#### ADDENDUM & CORRIGENDUM -2

Dated: 04 .08.2020

Request for proposal (RFP) for Selection of Master ETC Service Provider at National Highways Fee Plazas RFP Reference No.: IHMCL/Master ESP/2020/01 published on dated 25.06.2020

SI. No.	Section	Original Clause	Updated Clause
1.	Clause 3.2.2	Additional clause Lead member & Member of Consortium	<ul> <li>If awarded, each member of the Consortium shall be responsible for its respective role/expertise during project execution, and it would be deem to have acknowledged that it was selected on the basis of the technical/financial capacity considered during the bidding phase. IHMCL may debar/blacklist all the members of the Consortium or any member of the Consortium if any of the members fail to carry out any obligation under the Contract.</li> </ul>
			ii. The lead member should be liable for the entire scope of work and risks involved thereof (the liability should be for the entire value of the contract).
			<li>iii. The lead member shall be sole interaction point for IHMCL, and shall be represent the Consortium in all project-related meeting, correspondences, etc.</li>
			iv. The non-lead member should be liable for the scope of work for which they are responsible along with the lead bidder; while the lead member still carries the liability for the entire scope of work.
			v. Any change in the consortium member at a later date shall not be allowed.
2.	Annexure – 13, page no. 182	Latest L1 Rates of BoQ line items	Revised Latest L1 Rates of BOQ line items. as per format provided in <b>Appendix-1</b> of this Corrigendum-2.

SI. No.	Section	Original Clause	Updated Clause
3.	Clause 5.18.6 (b) - Compensation for Breach	Compensation for default by IHMCL (Termination Payments)	
4.	Clause 5.18.17 – Limitation of Liability	The Successful Bidder's liability under this Contract shall be determined as per Applicable law. The Successful Bidder shall be liable to IHMCL for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the Successful Bidder its affiliates, subsidiaries, stockholders, subcontractors, suppliers, directors, officers, employees, assigns and agents, including loss caused to IHMCL on account of defect in goods or deficiency in services on the part of Successful Bidder or his agents or any person / persons claiming through or under said Successful Bidder.	<ul> <li>5.18.17.1 The Successful Bidder's liability under this Contract shall be determined as per Applicable law. The Successful Bidder shall be liable to IHMCL for loss or damage occurred or caused or likely to occur on account of any act of omission on the part of the Successful Bidder its affiliates, subsidiaries, stockholders, subcontractors, suppliers, directors, officers, employees, assigns and agents, including loss caused to IHMCL on account of defect in goods or deficiency in services on the part of Successful Bidder or his agents or any person / persons claiming through or under said Successful Bidder.</li> <li>5.18.17.2 Limitation of Liability (additional clause)</li> <li>Notwithstanding anything stated herein above, the liability for Master ETC Service Provider shall NOT exceed ten times the value of Performance Bank Guarantee amount of the number of Zone(s) awarded.</li> <li>5.18.17.3 This limitation of liability shall not affect Master ETC Service Provider's liability, if any, for damage to Third Parties caused by Master ETC Service Provider or any person or company acting on behalf of Master ETC Service Provider in carrying out the Services.</li> </ul>

SI. No.	Section	Original Clause	Updated Clause
			5.18.17.4 The liability cap given under Clause 5.18.17 shall not be applicable to the indemnification obligations set out in Clause 5.13.
5.	Clause 6.4.1; sub clause d) Operation & Maintenance of ETC system, & Corrigendum 1 released.	Additional information	A general overview ETC Equipment Status of fee plazas (Zone- wise) is provided in <b>Appendix – 3</b> of this Corrigendum-2. The equipment status details provide are indicative & solely for information purpose ONLY. The bidders are strongly recommended to check and carry out due diligence at their end regarding the veracity of the provided data. The Bidder may wish to visit and examine the site or sites and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the Contract. IHMCL shall not be held responsible for any estimation & calculation carried out the bidder.
6.	Clause 7.2.6. a) Description and Functions – Automatic Barriers, SI no. (ii), page no. 86	Automatic Barrier Gate ii. The housing and any mounting frame shall be fabricated from corrosion-resistant materials. They shall be <b>IP 55</b> rated. The barrier shall be driven electrically. The motor shall not be damaged when the barrier is blocked in any position. Exit barriers shall have presence detectors independent to the AVC system to prevent barrier arms coming down on vehicles while passing. This shall be in the form of infrared units and dedicated embedded loops. Apart from the barrier arm, the mechanism may not have any moving protrusions that pose a risk to persons standing in close proximity to the barrier.	Automatic Barrier Gate ii. The housing and any mounting frame shall be fabricated from corrosion-resistant materials. They shall be IP <del>55</del> <b>54</b> rated. The barrier shall be driven electrically. The motor shall not be damaged when the barrier is blocked in any position. Exit barriers shall have presence detectors independent to the AVC system to prevent barrier arms coming down on vehicles while passing. This shall be in the form of infrared units and dedicated embedded loops. Apart from the barrier arm, the mechanism may not have any moving protrusions that pose a risk to persons standing in close proximity to the barrier.

SI. No.	Section	Original Clause	Updated Clause
7.	Clause 7.3.1, Functional Requirement, page no. 130	<ul> <li>f) Vehicle processing</li> <li>The System should check if the vehicle can be processed via electronic transactions. If the vehicle can be processed electronically, then Error! Reference source not found. related rules should be followed.</li> <li>For vehicle that do not have active electronic payment modes, Error! Reference source not found. related rules should be followed.</li> </ul>	<ul> <li>f) Vehicle processing</li> <li>The System should check if the vehicle can be processed via electronic transactions. If the vehicle can be processed electronically, then Electronic/RFID Tags processing related rules should be followed.</li> <li>For vehicle that do not have active electronic payment modes, Fare Calculations and Cash Operations related rules should be followed.</li> </ul>
8.	Clause 5.6.3, page no. 38	5.6.3. Within 60 days of receiving invoice from the Master ESP, IHMCL shall release payment to the Master ESP after deduction of penalty/damage, if any.	<ul> <li>5.6.3.</li> <li>i. Within 60 days of receiving invoice from the Master ESP, IHMCL shall release payment to the Master ESP after deduction of penalty/damage, if any.</li> <li>ii. Subject to Clause 5.6.3 (iv), within ten (10) working days of receiving invoice from the Master ESP, IHMCL would release the payment to the Master ESP, as follows:</li> </ul>
			<ul> <li>75% of the invoiced amount for all ETC transaction counts (for a Zone) which are settled and cleared in CCH system of NETC programme, as per report provided by CCH Provider.</li> <li>The balance invoiced amount shall be released subject to the verification of the invoice and applicable deductions including SLA/penalty/damage, if any.</li> </ul>

SI. No.	Section	Or	iginal Clause	Updated Clause				
				endeavor to devise a	.6.3. (ii) above, IHMCL shall also n electronic fund transfer system to o Master ESP automatically.			
			iv. Notwithstanding anything contained Agreement, IHMCL shall only be li payment to the Master ESP, provid sufficient funds in advance from NHA					
9.	NA	New clause		Compliance to be ensured w.r.t. Office Memorandum of Department of Expenditure, dated 23 July 2020, and any related clarifications, subsequent guidelines issued by Department of Expenditure, as applicable, regarding insertion of Rile 144 (xi) in the General Financial Rules (GFRs), 2017. A copy of the OM is enclosed with this Corrigendum. Bidder may visit website of Department of Expenditure ( <u>https://doe.gov.in/)</u> for more details on the said Office Memorandum.				
10.	Key Dates							
		Event Description	Date	Event Description	Date			
		Bid Due Date	17 August 2020 (Up to 15:00 Hrs IST)	Bid Due Date	31 August 2020 (Up to 15:00 Hrs IST)			
		Opening of Technical Bids	18 August 2020 (16:00 Hrs IST)	Opening of Technical Bids	1 September 2020 (16:00 Hrs IST)			

# Appendix – 1 - Revised Latest L 1 Rates of BoQ line items

## A. For 6-lane fee plazas

SI. no	Item	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
А	Integral Components (Lane level & Plaza Level )			<b>_</b>	
1	RFID ETC transceiver near Pay-axis - mounted on canopy (1 per lane)	No	6	77,800.00	4,66,800.00
2	Electronics Enclosure - (1 per lane)	No	6	6,670.00	40,020.00
3	Lane Controller with Industrial PC - (1 per lane)	No	6	91,895.00	5,51,370.00
4	AVC including sensors, loop and detector - (1 per lane)	Set	6	1,50,000.00	9,00,000.00
5	User Fare Display with mounting pole - (1 per lane)	Set	6	14,300.00	85,800.00
6	Automatic Barrier Gate - (1 per lane)	No	6	78,000.00	4,68,000.00
7	Overhead Lane Status light (OHLS) - (1 per lane)	No	6	8,250.00	49,500.00
8	Traffic light with mounting pole - (1 per lane)	Set	6	8,250.00	49,500.00
9	Loops with detector - (2 per lane)	Set	12	4,050.00	48,600.00
10	Incident Capture Camera with mounting pole - (1 per lane)	Set	6	6,400.00	38,400.00
11	License Plate Image Capture Camera with mounting poles - (1 per lane)	Set	6	6,400.00	38,400.00
12	Customized industrial grade keyboard - (1 per lane)	No	6	<sup>-</sup> 6,630.00	39,780.00
13	Cabling/Networking/Installation/Commissi oning (Lump sum)	LS	1	1,33,000.00	1,33,000.00
14	Software – Lane Level - (1 per lane)	No	6	15,000.00	90,000.00
15	Plaza Servers in hot-standby configuration	No	1	5,65,000.00	5,65,000.00
16	Workstations for MIS, Cashup, Audit & LSDU (Lane status display unit in control room)	No	4	42,500.00	1,70,000.00
17	24 Port Network switch (Layer 3)	No	2	70,000.00	1,40,000.00
18	Outdoor wifi Access Point	No	1	9,250.00	9,250.00
19	Software – Plaza level	Job	1	55,000.00	55,000.00
20	Broadband/Dedicated Internet Lease Line (01 Static IP) with minimum 04 Mbps link for CCH connectivity	Facility	2	80,000.00	1,60,000.00
21	UPS system as required for complete Hybrid ETC Toll Plaza system	No	2	2,05,000.00	4,10,000.00
22	Servo stablizer (60 KVA - 03 phase)	No	1	1,05,000.00	1,05,000.00
23	Network Video Recorder (NVR) for CCTV recording with adequate storage	No	1	62,000.00	62,000.00
в	Other components (Lane level & Plaza Level)			10 10 10 10 HIGH STATE	
24	TFT Monitor - (1 per lane)	No	6	5,350.00	32,100.00
25	Thermal Receipt Printer - (1 per lane)	No	6	12,500.00	75,000.00
26	RFID Handheld Readers	No	4	68,000.00	2,72,000.00
27	Violation light & Alarm (on existing pole) and Foot switch in booth - (1 per lane)	No	6	2,400.00	14,400.00
28	Booth CCTV camera with voice recording - (1 per lane)	No	6	7,950.00	47,700.00
29	Intercom Slave unit in booth - (1 per lane)	No	6	3,750.00	22,500.00
30	Lane Level UPS - (1 per lane)	No	6	16,000.00	96,000.00
31	Intercom Master unit - (1 per plaza)	No	1	44,000.00	44,000.00
32	Firewall Hardware	No		42,000.00	42,000.00

SI. no	ltem	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
33	CCTV cameras for Plaza building surveillance (server room, control room, cash room, admin)	No	4	5,250.00	21,000.00
			Tota	I CAPEX Price	53,42,120.00

## B. For 8-lane fee plazas

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SI. no	ltem	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
Α	Integral Components (Lane level & Plaza Level )				**
1	RFID ETC transceiver near Pay-axis - mounted on canopy (1 per lane)	No	8	77,800.00	6,22,400.00
2	Electronics Enclosure - (1 per lane)	No	8	6,670.00	53,360.00
3	Lane Controller with Industrial PC - (1 per lane)	No	8	91,895.00	7,35,160.00
4	AVC including sensors, loop and detector - (1 per lane)	Set	8	1,50,000.00	12,00,000.00
5	User Fare Display with mounting pole - (1 per lane)	Set	8	14,300.00	1,14,400.00
6	Automatic Barrier Gate - (1 per lane)	No	8	78,000.00	6,24,000.00
7	Overhead Lane Status light (OHLS) - (1 per lane)	No	8	8,250.00	66,000.00
8	Traffic light with mounting pole - (1 per lane)	Set	8	8,250.00	66,000.00
9	Loops with detector - (2 per lane)	Set	16	4,050.00	64,800.00
10	Incident Capture Camera with mounting pole - (1 per lane)	Set	8	6,400.00	51,200.00
11	License Plate Image Capture Camera with mounting poles - (1 per lane)	Set	8	6,400.00	51,200.00
12	Customized industrial grade keyboard - (1 per lane)	No	8	6,630.00	53,040.00
13	Cabling/Networking/Installation/Commissioning (Lump sum)	LS	1	2,83,000.00	2,83,000.00
14	Software – Lane Level - (1 per lane)	No	8	15,000.00	1,20,000.00
15	Plaza Servers in hot-standby configuration	No	1	5,65,000.00	5,65,000.00
16	Workstations for MIS, Cashup, Audit & LSDU (Lane status display unit in control room)	No	4	42,500.00	1,70,000.00
17	24 Port Network switch (Layer 3)	No	2	70,000.00	1,40,000.00
18	Outdoor wifi Access Point	No	1	9,250.00	9,250.00
19	Software – Plaza level	Job	1	75,000.00	75,000.00
20	Broadband/Dedicated Internet Lease Line (01 Static IP) with minimum 04 Mbps link for CCH connectivity	Facility	2	80,000.00	1,60,000.00
21	UPS system as required for complete Hybrid ETC Toll Plaza system	No	2	2,05,000.00	4,10,000.00
22	Servo stablizer (60 KVA - 03 phase)	No	1	1,05,000.00	1,05,000.00
23	Network Video Recorder (NVR) for CCTV	No	1	62,000.00	62,000.00
	recording with adequate storage				
В	Other components (Lane level & Plaza Level)				
24	TFT Monitor - (1 per lane)	No	8	5,350.00	42,800.00
24	Thermal Receipt Printer - (1 per lane)	No	8	12,500.00	1,00,000.00
26	RFID Handheld Readers	No	4	68,000.00	2,72,000.00
27	Violation light & Alarm (on existing pole) and Foot switch in booth - (1 per lane)	No	8	2,400.00	19,200.00
28	Booth CCTV camera with voice recording - (1 per lane)	No	8	7,950.00	63,600.00
29	Intercom Slave unit in booth - (1 per lane)	No	8	3,750.00	30,000.00
30	Lane Level UPS - (1 per lane)	No	8	16,000.00	1,28,000.00

