

## ACTIVE APM IMPLEMENTATIONS

FALL, 2005

Site/Project	Service	Configuration	No. Veh.	System Cost(\$m)	Supplier
<b>Projects of Architectural Scale</b>					
Paris CDG Airport	France	2006 4km, 5-station replacement	40	180	Siemens-Keolis
Miami Airport/AA	USA	2006 2.6km rooftop line with 4 stations	22	68	Sumitomo-MHI
Toronto Pearson Airport	Canada	2006 1.5km underground linw with 3 stations	14	30	Doppelmayr DCC
Singapore Changi Airport	Singa.	2006 5.2km elevated with 7 stations (2 systems)	16	75	Sumitomo-MHI
Mexico City Airport	Mexico	2007 3km elevated with 2 stations	4	64	Doppelmayr DCC
Dubai Airport	UAR	2007 Terminal 3 to two new concourses	6	73	MHI
Hong Kong Airport	China	2007 0.5km extension to SkyCity	?	25	Niigata
Orlando Airport	USA	2007 Refurbish 4 vehicles	4	9	Bombardier-APM
Chicago O'Hare Airport	USA	2007 Life-extending fleet rehabilitation	0	30	Siemens-TS
Atlanta control upgrade	USA	2007 Gealaoc ATO replacement	0	15	Bombardier
London Heathrow- T5	UK	2007 0.4km shuttle, expandable	6	40	Bombardier
Beijing Airport	China	2008 Dimensions not public	n.a.	50	Bomb. or MHI
Atlanta Airport-car rental center	USA	2008 2km elevated with 3 stations	18	190	Bombardier or MHI?
London Heathrow- T1 parking	UK	2008 3km partially in tunnel, 3? Stations	18	20?	ATS
Seoul-Incheon Airport	Korea	2008 0.9km w/ 2 stations, expandable to 3.2km	5	43	MHI
<u>Washington Dulles Airport</u>	<u>USA</u>	<u>2009 3.5km tunneled with 5 stations</u>	<u>29</u>	<u>170</u>	<u>Sumitomo-MHI-Alcatel</u>
Total			182	1062	
<b>Projects of Institutional Scale</b>					
Sentosa	Singa.	2006 2km elevated with 4 stations (with drivers)	8	47	Hitachi
Moscow Monorail	Russia	2006? 3km elevated extension	0	30	Intamin
Railcab Test Track (Paderborn)	Germ.	2006 530 track	2	10	Univ. of Paderborn
Hong Kong-Buddha	China	2006 6km gondola with 3 stations	40	100	Leitner
OSHU tram (Portland OR)	USA	2006 1km gondola linking hospital sites	2	34	DCC/CTEC
London DLR vehicle refurb.	UK	2005 Refurbishment of 94 vehicles	94	31	Alstom
Kobe Portliner extension	Japan	2005 2.5km, 3-stat, elevated extension to new airport	12	50	MHI et al.
Yokohama extension	Japan	2005 0.2km elevated extension, move station	0	30	IHI et al.
London DLR Fleet expansion	UK	2007 additional vehicles	31	40	Bombardier
Lisbon Oeiras extension	Portug.	2007 1.4km with 2 stations and detachable grips	2	12	Poma-Otis
London DLR extension	UK	2007 1.1km elevated with 1 new station	0	20	Alcatel et al.
Perugia	Italy	2007 3km town line with 7 stations	25	60	Leitner
Korea PRT Demonstration	Korea	2009 R&D program, track, demo	10	57	KRRO
<u>OrlyVAL</u>	<u>France</u>	<u>2009 computer upgrade</u>	<u>0</u>	<u>10</u>	<u>Siemens TS</u>
Total			208	531	
<b>Projects of Metro/Transit Scale</b>					
Tokyo Toneri Line	Japan	2006 10km elevated with 13 stations	120	600	Jap. Consortium
Turin Metro	Italy	2006 10km mostly underground with 15 stations	92	200	Siemens-TS
Circle Line	Singa.	2006 34km with 19 stations	78	800	Alstom
Prague Line C extension	Czech.	2006 4km extension, progressive automation of line	0	19	Siemens-TS
Tokyo Yurikonome extens.	Japan	2006 3km elevated, 4-station	12	50	IHI-Kobelco
Paris Meteor extension	France	2007 0.8km extension, 1 station	0	17	Siemens-TS
Copenhagen Metro- III	Denm'k	2007 4.2km elevated with 6 stations	18	240	Ansaldo et al.
Toulouse- Ligne B	France	2007 16km mostly underground with 20 stations	70	199	Siemens-TS
Lausanne	Switz.	2007 4.4km underground (85%) with 14 stations	30	82	Alstom
Taipei - Neihu Line	Taiwan	2007 15km extension of Mucha, with 12 stations	102	500	Bombardier-ATS
Nuremburg new/old line	Germ.	2007 New line with segment shared with existing line	60	185	Siemens-TS
Brescia Metro	Italy	2007 15km part underground with 19 stations	63	310	Ansaldo
Paris- Line 1	France	2008 Upgrade to driverless operation	?	100	Siemens-TS
Kuala Lumpur Monorail	Malay.	2008 Upgrade controls to driverless operation	0	40	Siemens-TS
Barcelona - Line 9	Spain	2008 41km 2/3-underground with 43 stations	250	400	Siemens, Alstom
Vancouver RAV	Canada	2009 20km elevated with 18 stations	30	500	SNC-Lavalin/Serco
<u>Seoul Yong-In</u>	<u>Korea</u>	<u>2009 19km mostly elevated w/15 stations as 35yr BTO</u>	<u>30</u>	<u>600</u>	<u>Bombardier-ATS</u>
Total			955	4842	
<b>ATO + Attendants</b>					
New York Canarsie Line	USA	2006 Comm.-based controls/Interoperability demo	0	155	Siemens-TS
" - "follow on" work	USA	2006 " under program led by Siemens	0	26	Alcatel and Alstom
Naples - Line 6	Italy	2005 6km line	0	30	Ansaldo
Paris- Line 13	France	2006 22.5km, 30-station capacity enhancement	0	60	Alcatel
Wuhan Metro	China	2007 10m (-->30km) with 10 (-->26) stations	(48)	15	Alcatel
Delhi- Line 3	India	2007 24km mostly elevated, 22 stations	(40)	60	Siemens-TS
Sao Paulo Line 4	Brazil	2007 13km with 11 stations	(50)	100	Alstom
Bangkok Airport Express	Thailand	2008 29km express and local lines		100	Siemens-TS
Budapest Line 2	Hungary	2008 11km underground line		34	Siemens-TS
<u>Paris- Lines 3,5,9,10+12</u>	<u>France</u>	<u>2009 "Ouragan" ATO upgrades, retaining drivers</u>	<u>0</u>	<u>100</u>	<u>Siem.+Technat.,Ansaldo</u>
Total			0	680	
<b>GRAND TOTAL</b>			<b>1345</b>	<b>7115</b>	

Some figures are "guestimates". "ATO + Attendants" listings are not exhaustive.