tariff/Patna/2023-24

Date: 22nd September 2023

The Secretary,
Airports Economic Regulatory Authority of India,
AERA Building, Administrative Complex,
Safdarjung Airport,
New Delhi-110003

Sub: Multi Year Tariff Proposal (MYTP) for the 2nd Control period (01.04.2023 to 31.03.2028) along with True up for the 1st Control Period (01.04.2018 to 31.03.2023) in respect of Jay Prakash Narayan International Airport, Patna

Sir,

AERA vide its Order No. 13/2019-20 dated 24.10.2019 has determined the Aeronautical Tariff in respect of Jay Prakash Narayan International Airport, Patna for the 1st Control Period 01/04/2018 to 31/03/2023.

AAI has prepared the MYTP for the Second Control Period (FY 01.04.2023 to 31.03.2028) along with the True-up for the 1st Control Period (01.04.2018 to 31.03.2023) as per AERA methodology. The proposal has been prepared by truing up the 1st control period 01/04/2018 to 31/03/2023 based on accounts duly approved by AAI Board and for the 2nd control period based on projections.

The MYTP along with detailed submissions and workings are enclosed for your consideration and approval.

(V Vidya)

Executive Director (JVC-Tariff)



Submission of MYTP for the 2nd Control Period (01.04.2023 to 31.03.2028) along with True up of 1st Control Period (01.04.2018 to 31.03.2023) for Jay Prakash Narayan International Airport, Patna.

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1. Background and Introduction to Jay Prakash Narayan International Airport, Patna

1.1. Background of Airport Authority of India

- 1.1.1. Airports Authority of India (AAI) was constituted under the Airports Authority of India Act 1994 (“AAI Act”) and came into being on 1st April 1995 by merging erstwhile National Airports Authority and International Airports Authority of India, with a view to accelerate the integrated development, expansion and modernization of the air traffic services, passenger terminals, operational areas, and cargo facilities at the airports in the country. The merger brought into existence a single organization entrusted with the responsibility of creating, upgrading, maintaining, and managing civil aviation infrastructure, both on the ground and air space in the country.

1.2. Overview and History of Jay Prakash Narayan International Airport

- 1.2.1. Jay Prakash Narayan International Airport is the 16th Busiest Airport in India based on the Passenger Traffic Handled at airports in India in FY2018-19. Patna Airport as known from the various sources was the Golf Course of Maharaja Darbhanga & today’s shape has been evolved after the no. of expansion and extension. Patna is one of the major airport catering to entire Bihar. This is the only airport which is located in the heart of city, hardly 3 km from Secretariat, 5 k.m from railway station and 7 km from City Centre. This airport is used for reaching various tourist location i.e. Nalanda, Vaishali, Pawapuri & Rajgir and Patna itself. Long back this was the land of all the great empire namely Mauryas & Guptas. This is the land of eminent scholar Chanakaya & Lord Buddha. This is the place who has taught democratic value to entire world as the Vaishali 70.k.m from Patna was the oldest known republic in global history.
- 1.2.2. AERA vide letter dated 19.07.2018 had shifted 1st CP from 01.04.2016 to 31.03.2021 to 01.04.2018 to 31.03.2023 and also allowed to carry forward the shortfall for FY 2016-17 & 2017-18 to ARR for determining Tariff for the 1st Control Period.
- 1.2.3. AERA had issued Tariff order dated 24th October 2019 vide order no.13/2019-20 for the 1st Control Period (01.04.2018 to 31.03.2023).

2. Methodology for Tariff Determination

2.1. Methodology / Approach to preparation of MYTP Submission

- 2.1.1. The Authority, vide Order No. 13/ 2010-11 dated 12.01.2011 (referred to as “Airport Order” hereinafter) and Direction No. 5/2010-11 dated 28.02.2011 (referred to as “Airport Guidelines” hereinafter), has issued guidelines to determine tariffs at major airports based on Single Till mechanism. Subsequently, the Authority has amended guidelines vide Order no. 14/2016-17 dated 12.01.2017 to determine future tariffs using Hybrid Till.
- 2.1.2. The tariff determination process consists of true-up of 1st Control Period and determination of building blocks for 2nd Control Period. The Authority proposes to undertake true-up of 1st Control Period and the determination of building blocks for 2nd Control Period under Hybrid Till.
- 2.1.3. The Aggregate Revenue Requirement (ARR) under regulatory framework of Authority is calculated as under

$$ARR = \sum_{t=1}^5 ARR_t$$

$$ARR_t = (FRoR \times RAB_t) + D_t + O_t + T_t - \alpha \times NAR_t$$

Where,

t is the Tariff Year in the Control Period;

ARR_t is the Aggregate Revenue Requirement for the year t;

FRoR is the fair rate of return for the Control Period;

RAB_t is the Aeronautical Regulatory Asset Base for the year t;

D_t is the Depreciation corresponding to the Aeronautical RAB for year t;

O_t is the Aeronautical Operation and Maintenance Expenditure for year t, which include all expenditures incurred by the Airport Operator(s) towards aeronautical activities including expenditure incurred on statutory operating costs and other mandatory operating costs;

T_t is the Tax for the year t, which includes payments by Airport Operator in respect of corporate tax on income from assets/ amenities/ facilities/ services taken into consideration for determination of ARR for year t;

α is 30% cross subsidy factor for revenue from services other than aeronautical services under Hybrid Till for 2nd Control Period. α was 100% cross subsidy factor under Single Till during First Control Period.

NAR_t is the revenue from services other than aeronautical services (Non-Aeronautical Revenues or NAR) for year t.

- 2.1.4. Based on ARR, Yield per passenger is calculated as formula given below:

$$Yield\ per\ passenger(Y) = \frac{\sum_{t=1}^5 PV(ARR_t)}{\sum_{t=1}^5 (VE_t)}$$

Where,

Present Value (PV) of ARR_t for a tariff year t is calculated at the beginning of the Control Period and the discounting rate for calculating PV is equal to the Fair Rate of Return determined by the Authority.

VE_t is the Traffic Volume in a tariff year t as estimated by the Authority.

ARR_t is the Aggregate Revenue Requirement for tariff year t .

3. True Up for First Control Period (FCP)

3.1.1. As per the Decision No.2 of Order No. 10/2017-18,

2b. The Authority decides to apportion CHQ/RHQ overheads on revenue basis.

2c. The Authority decides to consider the revenues from cargo facility, Ground handling services and supply of fuel to aircraft including land lease rentals as aeronautical revenue.

2d. The Authority decides the following depreciation rates.

- i. For asset types not defined under Companies Act (runway, taxiway and aprons): 3.33% based on useful life of 30 years from FY 2011-12 onwards.
- ii. For asset types defined under Companies Act: rates prevalent under the Companies Act 1956 till FY 2013-14 and as per the Companies Act 2013 from FY 2014-15 onwards as the effective date of implementation of the Companies Act 2013 is 01.04.2014.

4. Traffic Actual vs Forecast for 1st control period (FCP)

4.1. Overview

4.1.1. The Airports Authority of India has true up 1st Control Period (2018-19 to 2022-23) with respect to Patna Airport.

4.2. Traffic

4.2.1. As per Decision No. 1(page22) of Order No. 13/2019-20, the Authority decided:

Decision No. 1(i) “The Authority decides to consider the ATM and passenger traffic as per Table 6”.

Decision No. 1(ii) “The Authority decides to true-up the traffic volume (ATM and passengers) based on actual traffic in 1st control period while determining tariffs for the 2nd control period”.

