GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

No.2005/C&IS/WP/Vending Machine(ATVM) New Delhi, Dated 22 .05.2007

The General Manager,
All Indian Railways.

Subject: Sanction for the work of "Expansion of Automatic Ticket Vending Machines on Indian Railways".

1.0 Works relating to the Expansion of Automatic Ticket Vending Machines on all Indian Railways have been included in the Pink Book for the year 2007-08. The details of the Abstract Cost are tabulated below:

(Figures in thousand)

Railway	PB Item No	No of ATVMs	Sanctioned cost
CR	34/2007-08	937	347,533
ECOR	38/2007-08	143	53,039
ECR	47/2007-08	353	130,928
ER	35/2007-08	666	247,019
NCR	32/2007-08	222	82,340
NER	27/2007-08	328	121,655
NFR	33/2007-08	157	58,231
NR	73/2007-08	526	195,093
NWR	36/2007-08	226	83,823
SCR	56/2007-08	487	180,628
SECR	34A/2007-08	125	46,363
SER	27/2007-08	80	29,672
SR	41/2007-08	455	168,760
SWR	23A/2007-08	143	53,039
WCR	31A/2007-08	159	58,973
WR	40/2007-08	587	217,718
Total for IR		**5,594**	**2,074,815**

Contd....2/-

1.1 Yeardstick followed in arriving at the abstract cost of an ATVM is annexed.

1.2 Railway-wise number of ATVMs sanctioned for installation over each category of stations is tabulated below:-

Sanctioned ATVMs on Zonal Railway							
Railway	**A**	**B**	**C**	**D**	**Total**	**Already sanctioned upto 2006-07**	**ATVMs sanctioned for current year 2007-08**
CR	230	50	780	52	1112	175	937
ECOR	60	35		48	143		143
ECR	220	55		78	353		353
ER	200	160	368	38	766	100	666
NCR	140	40		42	222		222
NER	150	90		88	328		328
NFR	90	25		42	157		157
NR	350	135		116	601	75	526
NWR	140	40		46	226		226
SCR	270	180	46	66	562	75	487
SECR	50	35		40	125		125
SER	90	20	54	16	180	100	80
SR	310	55	112	78	555	100	455
SWR	70	45		28	143		143
WCR	90	35		34	159		159
WR	220	70	360	62	712	125	587
	2680	**1070**	**1720**	**874**	**6344**	**750**	**5594**

2.0 Steps to be initiated by the Zonal Railways are as under:-

Concerned Railways may ensure that collection of fare for issuing tickets should be done through smart cards over suburban sections of CR, WR and to an extent on SR and through debit cards over 'A' category stations of all zonal railways. Usage of currency notes and coin operated machines is anticipated in rest of the category of stations and railways. An ATVM machine should consist of an ATVM kiosk, touch screen, embedded client, RFID reader/writer, thermal printer, OS and RDBMS licenses. To continuously monitor the health of each ATVM on the LAN, a management terminal should be provided at the depot station.

2.1 After the last sanctioned ATVMs project on each of Zonal Railway, all balance A, B, C and D category stations of the Zonal Railways are to be covered under the project.

2.2 The detailed estimate indicating names of locations, counters to be provided and segment-wise details should be prepared by the concerned Zonal Railway and sent to Board for sanction.

Contd....3/-

2.3 The procurement of system peripherals and telecom equipment may be entrusted to CRIS after the approval of the General Managers of the Zonal Railways. Appropriate advance should be made to CRIS after the execution of MOU. Such advances should be adjusted against future bills raised by CRIS. The telecom network will be designed by CRIS, which should be IP based.

2.4 Media and route diversity, including diversity of Service Providers may be planned so that down time is minimum. The cost of hiring of channels shall be charged to revenue.

2.5 Zonal Railways should undertake the work of site preparation including LAN wiring, civil and electrical works etc. at the locations.

2.6 It may be ensured that the telecom networks are secure and dedicated for running the application under reference and do not share resources with any other application or with non railway users so that system security/efficiency is not compromised as this may lead to hacking/frauds.

3.0 A committee of SAG Officers has been constituted by Railway Board to fix the modalities of procurement relating to this projects based on the PPP model. Thus, the concerned Railways are enjoined upon not to enter into financial commitments prior to the finalisation of the committee's report.

4.0 This issues with the concurrence of Finance Directorate of Ministry of Railways

Please acknowledge receipt.

(Chhatrasal Singh)
Director (C&IS)

No.2005/C&IS/WP/Vending Machine(ATVM) New Delhi, Dated 22.05.2007

Copy to :

The FA & CAO, and FA & CAO/Const., All Indian Railways.

For Financial Commissioner/Railways

Copy to :

1. F(X)-II and Budget Branches of Railway Board
2. Chief Commercial Managers, All Indian Railways.
3. Managing Director, CRIS, Chanakyapuri, New Delhi

Annexure

REVISED COST YARDSTICK FOR AUTOMATIC TICKET VENDING MACHINE (ATVM)				ANNEXURE
Annexure to letter No.2005/C&IS/WP/Vending Machine (ATVM)				
(A)	**Hardware and software Item**	**Qty**	**Rate (Rs.)**	**Amount (Rs.)**
1	ATVM Kiosk inclusive of touch screen, Embedded Client, RFID reader/ writer or swipe card reader/ currency note counter, Thermal printer, OS and RDBMS licence	1	200,000	200,000
2	RFID reader/ Writer for charging smart card two per issuing station	0.20	16,000	3,200
3	Proportionate Cost of ATVM Kiosk Management terminal at issuing station	0.10	35,000	3,500
4	RFID Card/ Swipe card machines per ATVM	100	50	5,000
5	Swipe card reader/ currency reader	1	10,000	10,000
	System hardware and software cost			221,700
	R/o			**222,000**
(B)	**CRIS implementation Charges**			
1	Implementation Charges and first year on-site warranty for ATVM applications	7.50%	222,000	16,650
2	Procurement charges @ 5% (hardware and software)	5%	222,000	11,100
3	R&D charges for development of debit/ credit card and currency operated ATVM	7.5%	222,000	16,650
	Total CRIS charges			44,400
	R/o			**44,400**
(C)	**Zonal Railway Networking Cost**			
1	Cost of Station Switch @ 20 TVM per one 24 port switch	0.50	32,000	16,000
2	Cost of 64 kbps modems (pairs) / LAN extenders	1.10	10,000	11,000
3	LAN wiring etc cost @ Rs 0.10 lakh per location	1	10,000	10,000
	Networking Cost			37,000
	R/O			**37,000**
(D)	**Zonal Railway Electrical Cost**			
1	LS electrical cost @ Rs 0.30 lakh per location (1 KVA UPS, wiring, earthing etc)	1	30,000	**30,000**
(E)	**Zonal Railway Civil Engg Cost**			
1	LS civil engg cost @ Rs 0.10 lakh per location	1	10,000	**10,000**
(F)	**Zonal Railway Establishment charges**			
1	8 % of the equipment cost	8.00%	343,400	27,472
	R/O			**27,500**
	Total Project Cost			370,900
	Total Cost per ATVM R/O			**370,900**
*suitable NMS will be setup by CRIS				