

CURRENT APM IMPLEMENTATIONS

FALL, 2009

Note: The information is what is available 12/08 and excludes O&M contracts.

Site/Project	Service	Configuration	Cost(\$m)	Supplier
<u>Projects of Architectural Scale (airports)</u>				
Heathrow PRT Handover	EU	2010	Completion of two-pronged shuttle	10 ATS
Washington - Dulles	USA	2010	Completion of 3.5km , 6 stat	50 MHI-Sumi.-Thales
Miami - AA	USA	2010	2.6km rooftop line with 4 stat, mothballed	70 MHI-Sumitomo
Honolulu Mall rehab	USA	2010	Upgrade old Rohr shuttle	3 SDI
Zurich	EU	2010	Three additional vehicles	5 Otis
London-Gatwick	UK	2010	Replace 1.2km shuttle, 6 vehicles	46 Bombardier
Chicago O'Hare	USA	2010	Fleet regeneration	30 In procurement?
Houston	USA	2010	440m, one stat extension w/ 4 vehicles	43 Bombardier
Sacramento	USA	2011	335m shuttle	30 Bombardier
Kuala Lumpur	Malay	2011	New MCF with spur, 3 vehicles	57 Bombardier
Doha, Qatar	ME	2011	600m shuttle	66 DCC
Las Vegas	USA	2011	0.4km underground shuttle to Terminal 3	43 Bombardier
Cairo Airport	Africa	2011	1.8km, 4-station cable-propelled	100 Poma-Leitner
Phoenix Airport	USA	2012	3.5km, 18 vehicles (+O&M)	186 Bombardier
MIA-mover	USA	2012	2.4km landside	259 Sumitomo-MHI
<u>Atlanta - extension</u>	<u>USA</u>	<u>2012</u>	<u>370m extension with 10 new vehicles</u>	<u>63</u> <u>Bombardier</u>
Total				988

Projects of Institutional Scale

Masdar PRT Handover	UAE	2010	Completion of start system	10	2getthere
Morgantown PRT	USA	2010	Upgrade vehicle comm/controls-II	2	Azimuth
Rome Cybercar Demo	EU	2010	Two automated vehicles	2	Robosoft
Venice	EU	2010	0.8km one-lane w/bypass with 3 stat	19	DCC
Hong Kong Airfront	China	2010	~3km, 6-station extension to SkyPier	25	IHI
Incheon- Wolmido Island	Korea	2010	6km, 4-station "monorail"	65	Rowin-Urbanaut
Makkah Hajj Line	ME	2010	Controls for 18km, 6+ stations, elevated	195	Thales
"	ME	2010	Vehicles	??	Changdun?
Busan-Gimhae Airport PPP	Korea	2011	24km, 18-sta ~elevated, steel/steel	300	Hyundai/Rotem-Thales
Daejon	Korea	2011	5-year 7km maglev demo	471	Hyundai
Caracas	SoAm	2011	2.3km, 5-station	75	DCC
Oakland Connector	USA	2012	5.1km airport link w/out mid-station	100	DCC - PPP
Riyadh Nura University	ME	2012	11km in extensive women's campus	223	Ansaldo
Suncheon PRT	Korea	2012	5km?, 3-station parking to nature preserve	100	Vectus
London DLR	UK	2012	4-station ext. to Olympic, etc.	700	Thales-Bombardier
<u>Incheon Rail Link</u>	<u>Korea</u>	<u>2012</u>	<u>6km, 6-station airport-rail maglev</u>	<u>300</u>	<u>Hyundia-Rotem</u>
Total				2,577	

Projects of Metro/Transit Scale

Brescia Metro	EU	2010	13km part underground with 17 stations	310	Ansaldo
Seoul Yong-In	Korea	2010	19km ~elev. w/15 stations as 35yr BTO	600	Bombardier
Paris- Line 1	EU	2010	Upgrade to driverless operation	100	Siemens-TS
Guangzhou-Tianhe	China	2010	4km, 9-station, 14 vehicle metro-feeder	71	Bombardier
Shanghai- Line 10	China	2010	Controls	60	Alstom
Sao Paulo - Line 4	Brasil	2010	Controls for 13km, 11-station line	105	Siemens-TS
Sao Paulo - Line 4	Brasil	2010	84 vehicles	150	Rotem
Dubai Green	UAE	2010	18Km (40% underground) with 14 stat	500	MHI-Thales-KinkoSharyo
Kuala Lumpur Monorail	Malay	2010	New vehicles	210	Bombardier-ATS
Budapest - 4	EU	2010	Controls for 8km, 10 stat tunneled	135	Siemens TS
Circle Line	Singa	2011	34km with 19 stations	800	Alstom
Miami Metromover	USA	2011	17 more vehicles	31	Bombardier-ATS
Seoul Uijeongbu	Korea	2011	11km elevated with 14 station	180	Siemens TS
Milan - 5	EU	2012	5.6km, 9 station concession	190	Ansaldo
Thessaloniki	EU	2012	9.5km, 13 station underground	500	Ansaldo
Helsinki	EU	2013	Metro retrofit to driverless + extension	230	Siemens TS
Rome - C	EU	2013	25km underground with 30 station	500	Ansaldo
Barcelnoa- Line 9	EU	2014	Completion to 48km buildout	300	Siemens, Alstom
Brussels	EU	2014	115 vehicles capable of driverless op.	260	Siemens-Bombardier
Lyon A+B	EU	2015	Conversion to driverless operations	75	Areva
Downtown Line	Singa	2016	40km, 219-vehicle line	572	Bombardier/Westinghouse Rail(UK)
<u>Copenhagen Ringen</u>	<u>EU</u>	<u>2017</u>	<u>15km underground with 17 new stat</u>	<u>900</u>	<u>In procurement</u>
Total				5,879	

ATO + Attendants (not exhaustive: Algiers? Istanbul? Nanjin et al.)

Paris - 13	EU	2010	22.5km, 30-stat. capacity enhancement	60	Thales
Budapest - 2	EU	2010	11km underground line	34	Siemens-TS
Wuhan Metro	China	2010	10m (-->30km) with 10 (-->26) stations	15	Thales
Paris- Lines 3,5,9,10+12	EU	2010	ATO upgrades	100	Siem.+Technat.,Ansaldo
Delhi - Lines 5 + 6	India	2010	Control/signaling systems	43	Bombardier
Shenyang	China	2011	Upgrade and extension to 28km	100	Ansaldo
Sao Paulo - 1, 2, 3	SoAm	2011	Moving block controls, later driverless	400	Alstom
Sao Paulo - 8, 10, 11	SoAm	2011	CBTC controls	400	Invensys (W'house Rail)
Toronto	Can	2012	New fleet and control upgrade	500	Alstom
NY/NJ PATH Upgrade	USA	2011	Intgrate various communication systems	25	Ansaldo
NY/NJ PATH Upgrade	USA	2011	Project management for above	21	Booz-Allen
<u>NY/NJ PATH Upgrade</u>	<u>USA</u>	<u>2017</u>	<u>Positive train control</u>	<u>340</u>	<u>Siemens-Safetran</u>

Total **2,038**
GRAND TOTAL **11,482**