Table 1: Traffic allowed as per Table No-6(p20) for First Control Period Order No. 13/2019-20

YEAR	Passenger			ATM		
	Domestic	International	Combined	Domestic	International	Combined
Growth rates						
2018-19	31%	NA	31%	28%	NA	28%
2019-20	28%	NA	28%	18%	NA	18%
2020-21	15%	NA	15%	18%	NA	18%
2021-22	15%	NA	15%	18%	NA	18%
2022-23	28%	NA	28%	18%	NA	18%
Traffic						
2018-19	4,061,990	-	4,061,990	28,087	-	28,087
2019-20	5,199,347	-	5,199,347	33,143	-	33,143
2020-21	5,979,249	-	5,979,249	39,109	-	39,109
2021-22	6,876,136	-	6,876,136	46,149	-	46,149
2022-23	8,801,454	-	8,801,454	54,456	-	54,456

Table 2: Actual Traffic

YEAR	DOM	INTL	Combined	% Increase	DOM	INTL	Combined	% Increase
2018-19	4061990	-	4061990	-	28087	-	28087	-
2019-20	4525765	-	4525765	11.42%	30953	-	30953	10.20%
2020-21	2710000	-	2710000	-40.12%	21572	-	21572	-30.31%
2021-22	2967681	-	2967681	9.51%	25501	-	25501	18.21%
2022-23	3748635	-	3748635	26.32%	27931	-	27931	9.53%
TOTAL	1,80,14,071	0	1,80,14,071	0	1,34,044	0	1,34,044	0

Table 3: Variance between actual and AERA approved traffic is tabulated below:

YEAR	UoM	Passenger			ATM		
		DOM	INTL	Combined	DOM	INTL	Combined
2018-19	No's	0	-	-	0	-	-
2019-20	No's	-6,73,582	-	-6,73,582	-2,190	-	-2,190
2020-21	No's	-32,69,249	-	-32,69,249	-17,537	-	-17,537
2021-22	No's	-39,08,455	-	-39,08,455	-20,648	-	-20,648
2022-23	No's	-50,52,819	-	-50,52,819	-26,525	-	-26,525

4.2.1.1. Significant reason for increase/ decreases in Traffic are as follows

- 4.2.1.1.1. AERA had considered higher growth of PAX 28% for FY 2019-20 & FY 2022-23 as against the 15% proposed by AAI for the 1st Control Period.
- 4.2.1.1.2. AERA had considered higher growth of ATM 18% for FY 2019-20 to FY 2022-23 as against the 13% proposed by AAI for the 1st Control Period.
- 4.2.1.1.3. Fall in ATM and Passenger for FY 2019-20 and FY 2020-21 was due to Pandemic.

5. Allocation of Assets between Aeronautical and Non-Aeronautical

5.1 For the allocation of assets, expenditure between aeronautical and non-aeronautical services, Airports Authority of India had divided assets into aeronautical, non-aeronautical and common components. Common components have further been segregated into aeronautical and non-aeronautical assets by applying one of the following three ratios:

5.2 **Terminal Area Ratio-** Ratio of Aeronautical area to non-aeronautical area (For terminal related assets).

Table 4: Terminal Building Ratio as approved by AERA for 1st Control period (Table 09, P-24 of Order No. 13/2019-20)

S. No.	Category	Area (Sq. meters)
1	Commercial Entities- Restaurant/ Snack Bars	739.33
2	Commercial Entities- T.R. Stall	126.75
3	Regulatory & allied agencies	84.60
4	Airlines	258.50
	Total non-aeronautical area (1)	1209.18
	Total area of terminal (2)	8589.00
	Terminal area ratio (1/2)	14.08%

Table 5: True Up of Terminal Building Ratio for 1st Control Period

Particulars	Location	2018-19	2019-20	2020-21	2021-22	2022-23
Space Rented	T. Building (SQM)	1240.89	482.61	689.15	751.72	669.84
Capacity	T. Building (SQM)	8589	8589	9795	9795	9795
Non-Aero %	T. Building	14.45%	5.62%	7.04%	7.67%	6.84%
Aero %	T. Building	85.55%	94.38%	92.96%	92.33%	93.16%

* Space falling vacant due to concessionaire leaving due to Pandemic and increase in Terminal Building area due to modification of existing terminal Building in FY 2020-21.

5.2.1 **Quarters Ratio-** Ratio of staff providing ANS service staying in residential building to staff providing aeronautical service staying in residential building.

Table 6: True Up of Quarters Ratio for 1st Control Period

Particulars	2018-19	2019-20
Total No. of Quarters	70	70
No. of Quarters ANS	25	25
No. of Quarters APT	45	45
ANS Usage Ratio	35.71%	35.71%
Aero Usage Ratio	64.29%	64.29%

* Quarters were got vacated on 31.05.2019 due to construction of New TB, ATC Tower, MT, Fire & New Quarters.

5.2.3 **Employee Ratio-** Ratio of staff providing commercial assets to staff providing aeronautical services.

Table 7: Employee Ratio as approved by AERA for 1st Control period as per Table: -7(p23) of Order No-13/2019-20)

Particulars	Ratio
Employee Ratio (Non-Aero : Aero)	3:98

Table 8: True Up of Employee Ratio for 1st Control Period

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23
Total Airport Strength	88	99	98	99	101
Total ANS Strength	74	72	75	67	63
Non Aero Emp. (Land+Commercial)	3	4	3	3	5
Common Emp.-(Finance & HR)	22	20	21	18	18
Total	187	195	197	187	187
Common Employee's apportionment					
Total Airport Strength	11	11	11	10	10
Total ANS Strength	10	8	9	7	7
Non Aero Emp. (Land+Commercial)	1	1	1	1	1
Total	22	20	21	18	18
Head Count after apportionment of Common Employees					
Total Airport Strength	99	110	109	109	111
Total ANS Strength	84	80	84	74	70
Non Aero Emp. (Land Commercial)	4	5	4	4	6
Total	187	195	197	187	187
Employee ratio for (ANS: AERO: Non-Aero)					
ANS	44.92%	41.03%	42.64%	39.57%	37.43%
Aero	52.94%	56.41%	55.33%	58.29%	59.36%
Non-Aero	2.14%	2.56%	2.03%	2.14%	3.21%
Employee ratio for (AERO: Non-Aero)					
Aero	96.12%	95.65%	96.46%	96.46%	94.87%
Non-Aero	3.88%	4.35%	3.54%	3.54%	5.13%

- Employee Ratio was taken based on FY 2017-18 for projecting 1st Control Period and the above ratio is based on the Actual for FY 2018-19 to FY 2022-23 have been considered for trued up.

6.Capital Expenditure for the 1st Control Period

6.1 AERA had approved the Proposed Capital Expenditure of Rs. 805.80 cr for the 1st Control Period. This has been shown in the Table Below

Table 9: Approved Capital expenditure by Authority as per Table No.19 (P43) of Order No. 13/2019-20 is as follows:

Asset Category (₹ Crores)	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Runways, Aprons and Taxiways	6.26	-	-	-	4.20	10.46
Road, Bridges & Culverts	-	-	-	-	81.68	81.68
Building - Terminal	5.59	11.81	-	-	398.35	415.75
Building – semi permanent	0.95	13.66	-	-	-	14.61
Building - Residential	-	32.56	-	-	-	32.56
Plant & Machinery	4.06	-	-	-	-	4.06
Electrical Installations	1.59	11.97	-	-	227.66	241.22
CFT/Fire Fighting Equipment	4.03	-	-	-	-	4.03
Others	1.43	-	-	-	-	1.43
Total	23.91	70.00	-	-	711.89	805.80

The Actual Capital Expenditure incurred during the 1st control period has been shown in the table below.

Table 10: Actual Capital Expenditure for the 1st Control Period is as follows:

S.No.	Particulars (₹ Crores)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
1	Aprons	0.00	0.00	0.00	8.10	0.00	8.10
2	Road, Bridges & Culverts	0.44	3.55	0.00	0.00	0.00	3.99
3	Building- Terminal	1.01	2.78	12.94	0.00	0.51	17.24
4	Building - Residential	0.00	0.00	0.00	0.00	20.18	20.18
5	Boundary Wall -Operational	0.00	0.09	0.00	0.00	0.00	0.09
6	Other Buildings-Unclassified	0.00	0.54	0.00	0.61	0.00	1.15
7	Computer & Peripherals : End User Devices	0.00	0.30	0.15	0.00	0.10	0.55
8	Intangible Assets- Software	0.03	0.10	0.00	0.00	0.00	0.13
9	Plant & Machinery	5.77	0.74	5.08	1.03	11.88	24.51
10	Tools & Equipments	0.30	3.09	0.44	0.61	0.01	4.46
11	Office Furniture	0.49	1.11	0.02	0.21	0.00	1.83
12	Other Vehicles	0.24	1.09	0.65	0.64	0.10	2.72
13	Other Office Equipments	0.32	0.30	0.14	0.00	0.00	0.76
14	Furniture & Fixtures: Trolleys	0.18	0.00	0.00	0.00	0.00	0.18
15	X Ray Baggage System	0.04	1.96	0.00	0.00	0.00	2.00
16	CFT/Fire Fighting Equipments	5.29	0.00	0.00	0.00	0.00	5.29
	Total	14.12	15.64	19.42	11.21	32.78	93.17

The above assets included IDC & Financing Allowance of Rs. 5.58 cr.

- The Major variance in projected vs. Actual is due to shifting of proposed date of capitalization (Due to Covid-19) of the project amounting to Rs.680.21 from 31.03.2023 to 31.12.2024(PDC).
- During 1st Control Period Rs.53.89 cr was incurred on unplanned capex due to operational requirements.