SI. no	ltem	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
31	Intercom Master unit - (1 per plaza)	No	1	44,000.00	44,000.00
32	Firewall Hardware	No	1	42,000.00	42,000.00
33	CCTV cameras for Plaza building surveillance (server room, control room, cash room, admin)	No	4	5,250.00	21,000.00
			Tota	Total CAPEX Price	

## C. For 10-lane fee plazas

SI. no	ltem	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
Α	Integral Components (Lane level & Plaza Level )				
1	RFID ETC transceiver near Pay-axis - mounted on canopy (1 per lane)	No	10	77,800.00	7,78,000.00
2	Electronics Enclosure - (1 per lane)	No	10	6,670.00	66,700.00
3	Lane Controller with Industrial PC - (1 per lane)	No	10	91,895.00	9,18,950.00
4	AVC including sensors, loop and detector - (1 per lane)	Set	10	1,50,000.00	15,00,000.00
5	User Fare Display with mounting pole - (1 per lane)	Set	10	14,300.00	1,43,000.00
6	Automatic Barrier Gate - (1 per lane)	No	10	78,000.00	7,80,000.00
7	Overhead Lane Status light (OHLS) - (1 per lane)	No	10	8,250.00	82,500.00
8	Traffic light with mounting pole - (1 per lane)	Set	10	8,250.00	82,500.00
9	Loops with detector - (2 per lane)	Set	20	4,050.00	81,000.00
10	Incident Capture Camera with mounting pole - (1 per lane)	Set	10	6,400.00	64,000.00
11	License Plate Image Capture Camera with mounting poles - (1 per lane)	Set	10	6,400.00	64,000.00
12	Customized industrial grade keyboard - (1 per lane)	No	10	6,630.00	66,300.00
13	Cabling/Networking/Installation/Commissioning (Lump sum)	LS	1	4,08,000.00	4,08,000.00
14	Software – Lane Level - (1 per lane)	No	10	15,000.00	1,50,000.00
15	Plaza Servers in hot-standby configuration	No	1	5,65,000.00	5,65,000.00
16	Workstations for MIS, Cashup, Audit & LSDU (Lane status display unit in control room)	No	4	42,500.00	1,70,000.00
17	24 Port Network switch (Layer 3)	No	2	70,000.00	1,40,000.00
18	Outdoor wifi Access Point	No	1	9,250.00	9,250.00
19	Software – Plaza level	Job	1	75,000.00	75,000.00
20	Broadband/Dedicated Internet Lease Line (01 Static IP) with minimum 04 Mbps link for CCH connectivity	Facility	2	80,000.00	1,60,000.00
21	UPS system as required for complete Hybrid ETC Toll Plaza system	No	2	2,05,000.00	4,10,000.00
22	Servo stablizer (60 KVA - 03 phase)	No	1	1,05,000.00	1,05,000.00
23	Network Video Recorder (NVR) for CCTV recording with adequate storage	No	1	62,000.00	62,000.00
B	Other components (Lane level & Plaza Level)				
24	TFT Monitor - (1 per lane)	No	10	5,350.00	53,500.00
25	Thermal Receipt Printer - (1 per lane)	No	10	12,500.00	1,25,000.00
26	RFID Handheld Readers	No	4	68,000.00	2,72,000.00
27	Violation light & Alarm (on existing pole) and Foot switch in booth - (1 per lane)	No	10	2,400.00	24,000.00
28	Booth CCTV camera with voice recording - (1 per lane)	No	10	7,950.00	79,500.00
29	Intercom Slave unit in booth - (1 per lane)	No	10	3,750.00	37,500.00
30	Lane Level UPS - (1 per lane)	No	10	16,000.00	1,60,000.00
31	Intercom Master unit - (1 per plaza)	No	1	44,000.00	44,000.00
32	Firewall Hardware	No	1	42,000.00	42,000.00
33	CCTV cameras for Plaza building surveillance (server room, control room, cash room, admin)	No	4	5,250.00	21,000.00
			Total	CAPEX Price	77,39,700.00

## D. For 12-lane fee plazas

SI. no	Item	Unit	Quantity	Unit Rate (Rs.)	Amount (Rs.)
Α	Integral Components (Lane level & Plaza Level)				
	RFID ETC transceiver near Pay-axis - mounted on canopy (1 per lane)	No	12	77,800.00	9,33,600.00
2	Electronics Enclosure - (1 per lane)	No	12	6,670.00	80,040.00
3	Lane Controller with Industrial PC - (1 per lane)	No	12	91,895.00	11,02,740.00
4	AVC including sensors, loop and detector - (1 per lane)	Set	12	1,50,000.00	18,00,000.00
5	User Fare Display with mounting pole - (1 per lane)	Set	12	14,300.00	1,71,600.00
6	Automatic Barrier Gate - (1 per lane)	No	12	78,000.00	9,36,000.00
7	Overhead Lane Status light (OHLS) - (1 per lane)	No	12	8,250.00	99,000.00
8	Traffic light with mounting pole - (1 per lane)	Set	12	8,250.00	99,000.00
9	Loops with detector - (2 per lane)	Set	24	4,050.00	97,200.00
10	Incident Capture Camera with mounting pole - (1 per lane)	Set	12	6,400.00	76,800.00
11	License Plate Image Capture Camera with mounting poles - (1 per lane)	Set	12	6,400.00	76,800.00
12	Customized industrial grade keyboard - (1 per lane)	No	12	6,630.00	79,560.00
13	Cabling/Networking/Installation/Commissioning (Lump sum)	LS	1	5,48,000.00	5,48,000.00
14	Software – Lane Level - (1 per lane)	No	12	15,000.00	1,80,000.00
15	Plaza Servers in hot-standby configuration	No	1	5,65,000.00	5,65,000.00
16	Workstations for MIS, Cashup, Audit & LSDU (Lane status display unit in control room)	No	4	42,500.00	1,70,000.00
17	24 Port Network switch (Layer 3)	No	2	70,000.00	1,40,000.00
18	Outdoor wifi Access Point	No	1	9,250.00	9,250.00
19	Software – Plaza level	Job	1	1,00,000.00	1,00,000.00
20	Broadband/Dedicated Internet Lease Line (01 Static IP) with minimum 04 Mbps link for CCH connectivity	Facility	2	80,000.00	1,60,000.00
21	UPS system as required for complete Hybrid ETC Toll Plaza system	No	2	2,05,000.00	4,10,000.00
22	Servo stablizer (60 KVA - 03 phase)	No	1	1,05,000.00	1,05,000.00
23	Network Video Recorder (NVR) for CCTV recording with adequate storage	No	1	62,000.00	62,000.00
В	Other components (Lane level & Plaza Level)				
24	TFT Monitor - (1 per lane)	No	12	5,350.00	64,200.00
25	Thermal Receipt Printer - (1 per lane)	No	12	12,500.00	1,50,000.00
26	RFID Handheld Readers	No	4	68,000.00	2,72,000.00
27	Violation light & Alarm (on existing pole) and Foot switch in booth - (1 per lane)	No	12	2,400.00	28,800.00
28	Booth CCTV camera with voice recording - (1 per lane)	No	12	7,950.00	95,400.00
29	Intercom Slave unit in booth - (1 per lane)	No	12	3,750.00	45,000.00
30	Lane Level UPS - (1 per lane)	No	12	16,000.00	1,92,000.00
31	Intercom Master unit - (1 per plaza)	No	1	44,000.00	44,000.00
32	Firewall Hardware	No	1	42,000.00	42,000.00
33	CCTV cameras for Plaza building surveillance (server room, control room, cash room, admin)	No	4	5,250.00	21,000.00
			То	otal CAPEX Price	89,55,990.00

## E. For 14-lane fee plazas

A 1 2 3 4 5	Integral Components (Lane level & Plaza Level ) RFID ETC transceiver near Pay-axis - mounted on canopy (1 per lane) Electronics Enclosure - (1 per lane) Lane Controller with Industrial PC - (1 per lane) AVC including sensors, loop and detector - (1 per lane) User Fare Display with mounting pole - (1 per lane)	No No No Set	14	(Rs.) 77,800.00	10,89,200.00
2 3 4 5	canopy (1 per lane) Electronics Enclosure - (1 per lane) Lane Controller with Industrial PC - (1 per lane) AVC including sensors, loop and detector - (1 per lane) User Fare Display with mounting pole - (1 per lane)	No No	14		10,89,200.00
3 4 5	Lane Controller with Industrial PC - (1 per lane) AVC including sensors, loop and detector - (1 per lane) User Fare Display with mounting pole - (1 per lane)	No		<b>•</b> • • • • • •	
4	AVC including sensors, loop and detector - (1 per lane) User Fare Display with mounting pole - (1 per lane)		4.4	6,670.00	93,380.00
5	lane) User Fare Display with mounting pole - (1 per lane)	Set	14	91,895.00	12,86,530.00
			14	1,50,000.00	21,00,000.00
-		Set	14	14,300.00	2,00,200.00
6	Automatic Barrier Gate - (1 per lane)	No	14	78,000.00	10,92,000.00
7	Overhead Lane Status light (OHLS) - (1 per lane)	No	14	8,250.00	1,15,500.00
8	Traffic light with mounting pole - (1 per lane)	Set	14	8,250.00	1,15,500.00
9	Loops with detector - (2 per lane)	Set	28	4,050.00	1,13,400.00
10	Incident Capture Camera with mounting pole - (1 per lane)	Set	14	6,400.00	89,600.00
11	License Plate Image Capture Camera with mounting poles - (1 per lane)	Set	14	6,400.00	89,600.00
12	Customized industrial grade keyboard - (1 per lane)	No	14	6,630.00	92,820.00
13	Cabling/Networking/Installation/Commissioning (Lump sum)	LS	1	6,88,000.00	6,88,000.00
14	Software – Lane Level - (1 per lane)	No	14	15,000.00	2,10,000.00
15	Plaza Servers in hot-standby configuration	No	1	5,65,000.00	5,65,000.00
16	Workstations for MIS, Cashup, Audit & LSDU (Lane status display unit in control room)	No	4	42,500.00	1,70,000.00
17	24 Port Network switch (Layer 3)	No	2	70,000.00	1,40,000.00
18	Outdoor wifi Access Point	No	1	9,250.00	9,250.00
19	Software – Plaza level	Job	1	1,00,000.00	1,00,000.00
20	Broadband/Dedicated Internet Lease Line (01 Static IP) with minimum 04 Mbps link for CCH connectivity	Facility	2	80,000.00	1,60,000.00
21	UPS system as required for complete Hybrid ETC Toll Plaza system	No	2	2,05,000.00	4,10,000.00
22	Servo stablizer (60 KVA - 03 phase)	No	1	1,05,000.00	1,05,000.00
23	Network Video Recorder (NVR) for CCTV recording with adequate storage	No	1	62,000.00	62,000.00
В	Other components (Lane level & Plaza Level)				
24	TFT Monitor - (1 per lane)	No	14	5,350.00	74,900.00
25	Thermal Receipt Printer - (1 per lane)	No	14	12,500.00	1,75,000.00
26	RFID Handheld Readers	No	4	68,000.00	2,72,000.00
27	Violation light & Alarm (on existing pole) and Foot switch in booth - (1 per lane)	No	14	2,400.00	33,600.00
28	Booth CCTV camera with voice recording - (1 per lane)	No	14	7,950.00	1,11,300.00
29	Intercom Slave unit in booth - (1 per lane)	No	14	3,750.00	52,500.00
30	Lane Level UPS - (1 per lane)	No	14	16,000.00	2,24,000.00
31	Intercom Master unit - (1 per plaza)	No	1	44,000.00	44,000.00
32	Firewall Hardware	No	1	42,000.00	42,000.00
33	CCTV cameras for Plaza building surveillance (server room, control room, cash room, admin)	No	4	5,250.00	21,000.00
		Í	Total CA	PEX Price	1,01,47,280.00

On account of termination of Contract Agreement by IHMCL with no fault of Master ESP, the following shall be paid as Termination Payment to the Master ESP:

Upon Termination of Contract Agreement by IHMCL with no fault of Master ESP, IHMCL shall compensate the depreciated (Calculated as per straight line method) value of capital expenditure incurred on ETC equipment by the Master ETC Service Provider, provided that no payment shall be due until the existing life of the current asset.

For avoidance of doubt the life of each of ETC equipment shall be considered to be 5 years. Termination Payment shall only be due in case of new equipment is installed after extinguishing the remaining life of the existing equipment. Further, the Master ESP shall be required to maintain Asset Management portal to maintain the records and inventory of replaced ETC equipment as per requirement of IHMCL.

Accordingly, the clause on "Compensation for default by IHMCL" as mentioned in SI. # 17 (Additional clause – Including Compensation for default by IHMCL) in Addendum & Corrigendum-1 issued on dated 20.07.2020 shall stand deleted.

