

U.S. ATLAS M&O Estimate Cost Book

Funding All Funding Type: All
Institutions: All

U.S. ATLAS M&O Estimate Cost

1/23/2005 12:42:46 PM

WBS 3

Description: U.S. ATLAS M&O Estimate

Institution : Contact

U.S. ATLAS Maintenance and Operations (M&O) includes detector specific costs allocated to subsystems and Common Fund cost related to overall experimental operations.

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	8412	0	0	8412	7086	0	1326	0	39.2	0.0

MANPOWER (k\$)	FY 03 (hrs) (k\$)	FY 04 (hrs) (k\$)	FY 05 (hrs) (k\$)	FY 06 (hrs) (k\$)	FY 07 (hrs) (k\$)	FY 08 (hrs) (k\$)	FY 09 (hrs) (k\$)	FY 10 (hrs) (k\$)	FY 11 (hrs) (k\$)	FY 12 (hrs) (k\$)	Total (hrs)
SUMMARY:											
Sr Research Scientist B/I	0	0	1760	1760	1760	1760	1760	1760	1760	1760	14080
	0	0	201.687	201.687	201.687	201.687	201.687	201.687	201.687	201.687	1613.496
B/I Total	0	0	1760	1760	1760	1760	1760	1760	1760	1760	14080
	0	0	201.687	201.687	201.687	201.687	201.687	201.687	201.687	201.687	1613.496
Computer Professional R	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508
Mechanical Engineer R	0	0	6060	6060	6060	5060	5060	5060	5060	5060	43480
	0	0	596.744	596.744	596.744	515.184	515.184	515.184	515.184	515.184	4366.152
R Total	0	0	6940	6940	6940	6820	6820	6820	6820	6820	54920
	0	0	681.86	681.86	681.86	685.416	685.416	685.416	685.416	685.416	5472.660
Total	0	0	8700	8700	8700	8580	8580	8580	8580	8580	69000
	0	0	883.547	883.547	883.547	887.103	887.103	887.103	887.103	887.103	7086.156

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	117.0	117.0	117.0	117.5	117.5	117.5	117.5	117.5	964.346
Travel R	0.0	0.0	33.0	33.0	33.0	30.0	30.0	30.0	30.0	30.0	361.398
R Total	0.0	0.0	150.0	150.0	150.0	147.5	147.5	147.5	147.5	147.5	1325.744
Total	0.0	0.0	150.0	150.0	150.0	147.5	147.5	147.5	147.5	147.5	1325.744

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	1052	1052	1052	1051	1051	1051	1051	1051	8412

WBS 3.10

Description: Technical Coordination

Institution :

Contact

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	8412	0	0	8412	7086	0	1326	0	39.2	0.0

MANPOWER (k\$) SUMMARY:	FY 03 (hrs) (k\$)	FY 04 (hrs) (k\$)	FY 05 (hrs) (k\$)	FY 06 (hrs) (k\$)	FY 07 (hrs) (k\$)	FY 08 (hrs) (k\$)	FY 09 (hrs) (k\$)	FY 10 (hrs) (k\$)	FY 11 (hrs) (k\$)	FY 12 (hrs) (k\$)	Total (hrs)
Sr Research Scientist B/I	0	0	1760	1760	1760	1760	1760	1760	1760	1760	14080
	0	0	201.687	201.687	201.687	201.687	201.687	201.687	201.687	201.687	1613.496
B/I Total	0	0	1760	1760	1760	1760	1760	1760	1760	1760	14080
	0	0	201.687	201.687	201.687	201.687	201.687	201.687	201.687	201.687	1613.496
Computer Professional R	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508
Mechanical Engineer R	0	0	6060	6060	6060	5060	5060	5060	5060	5060	43480
	0	0	596.744	596.744	596.744	515.184	515.184	515.184	515.184	515.184	4366.152
R Total	0	0	6940	6940	6940	6820	6820	6820	6820	6820	54920
	0	0	681.86	681.86	681.86	685.416	685.416	685.416	685.416	685.416	5472.660
Total	0	0	8700	8700	8700	8580	8580	8580	8580	8580	69000
	0	0	883.547	883.547	883.547	887.103	887.103	887.103	887.103	887.103	7086.156