The Actual Capital Expenditure (Planned & Unplanned) incurred during the 1st control period has been shown in the table below.

Table 11: Planned Capital Expenditure for the 1st Control Period is as follows:

S.No.	Particulars (₹ Crores)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
1	Aprons	0.00	0.00	0.00	7.44	0.00	7.44
2	Building- Terminal	0.30	2.61	0.00	0.00	0.00	2.92
4	Building - Residential	0.00	0.00	0.00	0.00	19.44	19.44
5	Boundary Wall -Operational	0.00	0.09	0.00	0.00	0.00	0.09
6	Intangible Assets- Software	0.03	0.00	0.00	0.00	0.00	0.03
7	Plant & Machinery	0.16	0.15	0.00	0.00	1.77	2.08
8	Tools & Equipment	0.18	0.42	0.00	0.00	0.00	0.60
9	Other Vehicles	0.00	1.08	0.00	0.00	0.00	1.08
10	Electrical Installations	0.00	0.00	0.00	0.00	0.00	0.00
11	Other Office Equipment	0.17	0.00	0.14	0.00	0.00	0.32
12	CFT/Fire Fighting Equipment	5.29	0.00	0.00	0.00	0.00	5.29
	Total	6.12	4.35	0.14	7.44	21.22	39.28

Table 12: Unplanned Capital Expenditure for the 1st Control Period is as follows: -

S.No.	Particulars (₹ Crores)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
1	Aprons	0.00	0.00	0.00	0.65	0.00	0.65
2	Road, Bridges & Culverts	0.44	3.55	0.00	0.00	0.00	3.99
3	Building- Terminal	0.71	0.17	12.94	0.00	0.51	14.32
4	Building - Residential	0.00	0.00	0.00	0.00	0.73	0.73
5	Other Buildings-Unclassified	0.00	0.54	0.00	0.61	0.00	1.15
6	Computer & Peripherals: End User Devices	0.00	0.30	0.15	0.00	0.10	0.55
7	Intangible Assets- Software	0.00	0.10	0.00	0.00	0.00	0.10
8	Plant & Machinery	5.62	0.59	5.08	1.03	10.11	22.43
9	Tools & Equipments	0.13	2.67	0.44	0.61	0.01	3.87
10	Office Furniture	0.49	1.11	0.02	0.21	0.00	1.83
11	Other Vehicles	0.24	0.01	0.65	0.64	0.10	1.64
12	Other Office Equipments	0.14	0.30	0.00	0.00	0.00	0.45
13	Furniture & Fixtures: Trolleys	0.18	0.00	0.00	0.00	0.00	0.18
14	X Ray Baggage System	0.04	1.96	0.00	0.00	0.00	2.00
15	CFT/Fire Fighting Equipments	0.00	0.00	0.00	0.00	0.00	0.00
	Total	7.99	11.29	19.28	3.76	11.56	53.89

7. Depreciation

7.1 AERA had approved the Depreciation for the 1st Control Period as per Order No.35/2017-18 titled “In the matter of Determination of Useful life of Airport Assets. This has been shown in the Table Below

Table No:13 Depreciation rates adopted by AAI as per Table No.24 (P-49) of Order No.13/2019-20

Asset Class Name	Classification	Depreciation Rate from 1.4.2014 onwards	Dep as per Order 35 (1.4.2018 onwards)
Runways, T/way, Apron	R/W, T/W, Apron	3.33%	3.33%
Building Freehold	Residential Building	3.33%	3.33%
Building Freehold	Terminal Building/Other Building	3.33%	3.33%
Building Freehold	Road	3.33%	10.00%
Building Freehold	Temporary Building	33.33%	33.33%
Boundary- Freehold	B/w Residential	3.33%	10.00%
Boundary- Freehold	B/w Operation	3.33%	10.00%
Boundary- Freehold	Temporary B/W(Fencing)	100.00%	10.00%
Plant & Equipment-Fr	Plant & Equipment	6.67%	6.67%
Plant & Equipment-Fr	Tools & Equipment	6.67%	6.67%
Plant & Equipment-Le	Xray Baggage	6.67%	6.67%
Furniture & Fixtures	Office Furniture	10.00%	14.29%
Furniture & Fixtures	Office Furniture-Trolley	10.00%	33.33%
Vehicles-Fire	CFT & Fire Fighting Equip.	6.67%	6.67%
Vehicles-Freehold	Car/Jeep etc	12.50%	12.50%
Office Appliances-Fr	Office Appliances	20.00%	20.00%
Office Appliances-Fr	Computer	16.67%	33.33%
Computer Software-Fr	Software	20.00%	20.00%
Plant & Equipment-Fr	Elect Installation	10.00%	10.00%

Table 14: Depreciation as per Table No.26 (P-51) of Order No. 13/2019-20 is as follows:

Particulars (₹ Crores)	Control period					
	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Depreciation	3.65	5.85	7.56	7.32	27.64	52.02

Table 15: True Up of Depreciation during FY 18-19 to FY 22-23 is as follows:

Particulars (₹ Crores)	Control period					
	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Depreciation	3.43	4.07	4.73	5.23	5.90	23.36

Significant reason for variations in Depreciation are as follow:

- The Major variance in Projected vs Actual is due to shifting of Proposed date of capitalization of the project amounting to Rs.680.21 from 31.03.2023 to 31.12.2024(PDC).
- During 1st Control Period Rs.53.89 cr were incurred on unplanned capex (Operational requirement).
- IDC and Financing allowance of Rs.5.58 cr have not been considered during true up of 1st Control Period.

8. Regulatory Asset Base for the 1st Control Period.

8.1 AERA had approved the Average RAB for the 1st Control.

Table 16: RAB for 1st Control Period as per Table No, 27 (P-54) of Order no. 13/2019-20 is as follows:

S. No.	Particulars (₹ Crore)	Pre-control regulatory period		Control period					Total
		FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	
A	Opening Aeronautical RAB*	15.4	17.3	19.0	39.0	103.1	95.6	88.3	345
B	Aeronautical assets capitalized during the year	4.4	4.3	23.9	70.0	0.0	0.0	711.9	805.8
C	Disposals/ Transfers	0.0	0.1	0.3	0.0	0.0	0.0	10.1	10.4
D	Depreciation	2.4	2.5	3.6	5.8	7.6	7.3	27.6	51.9
E	Closing Aeronautical RAB (A+B-C-D)	17.3	19.0	39.0	103.1	95.6	88.3	762.4	1088.4
F	Average RAB (A+E)/2	16.3	18.2	29.0	71.1	99.4	91.9	425.3	716.7

Table No17: True Up of RAB for the 1st Control Period is as follows:

	Particulars (₹ Crore)	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23	Total 1 st CP
A	Opening Aeronautical RAB*	15.38	17.35	19.04	29.42	41.00	55.69	61.66	206.80
B	Aeronautical assets capitalized during year	4.37	4.34	14.12	15.64	19.42	11.21	32.78	93.17
C	Disposals/ Transfers	0.00	0.15	0.31	0.00	0.00	0.00	0.00	0.31
D	Depreciation	2.40	2.51	3.43	4.07	4.73	5.23	5.90	23.36
E	Closing Aeronautical RAB (A+B-C-D)	17.35	19.04	29.42	41.00	55.69	61.66	88.54	276.30
	Average RAB (A+E)/2	16.36	18.19	24.23	35.21	48.34	58.68	75.10	241.55

*Opening Aeronautical RAB does not include value of land

Significant reasons for variations in RAB and Depreciation are as follow

- The Major variance in projected vs. Actual is due to shifting of proposed date of capitalization (Due to Covid-19) of the project amounting to Rs.680.21 from 31.03.2023 to 31.12.2024(PDC).
- During 1st Control Period Rs.53.89 Crores were incurred on unplanned capex (Operational requirement).

9 Fair Rate of Return (FRoR)

9.1 AERA had considered the FRoR at 14% in line with the decision by AERA taken for Chennai, Kolkata, Guwahati & Lucknow airports for the First Four years of Control Period and 11.54% for the fifth year of the Control Period.

Table 18: Summary of Projected FRoR on Regulatory Asset Base is as follows

Particulars (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Average Regulatory Asset Base (RAB)	29.01	71.06	99.36	91.93	425.35	716.71
Fair Rate of Return (FRoR)	14%	14%	14%	14%	11.54%*	
Return on Average RAB @ 14%	4.06	9.95	13.91	12.87	49.09	89.88

- The Authority considered FRoR 11.54% for the final year of the first Control Period, in which the terminal building is expected to be operationalized.