A. Zone -1

#### 1. Toll Plaza Details

a. ETC Equipment Status overview provided for 110 toll plazas

#### 2. Equipment Details

Sr.No	Equipment Details	Key Makes/OEMs of equipment
1	RFID Reader	3M, Alien, Biso, Delphi, Feig, Tagmaster, Honeywell, Kathrein, Linear, Motorola, Zebra,Star
2	AVCC	Advantech, Arya Omnitalk, E Toll, Efkon, Kent, Lenovo, metro,Qualix, Rajdeep, Scita, Sick, Technido, Techsture, Toradex, VaaaaN
3	TLC	Additech,Advantech, AOC, Arohan, Omnitalk, Dell, E Toll, Efkon, Kent, Lenovo, metro,Qualix, Rajdeep, Scita, Sick, Technido, Techsture, Toradex, VaaaN, Path, Lanner Electronic, Mahakal
4	Server	Dell, HP, IBM, Lenovo
5	LPIC	Auric, CP Plus, Dahua, Hikvision, Samsung, Unv, Vivotek,
6	ICS	Auric, CP Plus, Dahua, Hikvision, Samsung, Unv, Vivotek,
7	Barrier	ASN, Elka,Wejoin, Magnetic, Numeric, Parkstar, E Toll, Rajdeep, VaaaN
8	NVR	Advik, Auric, CP Plus, Dahua, Hikvision, Samsung, Unv, Vivotek, Honeywell
9	Master Intercom	AlPhone, Grandstream, Matrix, Beetel

## 3. Toll Plaza Equipment Installation Year

Installation Year	No of toll plazas
2013	01
2014	08
2015	04
2016	11
2017	16
2018	37
2019	26
2020	07

Plaza Name	 Total no. of Lanes	Implementa tion Date	RFID Reader	AVCC	TLC	Server	LPIC	ICS	Automatic Barrier	NVR	Master Intercom	Remarks
L&T PANIPAT	 21	Sep-17	Alien	Kent ITS	Additech	Lenovo	Hikvision	Hikvision	Elka	Hikvision	Aiphone	
Zidda	10	Nov-19	TagMaster	Toll expert	Toll Expert	ЧН	CP Plus	CP Plus	Elka & wejoin	CP Plus	Aiphone	
Lehrabega	 10	Feb-18	TagMaster	Rajdeəp	Rajdeep	IBM	Hikvision	Hikvision	Rajdeep	Hikvision	Aiphone	All ok expect 4 AVC, 4 ICS & 12 LPIC
Badbar	 10	Sep-17	Zebra	Metro	Metro	Lenovo		Vivotek		Hikvision	Aiphone	
Paind	 10	Jul-18	TagMaster	Rajdeep	Rajdeep	IBM		Hikvision	Rajdeep	Hikvision	Aiphone	
Chandimandir	 14	Dec-18	Feig	Efkon	Efkon	dН		Panasoni c	Magnetic	Samsung	Aiphone	
Milkmajara	 16	Jul-18	Zebra	Metro	Metro	Lenovo		Hikvision		Hikvision	Aiphone	All ok except 4 RFID, 4 TLC, 4 AVC, 4 ICS
Kalajhar	12	Jun-17	TagMaster	Dell	Dell	dH	CP Plus	CP Plus	Wejoin	CP Plus	Aiphone	
Jaloli	12	Mar-20	TagMaster	Banner	Qualix	Dell	CP Plus	CP Plus	Wejoin	CP Plus	Aiphone	
Landhari	12	Oct-17	TagMaster	Banner	Qualix	dН	CP Plus	CP Plus	Wejoin	CP Plus	Aiphone	
Khuian Malkan	14	Mar-18	TagMaster	Banner	Qualix	dH	CP Plus	CP Plus	Wejoin	CP Plus	Aiphone	
Bhavdeen	14	Mar-18	TagMaster	Banner	Qualix	dН	CP Plus	CP Plus	Wejoin	CP Plus	Aiphone	
Chiddan	10	Feb-18	TagMaster	Banner	VaaaN	머	Hikvision	Hikvision		Vivotech	Aiphone	All ok except 2 RFID, 3 TLC, 1 AVC
Kitlana	12	Jun-20	TagMaster	Banner	VaaaN	ЧH	Hikvision	Hikvision	Toll Max	CP Plus	Grand Stream	

4. Toll plaza Along with Implementation date with Equipment Make



Remarks			All ok except 2 AVC		All ok except 1 RFID							All ok except 2 RFID, 1 AVC, 1 ICS, 2 Barrier
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Grand Stream		Aiphone	Aiphone	Grand Stream	Aiphone
NVR	CP Plus	CP Plus	Vivotech	Vivotech	Hikvision	Hikvision	CP Plus	Hikvision	Dahua	Dahua	CP Plus	Hikvision
Automatic Barrier		VaaaN	VaaaN	VaaaN	Biso	Biso	VaaaN	Parkstar	Wejoin	Wejoin	VaaaN	Magnetic
ics	CP Plus	Hikvision	Hikvision	Hikvision	Híkvision	Hikvision	Hikvision	Vivotek	Dahua	Dahua	Hikvision	Hikvision
LPIC	CP Plus	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Vivotek	Dahua	Dahua	Hikvision	
Server	HP	Lenovo	Lenovo	Lenovo	Lenovo	Lenovo	Lenovo & IBM	Lenovo	ΗЬ	ЧН	Lenovo & IBM	IBM
TLC	Qualix	VaaaN	Toll Max	Toll Max	Advantech	Advantech	Toll Max	Metro	Advantech	Advantech	Toll Max	Kent ITES
AVCC	Banner	VaaaN	Toli Max	Toll Max	Arya Omnitalk	Arya Omnitalk	Toll Max	Metro	Rajdeep	Rajdeep	Toll Max	Kent I <sup>–</sup> S
RFID Reader	TagMaster	Feig & TagMaster	Kathrein	Kathrein	Biso	Biso	TagMaster	TagMaster	Linear	Linear	TagMaster	Feig
Implementa tion Date	Jun-18	Aug-17	Nov-19	Nov-19	Nov-19	Dec-19	May-14	Aug-16	Oct-19	Jan-19	May-14	2015
Total no. of Lanes	8	14	Q	9	Q	9	10	10	10	10	10	10
Plaza Name	Banushi	Deoria	Nainsar	Chapwa	Hadwa	Akshda	Ronahi	Nawabganj	Khairabad near Karondi	ltunja near Barabhari	Ahmedpur	Dakshinashekh pur
S.No	15	16	17	18	6 0	20	21	22	23	24	25	26

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Remarks		All ok except 3 RFID, 3 AVC		-	All ok except 2 TLC, 1 AVC, 1 LPIC & 1 ICS							
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Matrix	Matrix	Matrix	Matrix	Matrix		Aiphone
NVR	Vintron	Hikvision	Vivotech	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision
Automatic Barrier	Magnetic	Biso	VaaaN	Wejoin	Wejoin	Wejoin	Wejoin	Wejoin	Wejoin	Wejoin	Wejoin	Elka
ICS		Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision
LPIC	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision
Server	IBM	Lenovo	Lenovo	ЧН	Lenovo	IBM	IBM	IBM	IBM	IBM	НР	Lenovo
TLC	Rajdeep	Advantech	Toll Max	Rajdeep	Rajdeep	Path India	Path India	Path India	Path India	Path India	Toll expert	Kent ITES
AVCC	Rajdeep	Arya Omnitalk	Toll Max	Rajdeep	Rajdeep	Technido	Technido	Technido	Technido	Technido	Toll expert	Kent ITS
RFID Reader	Technova	Biso	TagMaster	Linear	Linear	Star	Star	TagMaster	Star	Star	TagMaster	TagMaster
Implementa tion Date	Oct-19	Aug-19	Nov-19	May-19	Apr-19	Jun-18	Jun-18	Jun-18	Jun-18	Jun-18	Jun-20	Aug-16
Total no. of Lanes	Q	ى	ى	16	16	10	10	4	4	4	9	14
Plaza Name	Aaini	Gulalpurva	shahabpur	Bara	Asroga	Sujala	Sihori Uparhar/Kokhr aj	Rajapur Maksudan/Sora on	Bhopatpur/Sah son	Adampur/Nawa bganj	Lalanagar	Tundla
S.No	27	58	29	30	31	32	33	34	35	36	37	38
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Remarks	7															
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Grand Stream	Matrix	Matrix	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Grand Stream	
NVR	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	VaaaN	Hikvision/Univi ew	Hikvision/Univi ew	Hikvision	Hikvision	Hikvision	CP Plus	CP Plus	Hikvision	CP Plus	
Automatic Barrier	VaaaN	Elka	VaaaN	Magnetic	Magnetic	VaaaN	Wejoin	Wejoin	Biso	Biso	Elka	Rajdeep	Rajdeep	Elka	VaaaN	
ICS	Hikvision	Hikvision	Hikvision	Auric	Auric		Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	
LPIC	Hikvision	Hikvision	Hikvision	CP Plus	CP Plus		Hikvision	Hikvision	Hikvision	Hikvision	Hikvísion	Vivotek	Vivotek	Hikvision	Hikvision	
Server	đ	Lenovo	đH	ЧН	ЧH	VaaaN	Н	ЧΗ	Lenovo	Lenovo	IBM	IBM	IBM	IBM	ЧH	
LLC	Vaaan	Kent ITES	Vaaan	Infrovate	Infrovate	AOC	Path India	Path India	Advantech	Advantech	Vaaan	Rajdeep	Rajdeep	Vaaan	VaaaN	
AVCC	Vaaan	Kent ITS	Vaaan	Scita	Scita	Vaaan	Technido	Technido	Arya Omnitalk	Arya Omnitalk	Vaaan	Rajdeep	Rajdeep	Vaaan	VaaaN	
RFID Reader	TagMaster	TagMaster	TagMaster	Zebra	Zebra	Kathrein	Star	Star	Biso	Biso	TagMaster	TagMaster	TagMaster	TagMaster	TagMaster	
Implementa tion Date	Jan-18	Aug-16	Jan-18	Jun-17	Jun-17	Jan-18	Feb-18	Feb-18	Jan-20	Jan-20	Jul-18	Dec-17	Dec-17	Oct-18	Dec-19	
Total no. of Lanes	9	12	9	10	10	9	10	10	ω	ω	6	18	16	6	9	
Plaza Name	Madrak	Gaurau	Baros	Somna	Luharli	Sabli Toll Plaza	Semri	Ait	Vighakhet	Babina	Khanna	Barajod (earlier Sikandara )	Anantram	Aliyapur	Katoghan	
S.No	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	

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Remarks	RFID Reader Dec- 17 EOL Dec 24	RFID Reader Nov- 17 EOL Nov 24	All ok except 2 AVC	RFID Reader Dec- 17 EOL Dec 24	_	RFID Reader Oct- 19					All ok except 2 RFID, 3 Barrier	Page <b>19</b> of <b>53</b>
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Diqu	Aiphone	Aiphone	Grand Stream	Pag
NVR	Hikvision	Hikvision	Vivotech	Hikvision	Hikvision	Hikvision	Vivotech	Hikvision	Hikvision	Hikvision	Unv & CP Plus	
Automatic Barrier					Wejoin	WEJOIN		E Toll	Magnetic	Magnetic	Toll Max	
ICS	Vivotek	Axis	Hikvision	Axis	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	
LPIC			Hikvision		Hikvision		Hikvision	Hikvision			Hikvision	
Server	면표	유	£	Ч	ЧH	Lenovo	ЧН	НР	HP Pro	HP Pro	ЧH	
тгс	Advantech	Advantech	Vaaan	Advantech	Arya Omnitalk	Kent ITES	Vaaan	E Toll	Lanner Electronics	Lanner Electronics	Toll Max	
AVCC	Advantech	Advantech	Banner	Advantech	Arya Omnitalk	Kent ITS	Banner	E Toll	Sick	Sick	Toll Max	
RFID Reader	Motorola	Star/Motor ola	TagMaster	Motorola	Zebra	feig/Zebra	TagMaster	Feig	Alien	Alien	Toll Max	
Implementa tion Date	Dec-15	Feb-13	Nov-18	Dec-14	Feb-19	Feb-19	Nov-18	Jan-18	Jan-15	Jan-15	May-19	
Total no. of Lanes	13	6	10	24	12	10	9	12	12	12	10	
Plaza Name	Sambhu Toll Plaza	Ladowal Toll Plaza	Usaka(Chameri )	Gharonda Toll Plaza	Thana	Saini Majra	Badauri	Sivaya	Thirya Khetal	Niyamatpur	Joya	
S.No	54	55	56	57	58	59	60	61	62	63	64	