Table 19: Summary of FRoR on Regulatory Asset Base (True Up) for the 1st Control Period is as follows

Particulars (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Average Regulatory Asset Base (RAB)	24.23	35.21	48.34	58.68	75.10	241.55
Fair Rate of Return (FRoR)	0.14	0.14	0.14	0.14	0.14	
Return on Average RAB @ 14%	3.39	4.93	6.77	8.21	10.51	33.82

Significant reasons for variations in Average RAB are as follow

- The Major variance in projected vs. Actual is due to shifting of proposed date of capitalization (Due to Covid-19) of the project amounting to Rs.680.21 from 31.03.2023 to 31.12.2024(PDC).
- IDC and Financing allowance of Rs.5.58 Crores have not been considered during true up of 1st Control Period.
- Change in FRoR to 14% against 11.54% considered by AERA for the final year of the first Control Period as no loan (Debt) has been availed due to non-execution of project.
- During 1st Control Period Rs.53.89 Crores was incurred on unplanned capex (Operational requirement).

10. Operating Expenses

10.1 AAI submitted that the allocation of CHQ/RHQ expenses among individual airports has been done on the basis of revenue.

10.2 Table No 20 Operating & Maintenance (O&M) expenses as considered by the Authority for the 1st Control Period as per Table No.45 (p-76) of Order No.13/2019-20 is as follows: -

Particulars (₹ Crore)	Control period					Total
	2018-19	2019-20	2020-21	2021-22	2022-23	
Payroll expenses	17.16	18.43	19.72	21.1	24.68	101.09
Provision for Retirement Benefit	3.01	3.22	3.44	3.68	4.31	17.66
Total Payroll Expenditure	20.17	21.65	23.16	24.78	28.99	118.75
Administration and General expenses –non CHQ/RHQ	2.35	2.56	2.8	3.05	3.42	14.18
Administration and General expenses – CHQ/RHQ	20.52	21.55	22.62	23.76	24.94	113.39
Total Admin & General Expenditure	22.87	24.11	25.42	26.81	28.36	127.57
Repairs and maintenance	4.23	9.84	10.3	10.81	11.38	46.56
Utilities and outsourcing expenses	2.04	2.07	2.11	2.15	2.36	10.73
Other outflows – Collection Charges on UDF	0.29	0.38	0.43	0.5	0.64	2.24
Total	49.6	58.05	61.42	65.05	71.73	305.85

Table 21: True Up of Operating & Maintenance (O&M) expenses during FY 18-19 to FY 22-23 is as follows:

Particulars (₹ Crore)	Control period					Total
	2018-19	2019-20	2020-21	2021-22	2022-23	
Payroll expenses	13.66	19.38	18.33	17.48	21.68	90.53
Provision for Retirement Benefit	81.55	2.29	0.40	0.63	-0.41	84.46
Total Payroll Expenditure	95.20	21.67	18.74	18.11	21.27	174.99
Administration and General expenses – Patna Airport	3.28	3.73	4.33	4.22	5.61	21.17
Administration and General expenses – (Apportion of CHQ/RHQ to Patna apt)	27.74	25.78	31.79	33.38	35.05	153.73
Total Admin & General Expenditure	31.02	29.51	36.12	37.60	40.65	174.90
Repairs and maintenance	4.62	6.33	2.65	4.46	19.43	37.50
Utilities and outsourcing expenses	2.32	2.80	2.42	3.34	3.90	14.78
Other outflows – Collection Charges on UDF	2.03	0.47	0.12	0.14	0.98	3.74
Total	135.19	60.79	60.05	63.65	86.23	405.91

AAI has appointed an agency to study the methodology for allocation of CHQ/ RHQ expenses to the airports.

Payroll expenses

AERA had considered 10% additional increase in FY 2022-23 due to operationalization of New Terminal Building however it has been shifted to Dec 2024.

- Overtime rate per hrs revised from April 2019 also increased the staff cost.

Actuarial Valuation (Retirement Benefits)

- Actuarial Valuation (Retirement Benefits) for FY 2018-19 include Provision for 3rd Pension and CAD Pension for FY 2018-19 (Upto March 2019) thereafter no provision of 3rd pension has been provided.
- In FY 2022-23 as there is negative balance of Rs.40.65 lacs due to reverse of excess provision.

Administration and General Expenses –Non CHO/RHQ

- AERA had considered 9% growth for FY 2019-20 to FY 2021-22 & 12% in FY 2022-23.
- Increase in Travelling Expenses due to revision of T. Allowance rates w.e.f. April 2019.
- Upkeep expenses increased due to award of new Contract in March 2019.
- Hiring of man power cost has also increased due to award of new contract by Airport.
- Rs.119.46 lacs for CSR expense & Interest on working capital of Rs.27.87 lacs which were not in Tariff order for the 1st CP shown under this head.

Administration and General Expenses – CHO/RHQ

- CHO/RHQ Expenses allocation proposed based on FY 2017-18 with 5% increase YOY basis however there is variation by increase due to revised pay as per 7th pay Commission, revised OTA/OPA, Travelling Allowance, medical allowance etc.
- Provision for 3rd pension (1st time) amounting to Rs.123.56 cr. and CAD Pension were made in FY 2018-19 which were not provided during 1st control period.

Repairs and maintenance

AERA had projected growth 132% for FY 2019-20 and thereafter 5% YoY basis for R&M.

Special Repair works were undertaken due to operational requirement which could not be projected in the 1st Control Period. Special repairs shown under R&M Civil (FL Code).

R&M Civil

Special Repair:-

- In FY 2018-19: - Rs. 19.22 lac modification of Toilets.
- In FY 2018-19: - Rs. 19.22 lac modification of Toilets.
- In FY 2019-20: - Rs.21.34 lac modification of Toilet, Rs.4.89lacs renovation of VIP room, Rs.18.26lacs replacement of old Signages.
- In FY 2020-21: - Rs.20.79 lac modification of Toilet, Rs.13.56lacs replacement of old signages Rs.14.79lacs-minor capital work- & Rs.40.72 lacs for waterproofing of existing TB .
- In FY 2021-22: - Rs.38.18 lac Renovation of BCS/IB/Civil Room-Existing Terminal Building. - Charged off.
- In FY 2022-23 961.56 lacs R/w Re carpeting, Rs.90.6 lacs Fall ceiling of TB, 0.43lacs modification of toilet ,4.66lacs minor capital works, Rs.15.61 lac Renovation of BCS/IB/Civil room-Existing T Building Rs.109.53 lacs refurbishing of metallic fall ceiling & allied works, Rs.43.48 lacs upgradation of ambiance/facelift-TB, Rs53.94 lacs , R/w painting Rs.22.71lac,water proofing Rs.11.74, repairs of apron(Bituminous) Rs.27.76lacs & Rs.22.76lacs for CPWD Quarters vacation etc.
- Other than the above routine AMC works were undertaken.

R&M Electrical

Special repairs

- In FY 2018-19: - Rs.18.61/-lacs, Replacement of LT cables & Rs.30.76lacs -Replacement of HPSV Light
- In FY 2019-20: - Rs.10.29lacs Replacement of LT cables & Rs.24.25 lacs Includes SITC of IT extension work.
- In FY 2020-21: - Rs. 14.54 lacs waterproofing of Existing TB.Rs.21.51lacs GLS Spares, Rs.4.73lacs CCR, Rs.24lacs-replacement of AC panel (HVAC), Rs.34.65 lacs-signages, Rs.12 lacs replacement of Stand (GLF), Rs13.73lacs Shock proof mat -charged off, Rs.1.31lacs-replament of Elect Panel, Rs.9.07lacs water fountain.

- In FY 2021-22: - Rs.4.18lacs-replacement of cable (Ops. Area), Rs.2.97 lacs-lighting (BMS area). Rs.7.12 lacs-modification (Covid), Rs.7.93 lacs water fountain.
- In FY 2022-23- Rs.10.59 water fountain & Rs.1.49lacs fire alarm & weighing scale & efficiency light Rs.2.34lacs,

R&M Electronics: -

- In FY 2018-19: - Rs. 21.56 lacs Build owned transfer XBIS-Lease charges has been charged off.

Utilities and outsourcing expenses

- AERA had projected growth 34% for FY 2019-20 and thereafter 2% YoY basis FY 2021-22 & 10% in FY2022-23.

Other outflows – Collection Charges on UDF

- Collection charges on UDF is directly linked with Passenger growth and AERA had taken higher growth for the 1st Control Period.