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Remarks	All ok except 1 AVC	-							02 ICS Camera Faulty						
Master Intercom	Grand Stream	Grand Stream	Grand Stream	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Matrix	Beetel	Aiphone	Aiphone	Aiphone
NVR	Unv & CP Plus	CP Plus	CP Plus	Unv	Unv	Unv	Honeywell	Honeywell	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Advik
Automatic Barrier	Toll Max	VaaaN	VaaaN	VaaaN	VaaaN	VaaaN			Elka	Elka	Wejoin	Numeric/Wejoi n			
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision		CP Plus	CP Plus
LPIC	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision			Hikvision	Hikvision	Hikvision	Hikvision	Vivotek	CP Plus	CP Plus
Server	НР	НЬ	ΗЬ	НР	ЧH	ЧH	IBM	IBM	Dell	Dell	IBM	Lenovo	Dell	dН	ЧЬ
TLC	Toll Max	Toll expert	Toll expert	Vaaan	Vaaan	Vaaan	Kent ITES	Kent ITES	Mahakal Infra	Mahakal Infra	Path India	Path India	Metro	Qualix	Scita
AVCC	Toll Max	Banner	Banner	Vааал	Vaaan	Vaaan	Advantech	Advantech	Advantech	Advantech	Technido	Technido	Metro	Qualix Toradex	Scita
RFID Reader	Toli Max	Kathrein	Kathrein	TagMaster	TagMaster	TagMaster	3M/Feig	3M/Feig	Delphi	Delphi	Star	Star	TagMaster	TagMaster	Zebra
Implementa tion Date	May-19	Jul-19	Jul-19	Sep-17	Sep-17	Sep-17	Nov-14	Nov-14	Feb-17	Feb-17	Mar-17	Mar-17	May-18	May-18	Nov-19
Total no. of Lanes	16	ω	8	12	12	12	10	10	ω	ß	7	10	10	10	9
Plaza Name	Brijghat	Belon	Mohammad Ibrahimpur	Narwana	Chaudhrivyas	Badopatti	Waryam Nangal Toll Plaza	Ladpalwan	JATL Nijjerpura Toll Plaza	JATL Dhilwan Toli Plaza	Harsa Mansar Toll Plaza	Chollang Toll Plaza	Usma	Kot karor kalan	Chak Bamniya
S.No	65	66	67	68	69	70	71	72	73	74	75	76	22	78	62

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Remarks								RFID 2015	RFID and Server Nov- 19	RFID and Server Nov- 19			Page <b>21</b> of <b>53</b>
Master Intercom	Aiphone	Aiphone		Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	bag
NVR		CP PLUS/Honeyw ell	NNU	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision	Hikvision	Hikvision	Hikvision	
Automatic Barrier	Magnetic	WeJoin	ASN	Elka	Elka	Elka	Wejoin	Magnetic	Magnetic	Magnetic	VaaaN		
ICS	Samsung	Hikvision	Unv					CP Plus	HIKVISI ON/CP- Plus	AURIC/H IKVISIO N	Hikvision	Hikvision	
LPIC	Samsung	Hikvision	Unv	Vivotek	Vivotek	Vivotek	Vivotek	CP Plus	HIKVISI ON/CP- Plus	AURIC/H IKVISIO N	Hikvision	Hikvision	
Server	IBM	IBM	Lenovo	IBM	IBM	IBM	IBM	ЧH	Lenovo	Lenovo	Lenovo	НР	
ТГС	Rajdeep	Rajdeep	Industrial	Advantech	Advantech	Advantech	Advantech	Arohan	Techsture	Infrovate	Kent ITES	Advantech	
AVCC	Rajdeep	Rajdeep	lenovo	Advantech	Advantech	Advantech	Advantech	Techsture	Techsture	Scita	Kent ITS	Advantech	
RFID Reader	Zebra	Linear/Tag Master	Zebra	Zebra	Zebra	Zebra	Zebra	Feig	Honeywell	Honeywell	Feig	TagMaster	-
Implementa tion Date	May-18	Jul-18	Jul-19	Jul-16	Apr-16	Jul-16	Apr-16	2014	Sep-16	Mar-16	Dec-19	Sep-19	
Total no. of Lanes	12	12	ω	14	10	14	10	12	12	12	æ	18	
Plaza Name	dapar	beharmpur	Bhagomajra	RAMYANA Toll Plaza	Makrauli Kalan Toll Plaza	Madina Toll Plaza	Dahar Toll Plaza	Rohad Toll Plaza	Jat Gangaicha Toll Plaza	Dighal Toll Plaza	Khatkar	Chajjarasi	
S.No	80	81	82	83	84	85	88 80	87	88	88	06	91	

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arks																			
Remarks																			
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Inspected	Inspected	Aiphone	Aiphone	Aiphone								
NVR	Hikvision	Hikvision	CP Plus	CP Plus	CP Plus	CP Plus	Hikvision	Hikvision	Hikvision	Unv	Unv	NN	UNV	UNV	UNV	NN	UNV	UNV	NNU
Automatic Barrier			Wejoin	Elka	Elka	Wejoin	Parkstar	Parkstar	Wejoin	Wejoin	Wejoin	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka
ICS	Vivotek	Vivotek	Mintron	Hikvision	Hikvision	Mintron	Hikvision	Hikvision		Unv	Cnv	NNV	NN	NNV	NN	NN	NN	NN	NN
ГЫС	Vivotek	Vivotek	Mintron	Hikvision	Hikvision	Mintron	Hikvision	Hikvision	Hikvision	Unv	Unv	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision
Server	IBM	ЧH	IBM	IBM	IBM	IBM	dН	ΗЬ	ЧН	ЧH	머	Dell	Dell	Dell	Dell	Dell	Dell	Dell	Dell
TLC	Metro	Metro	rajdeep	VaaaN	VaaaN	rajdeep	Metro	Metro	Advantech	Qualix	Qualix	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka	Ashoka
AVCC	Scita	Scita	Rajdeep	VaaaN	VaaaN	Rajdeep	Metro	Metro	Scita	Toradex Banner	Toradex Banner	Scita	Scita	Scita	Scita	Scita	Scita	Scita	Scita
RFID Reader	3M	ЗМ	TagMaster	TagMaster	TagMaster	TagMaster	Zebra	Zebra	Zebra	Zebra	Zebra	Zebra/Star	Zebra/Star	Zebra/Star	Zebra/Star	Zebra/Star	Zebra/Star	Zebra/Star	Zebra/Star
Implementa tion Date	Jul-14	Jul-14	Dec-18	Apr-16	Apr-16	Dec-18	Dec-19	Dec-19	Mar-19	Jun-20	Jun-20	Jun-18	Jun-18	Jun-18	Jun-18	Jun-18	Jun-18	Jun-18	Jun-18
Total no. of Lanes	Э	26	g	9	9	9	9	9	8	10	10	12	8	15	12	17	16	18	20
Plaza Name	IGIA	Khedki Daula	Jindpur	Nuruddinpur	Kunwarpur	Aihar	Aindhi	Piddhi	Andhiyari	Behram	Bachhwan (Bachhuan)	Mawikalan	Maujpur	Jakhauli	Fatehpur Rampur	Duhai	Dasna	Chhajju Nagar	Bilakbarpur
S.No	92	93	94	95	96	67	98	66	100	101	102	103	104	105	106	107	108	109	110

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#### B. Zone -2

#### 1. Toll Plaza Details

a. ETC Equipment Status overview provided for 144 toll plazas

## 2. Equipment Details

Equipment Details	Key Makes/OEMs of equipment
RFID Reader	3M, Alien, Biso, Elodon, IDTECH, Katherin, Kathren, Kathren/Tag Master,
	LINEAR, TAGMASTER, FIEG, Motorola, Newtech, OBID, Star, Tag
	Master, Zebra, Star
AVCC	Aditech, Advantech-Banner, Arya Omnitalk, Banner, Biso, Comvision,
	Efkon, Hitech, Intec, Kent, Metro, Metro banner, Qualix, Rajdeep, Rittal
	Banner, Sensor Line, Sick, SICK-Advantech, Technido, Technova,
	Techsture, Telegra, Toll Max, Toll Max Banner, TollXpert banner, VaaaN
TLC	Aditech, Advantech, Arya Omnitalk, Bisotech, Compaq, Cotmac, Efkon,
	Gigabite/FOXIN/ZEBRONIC, IMBM, Industrial PC, ITNL, Kent, Lenovo,
	metro, NA, Path, Qualix, Rajdeep, Rittal, Technova, Techsture, Toll Max,
	VaaaN, Zebronic
Server	Cooler-Master, Dell, HP, IBM, M3, Lenovo
LPIC	APRO, Axis, Beslar, CP Plus, Hikvision, Samsung, Vivotek, Wbox
ICS	APRO, Axis, CP Plus, Dahua, Hikvision, Honeywell, MINTRON, Samsung,
	Vivotek, Wbox
Automatic Barrier	Bisotech, Elka, IRB, La Barrier, Magnetic, NP, Parkstart, Toll max, Toshi,
	VaaaN, WeJoin
NVR	Hikvision UNV, CP Plus, Hikvision, Hikvision/UNV, Honeywell, Honeywell/
	UNV, HONEYWELL/ HIKVISION, NUUO, Qnap, UNV, Vivotek,
Master Intercom	Aiphone, Binatone, Crystal, Grand Stream, MATRIX, Panasonic, Rajdeep,
,	Toolfone

## 3. Toll Plaza Equipment Installation Year

Installation Year	No of toll plazas
2012	04
2013	16
2014	05
2015	09
2016	02
2017	21
2018	35
2019	31
2020	14
NA	07

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Remarks	03 RFID and 01 Barrier Not working	All Functional, RFID in 2017	All Functional, RFID in 2017	All Functional, RFID readers in 2017	All Functional except 01 ICS and 1 AEB, only 04 RFID are isntalled	All Functional, RFID readers in 2017	All Functional, RFID in 2017
Master Intercom		Aiphone	Aiphone	MATRIX	Aiphone	MATRIX	Aiphone
NVR	Hikvision	HONEYW ELL/HIKVI SION	HONEYW ELL/HIKVI SION	HONEYW ELL/HIKVI SION	Hikvision	HONEYW ELL/HIKVI SION	HONEYW ELL/HIKVI SION
Automatic Barrier	Toshi				BAI		
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision
LPIC					Hikvisio n		
Server	IBM	IBM System x3650 M3	IBM System x3650 M3	IBM System x3650 M3	IBM	IBM System x3650 M3	IBM System x3650 M3
TLC		Kent	Kent	Kent	Techsture	Kent	Kent
AVCC		Kent	Kent	Kent	Techstur e	Kent	Kent
RFID Reader	Feig	Feig	TagMaster/Fei g	Feig	Feig	TagMaster/Fei g	Feig
Implementa tion Date	2015	Jan-13	Jan-13	Jan-13	2015	Jan-13	Jan-13
Total no. of Lanes	ω	14	15	თ	ω	ø	14
Plaza Name	Vavadikh urd	Vasad	Vadodara	Ring Road	Pithai	Nadiad	Kheda
S.No	<del></del>	2	ε	4	CJ	9	7

4. Toll plaza Along with Equipment Make

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							I		
Remarks	All Functional, RFID readers in 2017	All Functional, except 02 RFID Readers, 05 RFID in 2015 and 04 in 2017				RFID in Mar-2017	RFID in Mar-2017		
Master Intercom	MATRIX	Aiphone	Aiphone	Aiphone		AlPhone	AlPhone	AlPhone	AlPhone
NVR	HONEYW ELL/HIKVI SION	HONEYW ELL/HIKVI SION	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision
Automatic Barrier			Toshi	Toshi					
ICS	Hikvision	Hikvision		Hikvision		Hikvisioin	Hikvisioin		
LPIC				Hikvisio n		Axis	Axis	Hikvisio n	Hikvisio n
Server	IBM System x3650 M3	IBM System x3650 M3	lenovo	lenovo	lenovo	Dell	Dell	dН	Ч
TLC	Kent	Kent	Insdustial PC	Insdustial PC	Kent	Advantech	Advantech	metro	metro
AVCC	Kent	Kent	Comvisio n	Comvisio n		Advantec h-Banner	Advantec h-Banner	Metro banner	Metro banner
RFID Reader	TagMaster/Fei g	TagMaster/Fei g	TagMaster	TagMaster	Feig	Zebra	Zebra	Kathrein/TagM aster	Kathrein/TagM aster
Implementa tion Date	Jan-13	Jan-13	Jan-18	Jan-18	Feb-18	Apr-15	Apr-15	NA	NA
Total no. of Lanes	ω	თ	ω	ω	14	16	16	ω	ω
Plaza Name	Anand	Ahmedab ad	Sikandra	Rajadhok	Khedi (Bandanw ara)	Pipalaz	Gegal	Tamdoli	Banthadi
S.No	8	Ø	10	÷	12	<del>č</del>	14	<del>1</del>	-16 16

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Remarks								RFID in 2019	RFID in Jun-19	RFID in Jun-19, 01 RFID missing			All Functional, RFID in Nov 2017
Master Intercom	Toolfone	Toolfone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	AIPHON E
NVR	Hikvision	Hikvision	Vivotek	Vivotek	Vivotek	Vivotek	Hikvision	CP Plus	CP Plus	CP Plus	CP Plus	CP Plus	Hikvision
Automatic Barrier	Biso	Biso	Toll max	Toll max	Toll max	Toll max	Toshi	WeJoin	WeJoin	WeJoin	WeJoin	WeJoin	Eka
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Vivotek	CP Plus/Hikvis ion	CP Plus	CP Plus	CP Plus	CP Plus	Hikvision
LPIC	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n		CP Plus/Hi kvision	CP Plus	CP Plus	CP Plus	CP Plus	Hikvisio n
Server	ΗР	dН	Lenovo	Lenovo	Lenovo	Lenovo	lenovo	ЧН	ЧH	ΗЬ	dH	НР	Lenovo
TLC	Biso	Biso	Toll Max	Toll Max	Toll Max	Toll Max	Insdustial PC	Qualix	Qualix	Qualix	Qualix	Qualix	Aditech
AVCC	Biso	Biso	Toll Max Banner	Toll Max Banner	Toll Max Banner	Toll Max Banner	Comvisio n	Qualix	Qualix	TollXpert barner	Qualix	Toradex	Aditech
RFID Reader	Biso	Biso	Tagmaster	Tagmaster	Tagmaster	Tagmaster	TagMaster	TagMaster	TagMaster	Tagmaster	TagMaster	TagMaster	Alien
Implementa tion Date	Jul-19	Aug-19	Jan-20	Jan-20	Jan-20	Jan-20	May-18	Jan-17	Jan-18	Jan-18	Aug-18	Aug-18	Sep-18
Total no. of Lanes	9	9	6	ę	6	6	10	Q	8	8	8	6	22
Plaza Name	Para	Lilamba	Bagaliya	Baggar	Badighati	Butati	Ludhwai	Nimbiya ki Dhani (bayatu)	Nimbasar	Khair fakir ki dhani	Hathitala	Bor Charnan	Bharthana / Karjan
S.No	17	18	19	20	21	22	23	24	25	26	27	28	29

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RFID Reader	AVCC	2 TLC	Server	LPIC	ICS	Automatic Barrier	NVR	Master Intercom	Remarks
Linear	Rajdeep Raj	Rajdeep It	lenovo	HIKVISIO n	Hikvision		Hikvision	Aiphone	
Linear	Rajdeep Ra	Rajdeep h	lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Linear	Rajdeep Ra	Rajdeep	lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
TagMaster	Qualix	Qualix	НР	CP Plus	CP Plus	WeJoin	CP Plus	Aiphone	
TagMaster	o xilalix	Qualix	НР	CP Plus	CP Plus	WeJoin	CP Plus	Aiphone	
IDTECH	Technov Tec	Technova	Lenovo		Hikvision		Hikvision	Matrix	01 RFID reader not working
Zebra/Tag Master	Rittal Banner	Rittal	IBM	Vivotek	Vivotek		Hikvision	Aiphone	
Zebra/Tag Master	Rittal Banner	Rittal	IBM	Vivotek	Vivotek		Hikvision	Aiphone	
Feig	<u>.</u>	Kent	Lenovo		Hikvision		Hikvision/U NV		
Feig		Kent	Lenovo		Hikvision		Hikvision/U NV		
Zebra/Motorol a/3M/Star	<u>000</u> 000	Gigabite/F OXIN/ZEB RONIC	BM	· · · ·	DHUA/HIK VISION		NA		RFID only 04 working, TLC only 06 working, AVCC not integrated
Newtech	Γe	Lenovo	IBM				NA	Crystal	
Newtech	Ze	Zebronic	IBM	Hikvisio n	Hikvision		NA		

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Remarks										Critical equipment in 2017 and other in 2010	Replaced in 2019	All Functional
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Binatone	Binatone	Grandstr eam	Grandstr eam	Aiphone	AlPhone	AlPhone	AlPhone
NVR	CP Plus	Hikvision	CP Plus	CP Plus	Hikvision	Hikvision	CP Plus	CP Plus	Vivotech	Hikvision	Hikvision	OUUN
Automatic Barrier		Toshi	Biso	WeJoin	WeJoin	WeJoin	Toll max	Toll max			Magnetic	Elka
ICS	CP Plus	Vivotek	Hikvision		Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	APRO	Hikvision
LPIC	CP Plus		Vivotec h	CP Plus	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	APRO	Hikvisio n
Server	НЬ	lenovo	Lenovo	НР	Dell	Dell	ЧH	НР	Lenovo	유	ЧН	С. Н
TLC	Advantech	Insdustial PC	Insdustial PC	Qualix	Technova	Technova	Toll Max	Toll Max	Toll Max	Rajdeep	Techsture	Advantech
AVCC	TollXpert banner	Comvisio n	Comvisio n	Banner	Technov a	Technov a	Banner	Banner	Toll Max	Rajdeep	Techstur e	Advantec h and banner
RFID Reader	Tagmaster	TagMaster	Biso	Zebra	IDTECH	IDTECH	Kathrein	Kathrein	TagMaster	Tagmaster	Zebra	Motorola
Implementa tion Date	Apr-19	May-18	Mar-18	Oct-18	Feb-20	Feb-20	Feb-20	Feb-20	Nov-19	Nov-17	Sep-19	2018
Total no. of Lanes	9	10	8	8	8	8	8	8	g	10	18	14
Plaza Name	Khachrol	Amoli	Korai	Rajora Khurd	Kondar	Chilachon d	Rabawata	Titoli	6ML @ km 229.100	Varahi	Samakhiy ali	Mokha
S.No	43	44	45	46	47	48	49	50	51	52	53	54

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Remarks	Critical equipment in 2017 and other in 2010	Critical equipment in 2017 and other in 2010, 01 RFID is of Starlink	Critical equipment in 2017 and other in 2015		01 RFID replaced in 2020	Some equipment in 2013	All Functional		
Master Intercom	AlPhone	AlPhone	AlPhone	Aiphone	Matrix	AIPHON E	Aiphone	Aiphone	Aiphone
NVR	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision
Automatic Barrier						Parkstar	WeJoin		
ICS	Hikvision	Hikvision	MINTORN E/HIK VISION	Samsung	Hikvision	Vivotek	Hikvision	Samsung	Vivotech
LPIC	Hikvisio n	Hikvisio n	Samsu ng	Hikvisio n	Hikvisio n	Vivotek	Hikvisio n	Hikvisio n	Vivotec
Server	웊	먚	먚	IBM	라	IBM	НР	IBM	Lenovo
TLC	Rajdeep	Rajdeep	Rajdeep	Efkon	Path	Advantech	Compaq	Efkon	Metro
AVCC	Rajdeep	Rajdeep	Rajdeep	Efkon	Technido	Metro	Metro	Efkon	Metro
RFID Reader	Tagmaster	Tagmaster	TAG MASTER/LINE AR/STAR SYSTEM	Feig	Star	Tagmaster	Zebra	Feig	Zebra
Implementa tion Date	Nov-17	71-voN	Nov-17	Mar-14	Jan-17	2016	Jul-19	Mar-14	Oct-18
Total no. of Lanes	10	01	12	16	10	ω	9	16	9
Plaza Name	Makhel	Bhiladi	Belgaum	Thikariya	Surajbari	Bhatwada	Limdi	Kishangar h	Nekawala
S.No	55	20	57	58	20	09	61	62	63

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Remarks								All ok except 2 TLC, 1 AVC			All ok except 3 RFID, 3 TLC, 2 LPIC, 2 ICS, 1 Barrier	
Master Intercom	Aiphone	AlPhone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone		Aiphone	Aiphone
NVR	Na	Na	Na	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	CP Plus	Hikvision	CP Plus	Vivotech
Automatic Barrier								Wejoin	Wejoin		Wejoin	
ICS	Hikvision	Hikvision	Hikvision	Apro	Apro	Apro	Apro	CP Plus	CP Plus	Vivotech	CP Plus	Hikvision
DIAT	Hikvisio n		Hikvisio n	Apro	Apro	Apro	Apro	CP Plus	CP Plus	Vivotec h	CP Plus	Hikvisio n
Server	ΗЬ	ЧH	НР	НР	ЧН	НР	ΗЬ	НР	ЧН	Lenovo	ЧH	Lenovo
тгс	Advantech	Advantech	Advantech	Cotmac	Cotmac	Cotmac	Cotmac	Qualix	Qualix	Rittal	Qualix	Toll Max
AVCC	Advantec		Advantec h (Síck)	Telegra	Telegra	Telegra	Telegra	Qualix	Qualix	Metro	Qualix	Toll Max
<b>RFID Reader</b>	Zebra	Star	Zebra	TagMaster	TagMaster	TagMaster	TagMaster	TagMaster	TagMaster	Elodon	TagMaster	TagMaster
Implementa tion Date	May-18	Mar-20	May-18	Jun-13	Jun-13	Jun-13	Jun-13	May-17	May-17		May-17	Nov-19
Total no. of Lanes	25	12	14	10	10	10	10	8	8	8	ω	9
Plaza Name	Shahjaha npur	Manoharp ur	Daulatpur a	Uthamam	Raipur	Indranaga r	Birami	Motisar/K hanori	Jasnath Nagar	Doli	Morani/ Pokaran	Tankala
S.No	64	65	66	67	68	69	70	71	72	73	74	75

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<u>г т</u>				1			1			<u> </u>		
Remarks	All ok except 1 AVC, 1 LPIC, 1 ICS							All ok except 2 LPIC	All ok except 1 ICS			
Master Intercom	Aiphone	Aiphone	Binatone		Binatone	Matrix	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone
NVR	Vivotech	Qnap	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Vivotech	CP Plus	Hikvision
Automatic Barrier		Elka	WeJoin		WeJoin	Elka			-			
ICS	Hikvision	Samsung	Hikvision	Hikvision	Hikvision	Hikvision	Vivotech	Vivotech	Vivotech	Hikvision	Vivotek/Hik vision	Hikvision
LPIC	Hikvisio n		Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n				Hikvisio n	Vivotek /Hikvisi on	Hikvisio n
Server	Lenovo	IBM	Dell	CoolerMas ter	Dell	ЧH	Lenovo	Lenovo	Lenovo	ЧН	ЧН	IBM
TLC	Toll Max	Insdustial PC	Technova	Lenovo	Technova	Advantech	Metro	Metro	Metro	VaaaN	VaaaN	Metro
AVCC	Toll Max	Efkon	Banner		Banner	Hitech	Metro	Metro	Metro	Banner	VaaaN	Metro
RFID Reader	TagMaster	3M	IDTECH	Star	IDTECH	TagMaster	TagMaster	TagMaster	TagMaster	Feig	Star/3 M	Zebra
Implementa tion Date	Nov-19	Jun-14	Feb-20	Feb-18	Feb-20	Nov-19	May-17	May-17	May-17	Feb-18	Apr-16	Dec-18
Total no. of Lanes	Q	10	ω	4	ω	10	Q	ø	Q	12	10	ω
Plaza Name	Netra	Kishorepu ra	Simliya / Baran	Kota Bypass/S akatpur Nayagaon	Fatehpur	Mandhan a	Shobhasa r	Lasedi	Dhadhar	Akhepura	Tatiyawas	Nimbhi Jodhan
S.No	76	17	78	62	80	81	82	83	84	85	86	87

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Remarks					All ok except 2 AVC		All ok excep 1 AVC	All ok except 1 RFID				
Master Intercom	Aiphone	Aiphone	Aiphone		Matrix	Matrix	Aiphone	Aiphone			Aiphone	AlPhone
NVR	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Vivotech	Vivotech	Hikvision	Hikvision	Vivotek	Hikvision
Automatic Barrier												
ICS	Hikvision	Vivotech	Vivotech	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision/S ecureeye	Hikvision/S ecureeye	Hikvision	Hikvision
LPIC	Hikvisio n	Vivotec h	Vivotec h		Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	
Server	IBM	IBM	IBM	Lenovo	ЧН	IBM	Lenovo	Lenovo	Lenovo	Lenovo	ЧH	НЬ
тгс	Metro	Rittal	Rittal	Rajdeep	Path	Path	Toll Max	Toll Max	kent	kent	VaaaN	Harikrukpa
AVCC	Metro	Banner	Banner		Technido	Technido	Toll Max	Toll Max	Kent	Kent	Banner	Harikrukp a-Sick
RFID Reader	Zebra	Zebra	Zebra	Linear	Star	Star	Kathrein	Kathrein	TagMaster	TagMaster	TagMaster	Feig
Implementa tion Date	Dec-18	Dec-15	Dec-15	Sep-17	May-18	May-18	Nov-19	Nov-19	2018	2018	Jul-18	Feb-17
Total no. of Lanes	8	12	10	12	10	10	9	Q	ω	ω	16	12
Plaza Name	Harimma	Negadiya	Mandawa da	Khandi Obri	Malera/Pi ndwara	Jaswantg arh/Gogu nda	Dumbarw adi	Dhoki	Taswade	Kini	Baswant	hivargaon Pavsa
S.No	88	68	06	91	92	63	94	95	96	26	86	66

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ΔŽ	Plaza Name	Total no. of Lanes	Implementa tion Date	RFID Reader	AVCC	TLC	Server	LPIC	ICS	Automatic Barrier	NVR	Master Intercom	Remarks
Laling/Dh ule	£	10	Nov-19	Honeywell/FEI G	Sick	Advantech	IBM	Hikvisio n	Hikvision		Hikvision	Aiphone	Different dates for other equipments
Ghoti		10	Apr-19	Linear	Rajdeep	Rajdeep	Dell	Hikvisio n	Hikvision		Vivotek	Ericssion	
Chandwa d toll plaza	- Ma	10	Nov-19	Honeywell/FEI G	Sick	Advantech	IBM	Hikvisio n	Hikvision		Hikvision	Aiphone	Different dates for other equipments
Arjunalli	ille	10	Apr-19	FEIG/LINEAR	Rajdeep	Rajdeep	Dell	Hikvisio n	Hikvision		Vivotek	Ericssion	-
Khed- Shivapur	pur 4	20	Nov-18	3M/Star	VaaaN	VaaaN	IBM	Hikvisio n	Hikvision	VaaaN	Neotech	Grandstr eam	
Anewadi	adi	16	Jan-19	3M/Star	VaaaN	VaaaN	IBM	Hikvisio n	Hikvision	VaaaN	Neotech	Grandstr eam	
Sardewad i	wad	10	Feb-13	Star	Efkon	Efkon	НР	Hikvísio n	Axis		Hikvision	AlPhone	RFID , AVC in 2020and server in 2016
Patas	se	12	Feb-13	Star	Efkon	Efkon	ЧH	Hikvisio n	Axis		Hikvision	AlPhone	RFID , AVC in 2020and server in 2016
Yedeshi	shi	12	Mar-18	TagMaster	Rajdeep	Rajdeep	Lenovo	Hikvisio n	Hikvision		Hikvision/U nv	Aiphone	
Varwade	ade	12	Aug-13	Alien	ITNL- LEC	LEC	НР		Hikvision		Hikvision	Aiphone	RFID in 2018
Tamlawad i	wad	12	Mar-18	TagMaster	Rajdeep	Rajdeep	Lenovo	Hikvisio n	Hikvision		Hikvision/U nv	Aiphone	
Sawalesh war Toll Plaza	lesh Toll za	12	Aug-13	Alien	ITNL-	LEC	dH		Hikvision		Hikvision	Aiphone	RFID in 2018
													Page 33 of 53