11. Taxation

11.1 AERA had considered Patna airport on standalone basis as it has done for other AAI airports as well.

The tax rate for 1st control period has been taken 34.9%. The Final tax expense considered by the Authority per Table No.50 (p-81) for the 1st Control Period as per Order No.13/2019-20 is as follows:

Table 22: Applicable tax rates as per Income Tax Act, 1961

Particulars	2016-17	2017-18	2018-19	2019-20	2020-21	2021-22	2022-23
Tax rates adopted for 2 nd Control Period	34.61%	34.61%	34.94%	34.94%	34.94%	34.94%	34.94%

Table 23: Tax expense considered by the Authority -INR crores (final)

Particulars (₹ Crore)	Pre-control regulatory period		Control period				
	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Aero revenue with proposed rates	22.52	33.57	42.60	68.84	108.79	127.92	160.65
O&M expenses	38.01	45.56	49.60	58.03	61.41	65.04	71.72
Depreciation	1.84	2.11	3.94	13.75	14.58	6.98	41.89
Profit before tax	17.32	-14.10	-10.93	-2.94	32.79	55.90	47.04
Set-off of loss	-	-	-	-	32.79	12.51	-
Profit before tax after set-off of loss	-17.32	-14.10	-10.93	-2.94	-	43.39	47.04
Tax rate (%)	34.6%	34.6%	34.9%	34.9%	34.9%	34.9%	34.9%
Tax	-	-	-	-	-	15.16	16.44

Table 24: True Up of Corporate tax as per Income Tax Act, 1961 for the 1st Control Period is as under: -

Applicable tax rates as per Income Tax Act, 1961

Particulars	2018-19	2019-20	2020-21	2021-22	2022-23
Tax rates adopted for 1 st C.P	34.94%	25.17%	25.17%	25.17%	25.17%

Table No:25 True Up of Corporate Tax as per Income Tax Act, 1961 for the 1st Control Period is as follows:

Particulars (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
AERO REV	41.25	56.02	52.47	58.81	72.96	281.51
OPEX	135.19	60.79	60.05	63.65	86.23	405.91
DEP. As WDV AS PER I.TAX	2.13	3.89	5.42	6.98	7.30	25.71
TOTAL EXP.	137.32	64.68	65.46	70.63	93.53	431.62
PBT	-96.07	-8.66	-12.99	-11.82	-20.57	-150.11
Set off losses	0.00	0.00	0.00	0.00	0.00	0.00
PBT after set-off of loss	-96.07	-8.66	-12.99	-11.82	-20.57	-150.11
Tax Rate	34.944%	25.17%	25.17%	25.17%	25.17%	
TAX	0.00	0.00	0.00	0.00	0.00	0.00

Variance in Tax amount due to change in Tax Rate and Fall in PAX & ATM due to Covid-19 resulting fall in Aero Revenue.

12. Non-Aeronautical revenue (NAR)

12.1 AERA had approved the Non-Aeronautical revenue. This shown in the table given below

Table 26: Non-Aeronautical revenue as per Authority for 1st Control Period as per Table No.37 (P-68) of Order No. 13/2019-20

Particulars (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
1. Trading concessions						
Restaurant / snack bars	2.47	3.24	3.57	3.93	4.51	17.72
T.R. stall	1.72	2.11	2.32	2.56	2.94	11.65
Hoarding & display	2.58	2.84	3.13	3.44	3.95	15.94
2. Rent and services						0
Land leases	-	-	-	-	-	0
Building (residential)	0.03	0.03	0.03	0.03	0.03	0.15
Building (non-residential)	4.84	5.32	5.85	6.44	7.73	30.18
4. Miscellaneous						0
Car rentals	0.07	0.08	0.09	0.1	0.11	0.45
Car parking	1.36	1.49	1.64	1.8	2.08	8.37
Admission tickets	0.22	0.29	0.33	0.38	0.48	1.7
Other income / sale of scrap	0.68	0.71	0.75	0.78	0.82	3.74
	13.97	16.11	17.71	19.46	22.65	89.9

Table 27: True Up of Non-Aeronautical revenue for 1st Control Period is as under

REVENUE (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
1. TRADING CONCESSIONS						
RESTAURANT / SNACK BARS*	2.53	2.84	1.51	1.82	3.13	11.84
T.R. STALL	1.34	1.23	0.75	0.93	1.29	5.56
HOARDING & DISPLAY	2.92	3.31	1.62	1.07	1.64	10.56
2. RENT AND SERVICES						0.00
LAND LEASES	0.53	0.01	0.09	0.11	1.38	2.13
BUILDING (RESIDENTIAL)	0.03	0.00	0.00	0.00	0.01	0.04
BUILDING (NON-RESIDENTIAL)	3.66	3.42	2.00	1.61	1.29	11.97
3. MISCELLANEOUS						0.00
CAR RENTALS	0.07	0.08	0.03	0.00	0.00	0.19
CAR PARKING**	2.89	1.61	0.56	0.76	1.29	7.11
ADMISSION TICKETS	0.02	0.11	0.02	0.02	0.04	0.22
OTHER INCOME/ SALE OF SCRAP	1.76	1.40	0.95	0.84	0.24	5.20
Dept. Adm. Charges	0.00	0.00	0.00	0.00	3.07	3.07
TOTAL	15.76	14.02	7.54	7.17	13.39	57.87

Variance

- AERA had taken additional 5% growth in FY2022-23 due to operationalization of New Terminal Building.
- AERA had linked Revenue from Admission Ticket to the Pax Growth. However, due to Covid-19 GOI had restricted entry of visitors due to which there is a reduction in revenue from admission tickets.
- Concession Support Scheme had been provided to all the concessionaire on PAN India basis due to Covid-19 resulting lower Non-Aero revenue.

13. Aeronautical revenue

13.1 AERA had approved the Non-Aeronautical revenue. This shown in the table given below

Table 28: Aeronautical revenue considered by Authority for the 1st Control Period as per Table No.66 (P-97) of Order No. 13/2019-20

Particulars (₹ Crore)	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	Total
Landing charges:						
Domestic	20.6	27.5	39.2	48	59	194.30
Parking and housing charges:						
Domestic	0	0	0	0	0	0.00
Fuel Throughput charges	0.6	0.8	1.1	1.2	1.5	5.20
Ground handling charges	0.4	0.4	0.5	0.6	0.7	2.60
Land lease – Oil companies	1.2	1.2	1.2	1.2	1.3	6.10
Land lease – Ground Handling	0.5	0.5	0.5	0.5	0.5	2.50
CUTE charges	3.5	4.5	5.2	6	7.6	26.80
Cargo Revenue	0.1	0.1	0.1	0.1	0.1	0.50
UDF	15.6	33.8	61.1	70.3	89.9	270.70
	42.5	68.8	108.9	127.9	160.6	508.70

Table 29: True Up of Aeronautical revenue for 1st Control Period is as under

Particulars (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Landing (Dom)	19.76	24.48	20.03	25.43	28.24	117.94
Parking & Housing	0.01	0.01	0.12	0.02	0.00	0.15
PSF(Facilitation)-Domestic	15.06	11.31	0.00	0.00	0.00	26.38
PSF(Facilitation)-International	0.00	0.00	0.00	0.00	0.00	0.00
UDF Domestic	0.00	14.08	27.15	28.57	37.50	107.31
THROUGHPUT CHARGES	0.52	0.28	0.92	0.00	0.00	1.72
Oil companies.	1.18	1.18	1.18	1.18	1.30	6.01
Ground Handling	0.71	0.58	0.56	0.81	0.81	3.47
Ground Handling Charges	0.60	0.53	0.50	0.21	0.97	2.81
Royalty from Cute Charges	3.38	3.54	1.64	2.45	3.90	14.91
Extn. Of watch hours	0.00	0.00	0.00	0.05	0.00	0.05
Royalty cargo revenue-30%	0.03	0.03	0.38	0.10	0.24	0.77
Total	41.25	56.02	52.47	58.81	72.96	281.51

- From the above tables it is seen that there has been a shortfall of in Aeronautical Revenue amounting to INR 227.19 Crores in 1st C.P owing to mainly effect of Covid-19 pandemic in FY2020-21& FY FY2021-22. Even in FY 2022-23 traffic has not been reached pre-covid level.

14. Aggregate Revenue Required for the 1st control Period (True Up)

Table 30: Projected ARR Considered by Authority for the 1st Control Period as per Table No.60(P88) of Order No. 13/2019-20 is as follows:

Particulars (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Average RAB	29.01	71.06	99.36	91.93	425.35	716.71
Fair Rate of Return	14%	14%	14%	14%	11.54%	0.68
Return on average RAB	4.06	9.95	13.91	12.87	49.06	89.85
O&M expenses	49.6	58.03	61.41	65.04	71.72	305.80
Depreciation	3.65	5.85	7.56	7.32	27.64	52.02
Tax expense				15.16	16.44	31.60
Add: True up	37.43					37.43
Less: 30% NAR	-4.19	-4.84	-5.31	-5.84	-6.8	-26.98
ARR per year	90.55	68.99	77.57	94.55	158.06	489.72
PV Factor (Discount)	1	0.88	0.77	0.67	0.59	3.91
PV of ARR	90.55	60.52	59.69	63.82	93.58	368.16
Approved Rev as per Order	42.5	68.8	108.9	127.9	160.6	508.7
PV of approved Rev	42.50	60.35	83.80	86.33	95.09	368.06
PV Shortfall	48.05	0.17	-24.11	-22.51	-1.50	0.10

Table 31: True Up for ARR and Yield for 1st Control Period is as follows:

Particulars (₹ Crore)	2018-19	2019-20	2020-21	2021-22	2022-23	Total
Average RAB	24.23	35.21	48.34	58.68	75.10	241.55
Fair Rate of Return	14%	14%	14%	14%	14%	0.70
Return on average RAB	3.39	4.93	6.77	8.21	10.51	33.82
O&M expenses	135.19	60.79	60.05	63.65	86.23	405.91
Depreciation	3.43	4.07	4.73	5.23	5.90	23.36
Tax expense	0.00	0.00	0.00	0.00	0.00	0.00
Intt. on Working capital	4.42	1.42	0.53	0.64	0.95	7.96
Add: True up	37.43					37.43
Less: 30% NAR	4.73	4.21	2.26	2.15	4.02	17.36
ARR per year	179.13	67.00	69.82	75.59	99.58	491.12
PV Factor (Compound)	1.93	1.69	1.48	1.30	1.14	7.54
PV of ARR	344.90	113.16	103.44	98.24	113.52	773.26
Actual Revenue	41.25	56.02	52.47	58.81	72.96	281.51
PV of Actual Revenue	79.43	94.61	77.74	76.43	83.17	411.38
PV Shortfall	265.47	18.55	25.70	21.81	30.35	361.88

MYTP for the 2nd Control Period (01.04.2023 to 31.03.2028)

15. Traffic Growth: -Passenger Traffic and ATM of Patna International Airport for the 2nd Control Period.

Table 32:-The historical & Projected Passenger traffic and ATM at the airport has been shown in the table 31 below:

Year	PAX			ATM		
	Dom	%	INTL	Dom	%	INTL
2016-17	2112150		-	15508		-
2017-18	3111273	47.3%	-	21916	41.3%	-
2018-19	4061990	30.6%	-	28087	28.2%	-
2019-20	4525765	11.4%	-	30953	10.2%	-
2020-21	2710000	-40.1%	-	21572	-30.3%	-
2021-22	2967681	9.5%	-	25501	18.2%	-
2022-23	3748635	26.3%	-	27931	9.5%	-
	Projection			Projection		
2023-24	4573335	22.0%	-	32959	18.0%	-
2024-25	5259335	15.0%	-	36914	12.0%	-
2025-26	5995642	14.0%	-	41343	12.0%	-
2026-27	6835032	14.0%	-	46304	12.0%	-
2027-28	7655235	12.0%	-	51398	11.0%	-

MYTP has been prepared considering the above growth of PAX & ATM for projecting the Aeronautical Revenue for the 2nd Control period. The projection has been made by CPMS directorate based on econometric techniques.

15.1 Allocation of Assets

15.1.1 For the allocation of assets, expenditure between aeronautical and non-aeronautical services, Airports Authority of India had divided assets into aeronautical, non-aeronautical and common components. Common components have further been segregated into aeronautical and non-aeronautical assets by applying one of the following three ratios:

15.2.1 **Terminal Area Ratio-** Ratio of Aeronautical area to non-aeronautical area (For terminal related assets).

Table 33: Terminal Building Ratio for 2nd Control Period

Particulars	AERO	NON-AERP
Terminal Building Ratio	90%	10%

15.3.1 **Quarters Ratio-** Ratio of staff providing ANS service staying in residential building to staff providing aeronautical service staying in residential building.

Table 34: Quarters Ratio for 2nd Control Period

Particulars	
Total No. of Quarters	70
No. of Quarters ANS	25
No. of Quarters APT	45
ANS Usage Ratio	35.71%
Aero Usage Ratio	64.29%

15.4.1 **Employee Ratio**- Ratio of staff providing commercial assets to staff providing aeronautical services.

Table 35: Employee Ratio for 2nd Control Period

Particulars	2023-24	2024-25	2025-26	2026-27	2027-28
Total Airport Strength	101	119	119	119	119
Total ANS Strength	63	71	71	71	71
Non Aero Emp. (Land+Commercial)	5	5	5	5	5
Common Emp.-(Finance & HR)	18	22	22	22	22
Total	187	217	217	217	217
Common Employee's apportionment					
Total Airport Strength	10	12	12	12	12
Total ANS Strength	6	8	8	8	8
Non Aero Emp. (Land+Commercial)	2	2	2	2	2
Total	18	22	22	22	22
Head Count after apportionment of Common Employees					
Total Airport Strength	111	131	131	131	131
Total ANS Strength	70	79	79	79	79
Non Aero Emp. (Land+Commercial)	6	7	7	7	7
Total	187	217	217	217	217
Employee ratio for (ANS: AERO: Non-Aero)					
ANS	36.90%	36.41%	36.41%	36.41%	36.41%
Aero	59.36%	60.37%	60.37%	60.37%	60.37%
Non-Aero	3.74%	3.23%	3.23%	3.23%	3.23%
Employee ratio for (AERO: Non-Aero)					
Aero	94.07%	94.93%	94.93%	94.93%	94.93%
Non-Aero	5.93%	5.07%	5.07%	5.07%	5.07%

16.Capital Expenditure for the 2nd Control Period (01.04.2023 to 31.03.2028)

Table 36:- List of Proposed Major Capital Expenditure for the 2nd Control Period is as below: -

S.No.	Description (In Lacs)	Civil	Elect	Total	Aero Cost	PDC	Remarks
1	Technical Block Control Tower	2297.64	1093.76	3391.41		JULY'23	ANS (Not considered)
2	Common user Cargo Terminal (CUCT)	986.40	688.86	1675.26		JUNE' 23	CARGO (Not considered)
3	Fire Station, EMC	1180.82	145.11	1325.93	1325.93	JUNE' 23	AERO
4	Terminal Building	47831.10	28357.95	76189.06	68570.15	MAR'24	AERO(TB R-90%)
5	Admn. Block	1363.95	456.82	1820.77	1756.31	NOV'23	AERO(EMP R-96.46% exc.ANS)
6	MT Pool (E&M Workshop)	915.33	335.42	1250.74	1250.74	APR'24	AERO
7	Elevated road with ramps	7628.05	0.00	7628.05	7628.05	DEC'23	AERO
8	Metrological Building	787.43	226.99	1014.42	1014.42	OCT'24	AERO
9	MLCP	6032.37	2759.65	8792.02		JUNE'22	NON-AERO (Not considered)
10	Link Bridge (MLCP to TB)	540.35	74.06	614.41	614.41	DEC'23	AERO
11	Community hall	636.41	154.16	790.57	460.81	MAR' 24	AERO(EMP R-58.29% inc.ANS)
12	Apron-phase-2	463.36	0	463.36	463.36	DEC' 24	0
13	Deposit Work						
	03 nos. Hangers with Offices. VIP Lounge and Flying Club offices	4800.23	1924.35	6724.58		DEC' 24	(Not considered)
14	Re-carpeting of R/Way	3465.30	175.52	3640.81		MAR' 24	Charge to R&M
15	C/o PTT & Allied work	3793.72	317.53	4111.25	4111.25	MAR' 24	AERO
16	C/o RCC Drain	179.19	0.00	179.19	179.19	MAR' 24	AERO
17	C/o B/Wall, Watch Tower	340.58	0.00	340.58	340.58	MAR' 24	AERO
18	Isolated Aircraft Parking Position	1122.49	116.45	1238.94	1238.94	MAR' 24	AERO
	Total	85109.20	36826.62	121935.82	88954.15		