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Remarks					All ok except 5 RFID, 5 TLC, 3 LPIC, 8 Barrier							
Master Intercom	AlPhone	AlPhone	Rajdeep	Aiphone	Aiphone Rt	Aiphone	Aiphone	Aiphone	AlPhone	AlPhone	Panasoni c	Aiphone
NVR	CP Plus	CP Plus	Honeywell	Hikvision	Hikvision	Лиv	Unv	Unv	Hikvision	Hikvision	Hikvision	Hikvision
Automatic Barrier			Wejoin	Magnetic	Biso	WeJoin	WeJoin	WeJoin	Eurosbarrra	Eurosbarrra	Toshi	
ICS	CP Plus	CP Plus	Honeywell	Samsung	Wbox	Hikvision	Hikvision	Hikvision	Vivotek	Vivotek	Samsung	Hikvision
LPIC	CP Plus	CP Plus	Hikvisio n		Wbox	Hikvisio n	Hikvisio n	Hikvisio n			Samsu ng	Hikvisio n
Server	Dell	Dell	IBM	Lenovo	Lenovo	Lenovo	Lenovo	Lenovo	ЧН	Ч	Lenovo	IBM
ТС	Mootek	Mootek	Rajdeep	Advantech	IMBM	Rajdeep	Rajdeep	Rajdeep	metro	metro	Advantech	VaaaN
AVCC	Scita	Scita	Rajdeep	Sensor Line	Banner	Rajdeep	Rajdeep	Rajdeep	metro	metro	Intec	VaaaN
RFID Reader	Zebra	Zebra	TagMaster	Feig	Biso	TagMaster	TagMaster	TagMaster	Zebra/3M	Zebra/3M	Zebra	TagMaster
Implementa tion Date	Feb-20	Feb-20	Apr-13	Dec-17	Dec-19	Mar-19	Mar-19	Mar-19	Feb-12	Feb-12	Aug-17	Aug-14
Total no. of Lanes	12	12	10	8	ω	12	12	12	10	10	ω	10
Plaza Name	Phulwadi	Talmod	Nandgaon	Karanja	Gondkhair i	Pargaon	Padalshin gi	Malewadi	SONGIR	SHIRPUR	Sendurwa fa toll plaza	Mathnì
S.No	112	113	114	115	116	117	118	119	120	121	122	123

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Remarks		01 barrier not working	01 barrier not working	All Functional	All Functional	All Functional					All Functional	All Functional	DEID and contor
		01 ba wo	01 ba wo	All Fu	All Fu	All Fu							RFID 8
Master Intercom	Aiphone	Matrix	Matrix	Matrix	Matrix	Matrix	Aiphone	Aiphone	Aiphone	Grandstr eam	AIPHON E	AIPHON E	
NVR	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	NA	Hikvision	NA	CP Plus	Vivotek/CP PLUS	Vivotek/CP PLUS	HP Proliant
Automatic Barrier		Magnetic	Magnetic	Magnetic	Magnetic	Magnetic				VaaaN	VaaaN	VaaaN	
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision	CP Plus	Hikvision	Hikvision	Hikvision	
LPIC	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n		Hikvisio n		Hikvisio n	Hikvisio n	Hikvisio n	
Server	ЧH	ΒH	ЧH	ЧН	ЧН	ЧН	Lenovo	dH	renovo	ΗΡ	Lenovo	Lenovo	
ТLС	Arya Omnitalk	ITNL	ITNL	Path	Path	Path	Efkon	Arya Omnitalk	Efkon	VaaaN	Toll max	Toll max	
AVCC	Arya Omnitalk	Sick	Sick	Technido	Technido	Technido		Arya Orrnitalk		VaaaN	Toll Max banner	Toll Max banner	sick-
RFID Reader	Feig	Alien	Alien	Star	Star	Star	Feig	Feig	Feig	Kathrein	Tagmaster	Tagmaster	ZEBRA/Motor
Implementa tion Date	May-19	Sep-18	Sep-18	Jun-17	Jun-17	Jun-17	Jun-12	May-19	Jun-12	Dec-19	Dec-19	Dec-19	
Total no. of Lanes	10	10	10	10	10	10	g	10	Q	ø	10	10	-
Plaza Name	Nagpur Byepass Check TP	Pithadiya	Bharudi	Vanana	Vaghasia	Dumiyani	KANHAN KAMPTE E BYE PASS	Borkhedi	Kumhari/ Mansar	Ashiv	Gadoi	Dari	Mandal/V
S.No	124	125	126	127	128	129	130	131	132	133	134	135	

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Remarks	Some RFID in Mar-2018	All Functional, 04 lanes in Feb-13	02 ICS camera not working, 08 Lane -19.12.2018	01 ICS, 03 barrier and 01 SAVC not working	RFID and server in Nov-17	01 ICS, 03 barrier and 01 SAVC not working		All ok except 4 AVC, 2 LPIC & 2 ICS
Master Intercom	AIPHON E	Alphone	Alphone	Alphone	AIPHON E	Alphone	Grandstr eam	Aiphone
NVR	Honeywell/ UNV	Hikvision	Hikvision	NNV	HP Proliant ML10	Hikvision	CP Plus	Hikvision
Automatic Barrier	WeJOIN	Wejoin	Wejoin	Wejoin	La Barrier	Wejoin	Toll max	Wejoin
ICS	MINTRON	Hikvision	Mintron	Mintron	Axis	Mintron	Hikvision	Hikvision
LPIC		Hikvisio n	Hikvisio n	Hikvisio n	Beslar	Hikvisio n	Hikvisio n	Hikvisio n
Server	BM	IBM	IBM	Mai	dн	IBM	Ч	Lenovo
TLC	Rajdeep	Rajdeep	Rajdeep	Rajdeep	Advantech	Rajdeep	Toll max	Rajdeep
AVCC	Rajdeep	Rajdeep	Rajdeep	Rajdeep	SICK- Advantec h	Rajdeep	Banner	Rajdeep
RFID Reader	TagMaster /Linear	LINEAR, TAGMASTER, FIEG	LINEAR, TAGMASTER, FIEG	LINEAR, TAGMASTER, FIEG	ZEBRA/Motor ola	LINEAR, TAGMASTER, FIEG	Kathrein	TagMaster
Implementa tion Date	Apr-15	Mar-18	Sep-14	Jan-19	Jun-15	Mar-18		Oct-19
Total no. of Lanes	10	14	18	18	12	14	10	ω
Plaza Name	Khaniwad e	Charoti	Choriyasi	Boriach	Bhatia	Bhagwad a	Husnapur	Haladgao n
S.No	137	138	139	140	141	142	143	144

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### C. Zone -3

#### 1. Toll Plaza Details

a. ETC Equipment Status overview provided for - 85

## 2. Equipment Details

Sr.No	Equipment Details	Key Makes/OEMs of equipment
1	RFID Reader	Biso, ID TECH, Feig, Tagmaster, Honeywell, Kathrein, Linear, Motorola, Zebra, Star, Intermac
2	AVCC	Approva,Advantech, Arya Omnitalk, E Toll, Efkon, Kent, Lenovo, metro,Qualix, Rajdeep, Scita, Sick, Technido, Techsture, Toradex, VaaaN, Green Tech, Intec, Biso
3	TLC	Additech,Advantech, , Omnitalk, , Efkon, Kent, metro,Qualix, Rajdeep, Scita, fanTeck, Techsture, Toradex, VaaaN, Path, , HP, Sinb, Biso, Green tech
4	Server	Dell, HP, IBM, Lenovo, DLINEC
5	LPIC	CP Plus, Hikvision, Samsung, Unv, Vivotek, Bosch
6	ICS	CP Plus, Hikvision, Samsung, Unv, Vivotek, Bosch
7	Barrier	ASN, Elka, Wejoin, Magnetic, Numeric, Parkstar, E Toll, Rajdeep, VaaaN, Sunfre
8	NVR	CP Plus, Hikvision, Vivotek, Unv
9	Master Intercom	AIPhone, Grandstream, Matrix, Beetel, Panasonic, Seimens

## 3. Toll Plaza Equipment Installation Year

1

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Installation Year	No of toll plazas
2011	01
2014	01
2015	06
2016	03
2017	07
2018	16
2019	38
2020	13

Remarks				01 RFId reader Faulty													Server in 2011				
Master Intercom		Aiphone	Aiphone	Aiphone		Aiphone	Aiphone	Aiphone	Aiphone		Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Panasonic	Aiphone	Aiphone	Aiphone	Biso	Metro
NVR	Hikvision	Vivotek	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision	Hikvision	Dahua	Dahua	Dahua	Hikvision	Hikvision
Automatic Barrier		Biso			magnetic	Biso	Biso	Biso	Biso								WeJoin	WeJoin	WeJoin		Wejoin
ICS	Hikvision	Vivotek	Vivotek	Vivotek	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Mintron	Mintron	Mintron	Hikvision	Mintron	Hikvision	Samsung	Samsung	Samsung	Hikvision	Hikvision
LPIC	Hikvision	Vivotek	Vivotek	Vivotek		Hikvision	Hikvision	Hikvision	Hikvision	CP Plus	Hikvision	Mintron	Mintron	Hikvision	Hikvision	Hikvision	Samsung	Samsung	Samsung	Hikvision	Hikvision
Server	Lenovo	Lenovo	Lenovo	Lenovo	Lenovo	ЧЬ	НР	ЧР	ΗР	£	Dell	Dell	Dell	IBM	Dell	Lenovo	IBM	IBM	IBM	НР	
LLC	Techsture	Comvision	Metro	Metro	Kent	Biso	Biso	Biso	Biso	Na	Rajdeep	Rajdeep	Rajdeep	VaaaN	Rajdeep	VaaaN	rajdeep	rajdeep	rajdeep	Biso	Biso
AVCC	Techsture	Comvision	Metro	Metro	Kent	Biso	Biso	Biso	Biso	Na	Rajdeep	Rajdeep	Rajdeep	VaaaN	Rajdeep	Sick	Rajdeep	Rajdeep	Rajdeep	Biso	Metro
RFID Reader	Honeywell	Biso	TagMaster	TagMaster	TagMaster	Biso	Biso	Biso	Biso	Chainway	TagMaster	TagMaster	TagMaster	TagMaster	TagMaster	Kathrein	TagMaster	TagMaster	TagMaster	Biso	Biso
Implementation Date	Dec-19	Jun-18	Jun-18	Jun-18	Apr-16	Nov-19	Nov-19	Oct-19	Nov-19	May-20	Jul-15	Jul-16	Jul-15	Jul-15	Jul-16	Jul-15	2017	2017	2017	Aug-19	Nov-19
Plaza Name	Sehatganj	Purankhedi	Pagara	Jogipura	Guna Bypass	titarpani	malthon	chithora	Bakoli	Mikirati Hawgaon Toll Plaza	Raje	Manhth maniyari	Maithi	Hariabara	Govindpur	ASANPUR	sasaram	mohania	Daffi	Mungwari	Ujara
S.No	~	2	e	4	5	6	7	8	6	10	11	12	13	14	15	16	17	18	19	20	21

4. Toll plaza Along with Equipment Make

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S.No	Plaza Name	Implementation Date	RFID Reader	AVCC	TLC	Server	LPIC	ICS	Automatic Barrier	NVR	Master Intercom	Remarks
22	Madai	Dec-19	Biso	Biso	Biso	dН	Hikvision			Hikvision	Biso	All ok except 1 RFID
23	Choundha	Sep-18	Star	VaaaN	Path India	IBM	Hikvision	Hikvision	Wejoin	Hikvision	Matrix	
24	Baretha or Jajau or Saiyan	Sep-18	Star	VaaaN	Path India	IBM	Hikvision	Hikvision	Wejoin	Hikvision	Matrix	
25	Rojwas	Apr-19	Feig	Kent ITES	Kent ITES	Lenovo	Hikvision	Hikvision	Magnetic	Hikvision	Aiphone	
26	Chhapra	Apr-19	Feig	Kent ITES	Kent ITES	Lenovo	Hikvision	Hikvision	Magnetic	Hikvision	Aiphone	
27	Sonway	Dec-17	TagMaster	Rajdeep	Rajdeep	Lenovo	Vivotek	Vivotek	Elka	CP Plus	Aiphone	
28	Khalghat Toll Plaza	Dec-17	TagMaster	Rajdeep	Rajdeep	Lenovo	Vivotek	Vivotek	Elka & Biso	CP Plus	Panasonic	
29	Jamli Toll Pllaza	Apr11	Star	Line	Fanteck	IBM	Bosch	Hikvision	Magnetic	Hikvision	Aiphone	
30	IDTL Toll Plaza-B	Nov-19	IDTech	Greentech ITS	Greentech ITS	ЧН	Hikvision	Hikvision	Sunfre	Hikvision	Aiphone	
31	IDTL Toll Plaza-A	Nov-19	IDTech	Greentech ITS	Greentech ITS	dН	Hikvision	Hikvision	Sunfre	Hikvision	Aiphone	
32	Dattigaon	Jul-18	Feig	Efkon	Efkon	Dell	Samsung	Samsung	Elka	Hikvision	Aiphone	
33	Methawada	Jul-18	Feig	Efkon	Efkon	Dell	Samsung	Samsung	Elka	Hikvision	Aiphone	All ok except 6 LPIC
34	Saliwada	Nov-19	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	
35	Pandutala	Nov-19	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	
36	Boharipar	Feb-20	Feig	Apurva	Sinb	Lenovo	Hikvision	Hikvision		Hikvision		
37	Kherwasaani	Aug-19	TagMaster	Banner	Toli Max	ЧH	Hikvision	Hikvision		Hikvision	Grand Stream	
38	Sonvarsa	Aug-19	Biso	Biso	Biso	Н	Hikvision	Hikvision		Hikvision	Biso	
39	Khadda	Aug-19	Biso	Biso	Biso	ЧН	Hikvision	Hikvision		Hikvision	Biso	