Construction of New Apron: - It was proposed to construct new aprons Ph-i having area of 9365 Sqm amounting to Rs.7.44 cr was completed on 31.12.2021 and Ph-ii having area of 5550 Sqm amounting to Rs.4.63 cr will be proposed to complete on 31.12.2024. The calculation of Normative cost of Apron as per area is given below:

Comparison of Capex vs Normative cost Fixed by AERA

Table No: 37 Inflation Adjusted **Normative Cost for Apron** Proposed by AAI in line with Tariff order No 40/22-23 issued by AERA is as under: -

Financial Year	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25	25-26
WPI Inflation		1.73%	2.96%	4.26%	1.68%	1.20%	12.97%	11.10%	5.10%	5.10%	5.10%
WPI Inflation		111.6	114.9	119.8	121.8	123.4	7.14%	9.60%	2.90%	2.90%	2.90%
Unit Rate	4700	4781	4923	5133	5219	5281	5966	6629	6967	7322	7695

A Comparison of the cost of Apron has been made with the Normative cost fixed by AERA and the cost is well within the Normative limit as shown in table below: -

Table No:37 Comparison of cost of Apron with Normative cost Fixed by AERA: -

Normative Calculation for Cost per SQM -Apron					
Particulars	Formula	Phase-1 ADC31.12.21 FY 2021-22 (1st CP)	As per Normative	Phase-2 PDC31.12.24 FY 2024-25 (2nd CP)	As per Normative
Area (SQM)	A	9635		5550	
Cost Incurred (Rs. In Cr.)	B	7.44		4.63	
Less: - Cost of GSE Area		0.63		0.35	
Less: - Cost of Earth Work		0.31		0.17	
Cost Incurred (Excluding above cost)	C	6.50		4.11	
Cost excluding GST (Rs. in Cr.)	D = C X100 /118	5.51	5.75	3.93	
Cost per SQM (Rs.)	D / A	5721.36	5966.40	7075.24	7322.04
Cost proposed by AAI (INR Cr)		7.44		4.63	

Construction of New Terminal Building: - Considering the rapid growth in Air Traffic in the last few years it was proposed to construct new Terminal Building having area of 65155 Sqm amounting to Rs.761.89 cr will be proposed to complete on 31.03.2024. The calculation of Normative cost of New Terminal is as under: -

Table No:38 Inflation Adjusted **Normative Cost for Terminal Building** Proposed by AAI in line with Tariff order No 40/22-23 issued by AERA is as under: -

Financial Year	2021-22	2022-23	2023-24
WPI Inflation as per Order 04/2023-24	123.40%	139.40%	139.40%
Unit Rate as per order 40/22-23 of Ahmedabad apt- (Table 95)	100000	112966	112966

A Comparison of the cost of Terminal Building has been made with the Normative cost fixed by AERA and the cost is well within the Normative limit as shown in table below: -

Table No:39 Normative cost of Terminal Building Proposed by AAI is as under: -

Particulars	Formula	Phase-1 (PDC-31.03.24)	As per Normative
		FY 2023-24 (2nd CP)	
Area (sq.m)	A	65155	
Cost Incurred (Rs. In Cr.)	B	761.89	
Cost Incurred	C	761.89	
Cost excluding GST (Rs. in Cr.)	$D = C \times 100 / 118$	645.67	
Cost of PMC @ 5.69%	E	34.76	
Cost excluding PMC (Rs. in Cr.)	F	610.91	627.76
Cost per SQM (In Rs.)	F / A	93762	96348
Cost proposed by AAI (INR cr)		761.89	

Table No:40:- Projected capital Expenditure proposed for the 2nd Control Period is as under: -

S.No.	Particulars (In Cr.)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1	Taxiway	40.50	0.00	0.00	0.00	0.00	40.50
2	Aprons	13.90	4.82	0.00	0.00	0.00	18.72
3	Road, Bridges & Culverts	91.00	0.00	0.00	0.00	0.00	91.00
4	Building- Terminal	472.59	8.81	0.00	0.00	0.00	481.40
5	Building - Residential	4.15	0.00	0.00	0.00	0.00	4.15
6	Boundary Wall -Operational	3.64	0.00	0.00	0.00	0.00	3.64
7	Other Buildings-Unclassified	27.89	10.65	0.00	0.00	0.00	38.54
8	Electrical Installations	293.24	6.44	0.00	0.00	0.00	299.68
	Total	946.90	30.73	0.00	0.00	0.00	977.62

- ❖ Capex (Aero) Rs.977.62 cr. (Aero Cost of Rs.889.54 cr. & Finance allowance & IDC of Rs.88.08cr.) have been proposed for the 2nd control period.

17. Depreciation

Depreciation have been proposed in line with the guidelines issued by AERA for the 2nd Control Period is as under: -

Table 41: Proposed Depreciation during FY 23-24 to FY 27-28 is as follows:

Particulars (₹ Crores)	Control period					
	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Depreciation	36.55	66.88	67.41	67.14	66.95	304.94

- Depreciation has been proposed 50% on 1st year or year of capitalization of assets and thereafter full Depreciation has been calculated for the 2nd Control Period.

18. Fair Rate of Return (FRoR):- It is proposed to fund the entire capex through 20% Debt & 80% internal resources.

Table No:42 Summary of Projected RAB and Fair Rate of Return on RAB for 2nd Control Period is as follows:

	Particulars (₹ Crore)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
A	Opening Aeronautical RAB*	88.54	998.88	962.72	895.31	828.17	3773.62
B	Aeronautical assets capitalized during year	946.90	30.73	0.00	0.00	0.00	977.62
C	Disposals/ Transfers	0.00	0.00	0.00	0.00	0.00	0.00
D	Depreciation	36.55	66.88	67.41	67.14	66.95	304.94
E	Closing Aeronautical RAB (A+B-C-D)	998.88	962.72	895.31	828.17	761.22	4446.31
F	Average RAB (A+E)/2	543.71	980.80	929.02	861.74	794.70	4109.96
G	Fair Rate of Return (FRoR)	14%	14%	14%	14%	14%	
H	Return on Average RAB @ 14%	76.12	137.31	130.06	120.64	111.26	575.39

19. Operating Expenses

Table 43: Proposed Operating & Maintenance (O&M) expenses for the 2nd Control Period is as follows:

Particulars (₹ Crore)	Control period					Total
	2023-24	2024-25	2025-26	2026-27	2027-28	
Payroll expenses	23.19	17.66	16.74	16.24	20.29	94.12
Provision for Retirement Benefit	0.63	0.79	0.85	0.91	1.20	4.37
Total Payroll Expenditure	23.82	30.08	32.18	34.43	45.45	165.96
Administration and General expenses – Patna Airport	6.07	12.26	13.49	14.84	16.32	62.98
Administration and General expenses – (Apportion of CHQ/RHQ to Patna apt)	36.80	38.64	40.57	42.60	44.73	203.33
Total Admin & General Expenditure	42.87	50.90	54.06	57.43	61.05	266.31
Repairs and maintenance	17.49	18.45	19.62	20.91	15.64	92.11
Utilities and outsourcing expenses	4.08	5.25	5.49	5.75	6.02	26.60
Other outflows – Collection Charges on UDF	1.19	1.37	1.57	1.79	2.00	7.92
Total	89.46	106.05	112.92	120.32	130.16	558.90

Payroll expenses –Patna Apt

An increase of 7% YoY has been proposed for the 2nd control Period.

An additional increase of 18% has been proposed for FY 2024-25 for increase in manpower due to operationalization of New Terminal building.

An additional increase of 25% has been proposed for FY 2027-28 because of wage revision due from 01.01.2027.

Provision of Retirement Benefit-Patna Apt.

Actuarial Expenses (Retirement Benefits) for FY 2023-24 has been projected based on the FY 2021-22 as there is negative balance of Rs.40.65 lacs in FY 2022-23 due to reverse of excess provision.

The same increase as proposed for Payroll Expenses-Non CHQ/RHQ has been proposed for CHQ/RHQ expenses for the 2nd Control Period.

Administration and General expenses –Patna Apt

An increase of 10% YoY has been proposed for the 2nd control Period.

An additional increase of 10% has been proposed for Travelling expenses in FY 2024-25.

MESS expense has been increasing in proportion of increase in area of New Terminal Building.

Apportion of CHQ/RHQ Expense to Patna Apt.

CHQ/RHQ Expenses has been proposed with 5% increase YOY basis.

Repairs and maintenance

R&M Civil

Runway re-carpeting amount has been proposed to be recovered in 5 instalments as per AERA guideline.

An increase of 10% YoY basis has been proposed for the 2nd Control Period.