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Remarks	All ok except 1 RFID		All ok except 2 AVC				All ok except 3 AVC	All ok except 3 AVC				All ok except 2 RFID, 2 TLC							Page <b>40</b> of <b>53</b>
Master Intercom	Aiphone	Aiphone	Aiphone	Grand Stream	Aiphone	Aiphone	Matrix	Matrix	Matrix	Aiphone	Biso	Aiphone	Aiphone	Aiphone	Aiphone			- <del>1</del>	Po
NVR	Vivotek	Vivotek	Vivotek	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Vivotek	Vivotek	Hikvision	Hikvision				
Automatic Barrier							Wejoin	Wejoin	Wejoin										
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision				
LPIC	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvísion	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision				
Server	Lenovo	Lenovo	Lenovo	유	Lenovo	Lenovo	IBM	IBM	IBM	Lenovo	dН	Lenovo	Lenovo	Lenovo	Lenovo				
TLC	Toll Max	Toll Max	Toll Max	Toll Max	Kent	Kent	Path India	Path India	Path India	Advantech	Biso	Toll Max	Toll Max	Advantech	Advantech				
AVCC	Toli Max	Toll Max	Toll Max	Banner	Kent	Kent	Technido	Technido	Technido	Arya Omnitalk	Biso	Toll Max	Toll Max	Arya Omnitalk	Arya Omnitalk				
RFID Reader	Kathrein	Kathrein	Kathrein	TagMaster	Biso	Biso	Star	Star	Star	Biso	Biso	TagMaster	TagMaster	Biso	Biso				
Implementation Date	Nov-19	Nov-19	Nov-19	Aug-19	Mar-18	Mar-18	May-18	May-18	May-18	Nov-19	Aug-19	Nov-19	Nov-19	Mar-20	Apr-20	Feb-20	May-20	May-20	
Plaza Name	Shadol	Pathoroundi	Majhgawan	Odaki Pipkhar	Panihaar	MudKheda	Ramnagar	Raksa	Mundiyar	Panikholi	Pipli	Srirampur	Gangapada\Gudipada	Brajarajnagar (Nuadeeh)	Dahalapara	Patgaon	Nazirakhet	Madanpur Toll Plaza	
S.No	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	

Remarks								All RFID not working	All ok except 3 RFID									
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Grand Stream	Seimens	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone
NVR	Vivotek	CP Plus	CP Plus	Vivotek	CP Plus	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision
Automatic Barrier		Wejoin	Wejoin		Wejoin			Rajdeep	Rajdeep				Kent ITS					
ICS	Hikvision	CP Plus	CP Plus	Hikvision	Unv		Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision
LPIC	Hikvision	CP Plus	CP Plus	Hikvision	Unv					Unv	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision
Server	Lenovo	dН	ΗР	ЧН	НР	С Ц	ЧH	£	dн	ЧH	Lenovo	IBM	Lenovo	Lenovo	Lenovo	Lenovo	Lenovo	Lenovo
ЦС	Toll Max	Toll Expert	Toll Expert	VaaaN	Toll Expert	Industrial Computer	ЧН	ЧН	ЧН	Efkon	Rajdeep	Rajdeep	Kent ITES	Metro	Metro	Metro	Metro	Advantech
AVCC	Toll Max	Banner	Banner	Banner	Banner	NA	Sick	Sick	Sick	Efkon	Rajdeep	Rajdeep	Intec	Scita	Scita	Scita	Scita	Arya Omnitalk
RFID Reader	Kathrein	TagMaster	TagMaster	TagMaster	TagMaster	Feig	Feig	Intermac	Intermac	Star	Feig	Feig	Biso	Kathrein	Kathrein	Kathrein	Kathrein	Biso
Implementation Date	Nov-19	Mar-19	Feb-19	Mar-18	Dec-19	Jun-14	Sep-17	Aug-15	Nov-15	Jan-19	Apr-18	Apr-18	Feb-20	Mar-20	Feb-20	Mar-20	Feb-20	Nov-19
Plaza Name	Raha	Pasyih	Lomshinong	Pahammawlein	Deingpasoh	Beliyad toll plaza	BANSKOPA	Rampura	Laxmanath	Rajchandrapur Toll Plaza	Jaladhulagori toll plaza	Debra toll plaza	Balivasa	Shibpur Plaza	Gajol	Chandermore Plaza	18th Mile Toll Plaza	Runni
S.No	58	59	60	61	62	63	64	65	99	67	68	69	70	71	72	73	74	75

Piaza Name	Implementation Date	RFID Reader	AVCC	JLC	Server	LPIC	ICS	Automatic Barrier	NVR	Master Intercom	Remarks
Jagtara	Dec-19	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	All ok except 4 RFID, 1 AVC
Mashora	Dec-19	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	
Badaiyiguda	Dec-19	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	All ok except 1 RFID, 1 LPIC
Tand Balidih	Dec-17	TagMaster	Raideep	Rajdeep	Dell		Hikvision	Wejoin	Hikvision	Aiphone	
Sosokhurd	Sep-19	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	
 Navasari	Nov-19	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	
Rasoiya Dhamna	Mar-18	TagMaster	Banner	Vaaan	ЧΗ	Hikvision	Hikvision		Vivotek	Aiphone	
 Kokpara	Dec-19	Feig	Kent ITES	Kent ITES	Lenovo	Hikvision	Hikvision	Wejoin	Hikvision	Aiphone	
Pundag	Nov-19	Zebra	Qualix	Qualix	ЧН	Unv	νnU	Wejoin	Unv	Aiphone	
Kothiya	Feb-20	Biso	Arya Omnitalk	Advantech	Lenovo	Hikvision	Hikvision		Hikvision	Aiphone	

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### D. Zone -4

## 1. Toll Plaza Details

a. ETC Equipment Status overview provided for 119 toll plazas

## 2. Equipment Details

Equipment	Key Makes/OEMs of equipment
Details	
DEID Baadar	3M & Star, Alien, Bisotech, Feig, Honeywell, Kathrein, Liner, OBID,
RFID Reader	OBID/STAR, Star, TagMaster, Zebra
11/00	Additech, Arya Omnitalk, Banner, Bisotech, Captch, Efkon, Greentech ITS,
AVCC	Kent ITES, Metro, Rajdeep, Scita, Technido, Techsture, Toll Max, VaaaN
Ŧ	Additech, Advantech, Biso, Efkon, Infrovate, Kent ITES, Metro, Path India,
TLC	Rajdeep, Rittal, Scita, Techsture, Toll Max, VaaaN
Server	Acer, Dell, HP, IBM, Lenovo
LPIC	CP Plus, Dahua, HIK VISION, Hikvision, Parkit, Uniview, Vivotech, Wejoin
ICS	CP Plus, Hikvision, Honeywell, Mintron, Uniview, Vivotech
Automatic Barrier	Elka, Euro, Kent, Kent ITES, Magnetic, Swaraj, VaaaN, Wejoin
NVR	Advik, CP Plus, Hikvision, Honeywell, Uniview, Vivotech
Master Intercom	Al-Phone, Bisotech, Matrix, Rajdeep

# 3. Toll Plaza Equipment Installation Year

Installation Year	Installation Year
2012	8
2013	1
2014	2
2016	1
2017	8
2018	31
2019	63
2020	5

Remark s			RFID in 2018	RFID in 2018						RFID 15.08.18				
Master Intercom	AiPhone	AiPhone	AiPhone	AiPhone	Greentech ITS	Greentech ITS	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone
NVR	Hikvision	Hikvision	Security	Security	Hikvision	Hikvision	Dview	Dview	CP Plus	Hikvision	Honeywe II	Hikvision	Hikvision	Hikvision
Automati c Barrier	Elka	Elka	Elka	Elka	Elka	Eka	Magnetic	Magnetic	Magnetic	Rajdeep		Wejoin	Wejoin	Wejoin
ICS	Dview	Dview	Mintron	Mintron	Hikvision	Hikvision	Korean	Korean	Vivotek	Samsun g	Hikvision	Hikvision	Hikvision	Hikvision
LPIC	Dview	Dview	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Korean	Korean	NA	Samsu ng	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n
Server	ЧН	dН	IBM	IBM	ΝA	ΥN	ЧH	ЧН	IBM	Dell	dell	IBM	IBM	IBM
TLC	Ш	Ε	Intel	Intel	Greentec h ITS	Greentec h ITS	Щ	Ш	Advantec h	Rajdeep	Kent ITS	Advantec h	Advantec h	Advantec h
AVCC	Telegra	Telegra	Rajdeep	Rajdeep	Greentech ITS	Greentech ITS	Telegra	Telegra	Banner	Rajdeep	Kent ITS	Rajdeep	Rajdeep	Rajdeep
RFID Reader	TagMaster	TagMaster	TagMaster	TagMaster	TagMaster	TagMaster	Neology	Neology	TagMaster	TagMaster/ Linear	Feig	Linear	Linear	Linear
Implementat ion Date	Oct-17	Oct-17	Feb-12	Feb-12	Feb-19	Feb-19	Feb-12	Feb-12	Jan-13	Apr-16	Dec-19	Feb-19	Jan-20	Jan-20
Plaza Name	Kamkole	Mangalgi	Bijapur	NAgarhalla	Bellur	DoddakareN Ahalli (Nelamangal a Toll)	Kirasave/kad abahalli	Shanthigram a	Indalwai	Kumbalam	Kaza	Marur	kasepalli	Amakthadu
S.No	۲	2	ო	4	£	9	7	8	6	10	11	12	13	14

4. Toll plaza Along with Equipment Make

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Remark s	Oct-19 RFID									03 RFID,03 TLC, 02 ICS, 05 Barrier not working	i of 53
Master Intercom	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone	AiPhone		AIPhone	Page 45 of 53
NVR	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Advik	
Automati c Barrier	Wejoin	Euro	Euro	Euro	Euro	Magnetic	Magnetic	Magnetic	Magnetic	Swaraj	
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	HONEY WELL/HI K VISION	HONEY WELL/HI VISION	HONEY WELL/HI K VISION	HONEY WELL/HI K VISION	CP Plus	
LPIC	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Plus Plus	
Server	IBM	Lenovo	Lenovo	Lenovo	Lenovo	Dell	Dell	Dell	IBM	Acer	
TLC	Advantec h	Metro	Metro	Metro	Metro	Kent ITS	Kent ITS	Kent ITS	Kent ITS	Infrovate	
AVCC	Rajdeep	Soita	Scita	Scita	Scita	Kent ITS	Kent ITS	Kent ITS	Kent ITS	Scita	
RFID Reader	Linear	Kathrein	Kathrein	Kathrein	Kathrein	Feig/STAR	Feig/STAR	Feig/STAR	Feig	Zebra/TagMa ster	
Implementat ion Date	Nov-18	Nov-19	Nov-19	Nov-19	Oct-19	Dec-19	Dec-19	Dec-19	May-20	May-18	
Plaza Name	Halaharvi	Pallempalli	NAnnuru	Chagalmarri	Chapirevula	Venkatachel am	BudNAm	Sulturpet	ChiNAganja m	Gollaprolu	
S.No	15	16	17	18	19	20	21	22	23	24	

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<b>a</b>	- I	Implementat ion Date	<b>RFID Reader</b>	AVCC	лгс	Server	LPIC	ICS	Automati c Barrier	NVR	Master Intercom	Remark s
Vemapadu Nov	ŃN	Nov-17	Feig	Intec	Kent ITS	НР	Unv	Unv	Wejoin	Huntkey	AlPhone	
Unguturu	Wa	May-18	Zebra	Arya Omnitalk	Scita	Dell	CP Plus	CP Plus	Advik	Auric	AiPhone	
KrishNAvara <sub>N</sub>	Ž	Nov-17	Feig	Intec	Kent ITS	ЧΗ	Unv	Unv	Wejoin	Unv	AiPhone	
Eethakota	Σ	May-18	Zebra	Arya Omnitalk	Scita	Dell	Dahua	CP Plus	Advik	Auric	AiPhone	
Sadahalli/De N vanhalli	2	May-14	TagMaster	Metro	Metro	Dell	Uniview	Uniview	Magnetic	CP Plus	AiPhone	
	0	Oct-18	TagMaster	Greentech ITS		đH	Vivotek	Hikvision		CP Plus	Aiphone	
Gaddurur /	1	Aug-17	TagMaster	VaaaN	VaaaN	IBM	Hikvisio n	Hikvision	VaaaN	CP Plus	Aiphone	
Hoskote (	•	Oct-18	TagMaster	Greentech ITS		dН	Vivotek	Hikvision		CP Plus	Aiphone	
Towards Bangalore Km.26.075	Z	Nov-19	Honeywell	Techsture	Techstur e	IBM	Hikvisio n	Vivotek	Magnetic	Hikvision	Aiphone	
Towards Nelamangai a Km.14.875	2	Nov-19	Honeywell	Techsture	Techstur e	IBM	Hikvisio n	Vivotek	Magnetic	Hikvision	Aiphone	
Bagepalli		Aug-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Chalageri		Jan-20	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Hebbalu		Jan-20	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	

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Plaza Name	Implementat ion Date	RFID Reader	AVCC	TLC	Server	LPIC	ICS	Automati c Barrier	NVR	Master Intercom	Remark s
1	Nov-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	All ok except 2 LPIC
	Aug-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Kognoli	Aug-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Kannole	Dec-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
	Dec-19	Biso	Arya Omn`talk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Brahamarkot Iu	Nov-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Surathkal	Nov-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Kannegala	Dec-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
K N Huindy	Dec-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Yeddore	Dec-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
VaNAgaram	Nov-18	TagMaster	Banner	VaaaN	ЧН	Hikvisio n	Hikvision		Vivotech	Aiphone	
SV Puram	Nov-18	TagMaster	Banner	VaaaN	ЧH	Hikvisio n	Hikvision		Vivotech	Aiphone	All ok except 1 LPIC & ICS