R&M Civil: -60% of cost (40% Reduction) of FY 2023-24 has been proposed for FY 2024-25 -R&M Civil.

Only Regular AMC works have been considered e.g. Rubber removal cost, joint filling of Apron, Grass cutting, STP, Pest Control, Birds chaser including crackers, solid waste management, may I help you, art work, AMC of TB, CISF Barracks, Residential colony etc.

R&M Electrical

An increase of 10% YoY basis has been proposed for the 2nd Control Period.

An additional increase of 70% has been proposed for FY 2024-25 as per the justification given below: -

- i. New Terminal Building will have all new equipment which will have CAMC along with manpower cost from the 1st day of the commencement of the operation.
- ii. New Terminal Building have 2 floor including basement and proposed to installed 06no. PBB, Escalators, CCTV camera. Inline X-BIS. Lifts, Conveyor, BHS system. It will increase the cost of R&M as well as Electricity expenses.
- iii. Specialized man power will have to be engaged for Screening and hiring charges will have to paid to AAICLAS.
- iv. Other than above, regular AMC expenses for DG set for secondary power supply, Ground light, Air conditioner and Equipment will also increase.

R&M Equipment & Furniture

An increase of 10% YoY basis has been proposed for the 2nd Control Period.

10% additional increase in FY 2024-25 has been proposed due to Operationalization Terminal Building including others Buildings.

R&M Electronics

An increase of 10% YoY basis has been proposed for the 2nd Control Period.

20% additional increase in FY 2024-25 has been proposed due to no of facilities increase e.g. SITC of X-bis (HB & RB), ETD, DFMD & HHMD & IT.

Utilities and outsourcing expenses

Additional 30% increase is proposed in FY2024-25 due to commencement of New Terminal Building April2024.

Additional 10% increase is proposed in FY2024-25 for consumption of stores & spares

Other outflows – Collection Charges on UDF

Collection charges on UDF is directly linked with Passenger growth and accordingly proposed for the 2nd control Period.**20. Taxation**

Table 44: Tax expense Proposed for the 2nd Control Period -INR crores

Particulars (₹ Crore)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
AERO REV	87.44	424.81	502.06	592.38	690.26	2296.96
OPEX	89.46	106.05	112.92	120.32	130.16	558.90
DEP. As WDV AS PER INCOME TAX	9.28	102.63	95.30	85.65	77.00	369.86
TOTAL EXP.	98.74	208.68	208.21	205.97	207.16	928.77
PBT	-11.30	216.13	293.85	386.41	483.11	1368.19
Set off losses	0.00	-161.42	0.00	0.00	0.00	-161.42
PBT after set-off of loss	-11.30	54.71	293.85	386.41	483.11	1206.77
Tax Rate	25.17%	25.17%	25.17%	25.17%	25.17%	
TAX	0.00	13.77	73.96	97.26	121.60	306.59

21. Non-Aeronautical revenue (NAR)

Table 45: Projected Non-Aeronautical revenue for 2nd Control Period is as under

REVENUE (₹ Crore)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
1. TRADING CONCESSIONS						
RESTAURANT / SNACK BARS*	3.44	4.48	4.92	5.42	5.96	24.22
T.R. STALL	1.42	1.85	2.03	2.24	2.46	10.01
HOARDING & DISPLAY	1.81	2.35	2.58	2.84	3.13	12.71
2. RENT AND SERVICES	0.00	0.00	0.00	0.00	0.00	0.00
LAND LEASES	1.38	1.38	1.58	1.58	1.58	7.51
BUILDING (RESIDENTIAL)	0.01	0.01	0.01	0.01	0.01	0.05
BUILDING (NON-RESIDENTIAL)	1.42	1.84	2.03	2.23	2.45	9.96
3. MISCELLANEOUS	0.00	0.00	0.00	0.00	0.00	0.00
CAR RENTALS	0.00	0.08	0.09	0.10	0.11	0.38
CAR PARKING**	1.42	1.70	1.87	2.06	2.26	9.31
ADMISSION TICKETS	0.05	0.06	0.07	0.08	0.08	0.34
OTHER INCOME/ SALE OF SCRAP	0.26	0.27	0.28	0.30	0.31	1.42
Dept. Adm. Charges	1.53	0.00	0.00	0.00	0.00	1.53
TOTAL	12.73	14.02	15.48	16.85	18.36	77.44

❖ Proposed Increase in revenue as given Table No:46 below: -

Particulars (₹ Crore)	2023-24	2024-25	2025-26	2026-27	2027-28
RESTAURANT / SNACK BARS	10%	30%	10%	10%	10%
T.R. STALL	10%	30%	10%	10%	10%
HOARDING & DISPLAY	10%	30%	10%	10%	10%
2. RENT AND SERVICES					
LAND LEASES	0%	0%	15%	0%	0%
BUILDING (RESIDENTIAL)	5%	5%	5%	5%	5%
BUILDING (NON-RESIDENTIAL)	10%	30%	10%	10%	10%
3. MISCELLANEOUS					
CAR RENTALS*			10%	10%	10%
CAR PARKING**	10%	20%	10%	10%	10%
ADMISSION TICKETS	10%	30%	10%	10%	10%
OTHER INCOME/ SALE OF SCRAP	5%	5%	5%	5%	5%

Note: - An additional increase of 20% has been proposed in FY 2024-25 on operationalization of New Terminal Building.

* **Car Rentals:** -Revenue of FY 2019-20 has been taken as basis for projections from FY 2024-25 due to operationalization of the terminal building as there is no car rental contract since FY 2020-21.

** **Car Parking:** -10% Additional increase has been proposed for Car Parking Contract in FY 2024-25.

22. Aggregate Revenue Required for 2nd CP

Table 47: Projected ARR for the 2nd Control Period is as follows:

Particulars (₹ Crore)	2023-24	2024-25	2025-26	2026-27	2027-28	Total
Average RAB	543.71	980.80	929.02	861.74	794.70	4109.96
Fair Rate of Return	14%	14%	14%	14%	14%	
Return on average RAB	76.12	137.31	130.06	120.64	111.26	575.39
O&M expenses	89.46	106.05	112.92	120.32	130.16	558.90
Depreciation	36.55	66.88	67.41	67.14	66.95	304.94
Tax expense	0.00	13.77	73.96	97.26	121.60	306.59
Intt. on Working capital	0.50	0.00	0.00	0.00	0.00	0.50
Add: True up 1st CP carry forward	361.90					361.90
Less: 30% NAR	3.82	4.21	4.64	5.06	5.51	23.23
ARR per year	560.72	319.81	379.71	400.30	424.46	2084.99
PV Factor (Discounted) @14%	1.00	0.88	0.77	0.67	0.59	
PV of ARR	560.72	280.53	292.17	270.19	251.31	1654.93
Total No of PAX (in Million)	4.57	5.26	6.00	6.84	7.66	30.32
Yield Per Pax (in Rs.)						545.85

23. Revenue Stream to recover ARR with proposed applicable date: -1st April 2024

The following revenue streams are available to recover the ARR: -

- Landing Charges:** - Landing charge is proposed to increase by 60% for Domestic landing from the existing charges w.e.f. 01.04.2024 for FY 2024-25. An increase of 6% thereafter on year on year basis from FY 2025-26 onwards is proposed.

It is also proposed to levy “A minimum Landing charge of Rs.3500/- per Flight in respect of Domestic Non-Scheduled Operators/GA operators or the applicable landing charges whichever is higher.”

- Parking Charges:** - Parking Charge is proposed to increase by 110% from the existing charges w.e.f. 01.04.2024 till 31.03.2025. An increase of 6% thereafter on year on year basis from FY 2025-26 onwards is proposed.

- User Development Fee (UDF) :** -The balance ARR after recovery through landing & parking charges is proposed to be recovered through UDF revision as under:

The existing and revised rates of UDF per Pax are as under:

Particulars	Existing (Rs)	Proposed (Rs)			
	FY 2023-24	FY24-25	FY25-26	FY26-27	FY27-28
Domestic	204	1350	1400	1450	1508

❖ **International flights will also have the same rates as Domestic flights.**

With the proposed Tariff for the period F.Y. 2024-2025 up to F.Y. 2027-28, the Present value of Target revenue and Projected revenue are as under: -

Particulars (₹ in Cr)	Amount
Present Value of Target Revenue as on 01.04.2023 (including PV of S/Fall 1CP of Rs.361.88 cr.)	1654.93
Total PV of projected Revenue at Proposed Rates for 2 nd Control Period	1654.93
Short fall carry forward for the next Control Period.	Nil