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r	1	1	1	1	1	1	T	1	<u> </u>	· · · · ·	1	1	1	1
Remark s	All ok excep 5 AVC, 1 ICS						All ok except 4 AVC						All ok except 2 AVC, 2 ICS	Page <b>48</b> of <b>53</b>
Master Intercom	Aiphone	Aiphone	Aiphone	Rajdeep	Matrix	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Page /
NVR	Vivotech	Vivotech	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Honeywe II	Hikvision	Hikvision	Hikvision	
Automati c Barrier								VaaaN	Elka	Kent ITES	VaaaN	VaaaN	Magnetic	
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	
СРІС	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	ΝA	Hikvisio n	Hikvisio n	Hikvisio n	
Server	НР	ЧΗ	Lenovo	Dell	ΗР	Lenovo	Lenovo	НР	Lenovo	IBM	ΗЬ	ΗР	НР	
TLC	VaaaN	VaaaN	Advantec h	Path India	Path India	Advantec h	Advantec h	VaaaN	Additech	Kent ITS	VaaaN	VaaaN	Efkon	
AVCC	Banner	Banner	Arya Omnitalk	Rajdeep	Technido	Arya Omnitalk	Arya Omnitalk	VaaaN	Additech	Kent ITS	VaaaN	VaaaN	Efkon	
RFID Reader	TagMaster	TagMaster	Biso	Star	Star	Biso	Biso	3M & Star	Alien	Feig	3M & Star	3M & Star	Star	
Implementat ion Date	Sep-18	Jul-18	Aug-19	Feb-19	Sep-19	Nov-19	Jul-19	Dec-18	May-19	Nov-14	Dec-18	Dec-18	Feb-19	
Plaza Name	Surapattu	NAllur	Mathur	(Sriperumba dur) Nemili	ChenNAsam udram	Paranur	Athur	Veeracholap uram	Palayam	Omallur	NAthakarai	Mettupatti	Vijayamanga lam	
S.No	50	51	52	53	54	55	56	57	58	59	60	61	62	

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Plaza	Plaza Name	Implementat ion Date	RFID Reader	AVCC	TLC	Server	LPIC	ICS	Automati c Barrier	NVR	Master Intercom	Remark s
Vaiguntham	ε	Jan-19	Star	Efkon	Efkon	先	Hikvisio n	Hikvision	Magnetic	Hikvision	Aiphone	All ok except 2 RFID, 2 TLC, 2 AVC, 2 ICS, 2 LPIC
Pullur		Jan-18	TagMaster	Banner	VaaaN	무	Hikvisio n	Hikvision		Vivotech	Aiphone	
Konetipuram	am	Apr-19	TagMaster	Banner	VaaaN	ЧH	Hikvisio n	Hikvision		Vivotech	Aiphone	
Kadthal		Nov-19	Biso	Arya Omnitalk	Advantec h	Lenovo	Hikvisio n	Hikvision		Hikvision	Aiphone	
Chinthapally	ally	Jan-19	Biso	Biso	Biso	dН	Hikvisio n	Hikvision		Hikvision	Biso	
Rolmamda	da	Mar-18	TagMaster	Banner	VaaaN	ЧH	Hikvisio n	Hikvision		Vivotech	Aiphone	All ok except 2 TLC
Pippalwada	ada	Mar-18	TagMaster	Banner	VaaaN	СН Н	Hikvisio n	Hikvision		Vivotech	Aiphone	All ok except 2 TLC
Gamjal	<u>_</u>	Feb-18	TagMaster	Banner	VaaaN	ЧН	Hikvisio n	Hikvision		Vivotech	Aiphone	All ok except 3 AVC
Gudur	L I	Dec-12	TagMaster	Rajdeep	Rajdeep	Dell	NA	Mintron	Elka	Hikvision	Aiphone	
Muthojipet	ipet	Nov-19	Kathrein	Toll Max	Toll Max	Lenovo	Hikvisio n	Hikvision		Vivotech	Aiphone	All ok except 1 RFID
PooNAriman galam	man n	Nov-19	Kathrein	Toll Max	Toll Max	Lenovo	Hikvisio n	Hikvision		Vivotech	Aiphone	
Pampampall am	npall	Dec-18	TagMaster	Captch	Metro	IBM	Parkit	Vivotek	Elka	Hikvision	Aiphone	
											I	

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NVR Master Remark Intercom s							Aiphone Aiphone Aiphone Aiphone	Aiphone Aiphone Aiphone Aiphone Aiphone Aiphone	Aiphone Aiphone Aiphone Aiphone Aiphone Biso	Aiphone Aiphone Aiphone Aiphone Biso Biso	Aiphone Aiphone Aiphone Aiphone Biso Biso Biso	Aiphone Aiphone Aiphone Aiphone Biso Biso Biso
	Advik Aiphone	Vivotech Aiphone		Vivotech Aiphone								
Plus Elka ision VaaaN			ision VaaaN	ision VaaaN		lsion	sion is	ision sion VaaaN				
	<u> </u>	┝	Hikvision	lo Hikvision		lo Hikvision						
Dahua Hikvisio	Hikvisio		Hikvisio	Hikvisio		n Hikvisio n	Hikvisio Hikvisio Hikvisio	Hikvisio Hikvisio Hikvisio NA	Hikvisio Hikvisio Hikvisio NA NA NA	Hikvisio Hikvisio Hikvisio Hikvisio n Hikvisio	Hikvisio Hikvisio Hikvisio Hikvisio Hikvisio	Hikvisio Hikvisio Hikvisio Hikvisio Hikvisio
	בפ	Lenovo	Lenovo	Lenovo		Lenovo	Lenovo Lenovo	Lenovo Lenovo Lenovo	Lenovo Lenovo Lenovo HP	Lenovo Lenovo Lenovo HP HP	Lenovo Lenovo Lenovo HP HP	Lenovo Lenovo Lenovo HP HP HP
0,200	SCITA	Vaaan	Vaaan	Vaaan		Advantec h	Advantec h Advantec h	Advantec h Advantec h Vaaan	Advantec h Advantec h Vaaan Biso	Advantec h Advantec h Vaaan Biso Biso	Advantec h Advantec h Vaaan Biso Biso	Advantec h Advantec h Vaaan Biso Biso Biso
	Scita	Vaaan	Vaaan	Vaaan		Arya Omnitalk	Arya Omnitalk Arya Omnitalk	Arya Omnitalk Arya Omnitalk Vaaan	Arya Omnitalk Arya Omnitalk Vaaan Biso	Arya Omnitalk Arya Omnitalk Vaaan Biso Biso	Arya Omnitalk Arya Omnitalk Vaaan Biso Biso	Arya Omnitalk Arya Omnitalk Vaaan Biso Biso Biso
Alion	AIIGII	Kathrein	Kathrein	Kathrein	_	Biso	Biso	Biso Biso TagMaster	Biso Biso TagMaster Biso	Biso Biso Biso Biso Biso	Biso Biso Biso Biso Biso	Biso Biso Biso Biso Biso Biso
Aug-19	,	Jul-19	Dec-19	Dec-19		Jul-19	Jul-19 Aug-19	Jul-19 Aug-19 Aug-19	Jul-19 Aug-19 Jan-19	Jul-19 Aug-19 Jan-19 Jan-19	Jul-19 Aug-19 Jan-19 Jan-19 Nov-19	Jul-19 Jul-19 Aug-19 Jan-19 Jan-19 Nov-19 Nov-19
	Palliyekarra	Thiruppache thi	Shenbagam pettai	Palaya Gandharvak ottai		Lembalakudi	Lembalakudi Lechchuma NApatti	Lembalakudi Lechchuma NApatti Bagalur	Lembalakudi Lechchuma NApatti Bagalur Salaipudhur	Lechchuma Lechchuma NApatti Bagalur Salaipudhur NAnguneri	Lembalakudi Lechchuma NApatti Bagalur Salaipudhur NAnguneri Kappalur	Lembalakudi Lechchuma NApatti Bagalur Salaipudhur NAnguneri Kappalur Etturvattum
†	75	76	77	78	T	79	79 80	79 80 81	82 80 79 82 82 82 82 82 82 82 82 82 82 82 82 82	79         81         83         83         84<	79         80         81         83         83         83         84<	79         81         83<

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Remark s		All ok except 2 RFID,3 TLC			All ok except 1 AVC										Page <b>51</b> of <b>53</b>
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Page
NVR	Hikvision	Vivotech	Vivotech	Vivotech	Vivotech	Hikvision	Hikvision	Hikvision	Hikvision	Vivotech	Hikvision	Vivotech	Hikvision	Vivotech	
Automati c Barrier															
ICS	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	Hikvision	
LPIC	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	Hikvisio n	
Server	Lenovo	ц Т	Lenovo	ЧН	ЧH	Lenovo	ЧН	dН	НР	ЧН	Lenovo	ЧН	Lenovo	ЧН	
TLC	Advantec h	VaaaN	Toli Max	VaaaN	VaaaN	Advantec h	Rittal	Rittal	Rittal	VaaaN	Advantec h	VaaaN	Advantec h	VaaaN	
AVCC	Arya Omnitalk	Banner	Toli Max	Banner	Banner	Arya Omnitalk	Scita	Scita	Scita	Banner	Arya Omnitalk	Banner	Arya Omnitalk	Banner	
RFID Reader	Biso	TagMaster	Kathrein	TagMaster	TagMaster	Biso	Zebra	Zebra	Zebra	TagMaster	Biso	TagMaster	Biso	TagMaster	
Implementat ion Date	Jun-19	Mar-18	Nov-19	Nov-18	Nov-18	Jul-19	May-19	May-19	May-19	Sep-18	Aug-19	Aug-18	Aug-19	Feb-19	
Plaza Name	Boothakudi	Vaghaikulam (Pudukottai)	Millampalli	Raaviguntap alli	Mekalavarip alli	Basapuram	tangatur	Musunur	Bollapalli	Rapur	DC Palli	Chintalapale m	Buchireddyp alem	BrahmaNAp alli	
S.No	87	8 8 8	89	06	6	92	63	94	95	96	67	98	66	100	

Remark s	All ok except 1 RFID		All ok except 1 RFID, 2 TLC, 1 LPIC, 2 Barrier					All ok except 4 AVC not installed	All ok except 1 RFID, 1 LPIC, 1 Barrier	RFID in March 2018 &
Master Intercom	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Aiphone	Matrix	Aiphone
NVR	Hikvision	Hikvision	Advik	Vivotech	Vivotech	Vivotech	Hikvision	Uniview	Uniview	na, DVR
Automati c Barrier		Magnetic					Wejoin	Kent	Kent	Elka
ICS	Hikvision	Honeywe II	CP Plus	Hikvision	Hikvision	Hikvision	Hikvision	Uniview	Uniview	Hikvision
LPIC	Hikvisio n	Hikvisio n	CP Plus	Hikvisio	Hikvisio n	Hikvisio n	Hikvisio n	Uniview	Uniview	Hikvisio n
Server	Lenovo	Dell	Dell	НЬ	dН	ЧΗ		ЧН	ЧН	IBM
TLC	Advantec h	Kent ITS	Infrovate	VaaaN	VaaaN	VaaaN	Metro	Kent ITS	Kent ITS	Rajdeep
AVCC	Arya Omnitalk	Kent ITS	Scita	Banner	Banner	Banner		Kent ITS	Kent ITS	Sick
RFID Reader	Biso	Feig	Zebra	TagMaster	TagMaster	TagMaster	Zebra	Feig	Feig	Zebra
Implementat ion Date	Jul-19	Dec-19	Jun-19	Jun-18	Jun-18	Aug-18	Dec-19	Aug-18	Aug-17	Dec-12
Plaza Name	Durgamvarip alli	Keesara	Davuluru	Pottipudu	Kalaparru	Badava	Gosthani gate	Laxmipuram	Bellupada	Chillakallu
S.No	101	102	103	104	105	106	107	108	109	110

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S.No	Plaza Name	Implementat ion Date	RFID Reader	AVCC	TLC	Server	LPIC	ICS	Automati c Barrier	NVR	Master Intercom	Remark s
												Server in 2016
111	Pantagi	Dec-12	Zebra	Sick	Rajdeep	IBM	Hikvisio n	Hikvision	Elka	na, DVR	Aiphone	RFID in March 2018 & Server in 2016
112	Koralphad	Dec-12	Zebra	Sick	Rajdeep	IBM	Hikvisio n	Hikvision	Elka	na, DVR	Aiphone	RFID in March 2018 & Server in 2016
113	Raikal	Nov-18	Motorola	Sick	Advantec h	ЧH	Vivotek	Vivotek	Magnetic	Vivotek	Aiphone	
114	Shakapur	May-19	Alien	Additech BEA	Additech	ΗЬ	Hikvisio n	Hikvision	Elka	Hikvision	Aiphone	
115	vanagari	May-18	Feig	Sick	Kent ITS	Lenovo	Hikvisio n	Hikvision	Elka	Hikvision	Aiphone	
116	shahapur	May-18	Feig	Sick	Kent ITS	Lenovo	Hikvisio n	Hikvision	Elka	Hikvision	Aiphone	
117	Hintal	May-18	Feig	Sick	Kent ITS	Lenovo	Hikvisio n	Hikvision	Elka	Hikvision	Aiphone	
118	Attibele	Jan-17	Star	Sick	Advantec h	Na	Hikvisio n	Hikvision	Elka	dН		
119	Electronic City Elevated: 1) Bangalore Up Ramp @ chainage KM 18/000	Jan-17	Star	Sick	Advantec h	a N	Hikvisio n	Hikvision	Elka	ан		

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