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	117.0	117.0	117.0	117.5	117.5	117.5	117.5	117.5	964.346
Travel R	0.0	0.0	33.0	33.0	33.0	30.0	30.0	30.0	30.0	30.0	361.398
R Total	0.0	0.0	150.0	150.0	150.0	147.5	147.5	147.5	147.5	147.5	1325.744
Total	0.0	0.0	150.0	150.0	150.0	147.5	147.5	147.5	147.5	147.5	1325.744

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	1052	1052	1052	1051	1051	1051	1051	1051	8412

WBS 3.10.1

Description: ATLAS Access

Institution :

Contact

Include Access equipment for Ultra short, Short and long Access configurations. This also include interfaces between systems that are dominated by Access specifications.

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	1974	0	0	1974	1724	0	250	0	9.2	0.0

MANPOWER (k\$) SUMMARY:	FY 03 (hrs) (k\$)	FY 04 (hrs) (k\$)	FY 05 (hrs) (k\$)	FY 06 (hrs) (k\$)	FY 07 (hrs) (k\$)	FY 08 (hrs) (k\$)	FY 09 (hrs) (k\$)	FY 10 (hrs) (k\$)	FY 11 (hrs) (k\$)	FY 12 (hrs) (k\$)	Total (hrs)
Mechanical Engineer R	0	0	2655	2655	2655	1655	1655	1655	1655	1655	16240
	0	0	266.537	266.537	266.537	184.977	184.977	184.977	184.977	184.977	1724.496
R Total	0	0	2655	2655	2655	1655	1655	1655	1655	1655	16240
	0	0	266.537	266.537	266.537	184.977	184.977	184.977	184.977	184.977	1724.496
Total	0	0	2655	2655	2655	1655	1655	1655	1655	1655	16240
	0	0	266.537	266.537	266.537	184.977	184.977	184.977	184.977	184.977	1724.496

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	131.280
Travel R	0.0	0.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	118.600
R Total	0.0	0.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	249.880
Total	0.0	0.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	249.880

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	298	298	298	216	216	216	216	216	1974

WBS 3.10.1.1

Description: Access Equipment

Institution : BNL-M&O

Contact

Develop and manage Access Equipment for the electronics of the Barrel Calorimeters, End cap calorimeters, JD Disc, and installation and access tools for the Beam Pipe, and Inner Detector. This level of effort will continue through 2007 when the detector commissioning is completed. After 2007, a level of effort is required for Access planning and implementation at CERN. This effort will be the planning and coordination for Access to the various detector elements during shutdown.

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	1730	0	0	1730	1480	0	250	0	7.5	0.0

MANPOWER SUMMARY:	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
Mechanical Engineer R	0	0	1655	1655	1655	1655	1655	1655	1655	1655	13240
	0	0	184.977	184.977	184.977	184.977	184.977	184.977	184.977	184.977	1479.816
R Total	0	0	1655	1655	1655	1655	1655	1655	1655	1655	13240
	0	0	184.977	184.977	184.977	184.977	184.977	184.977	184.977	184.977	1479.816
Total	0	0	1655	1655	1655	1655	1655	1655	1655	1655	13240
	0	0	184.977	184.977	184.977	184.977	184.977	184.977	184.977	184.977	1479.816

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	131.280
Travel R	0.0	0.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	118.600
R Total	0.0	0.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	249.880
Total	0.0	0.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	249.880

CONTINGENCY FACTORS:	Risk				Weight			Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	216	216	216	216	216	216	216	216	1730

WBS 3.10.1.2

Description: Access and Interface Beam and Pixel

Institution : LBNL

Contact

Define interfaces and Access between Pixel and Beam Pipe. Beam Pipe and Pixel are now one unit that is removed during long term access. This level of effort will be required through 2007 when the Inner Detector is finally and successfully installed.

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	245	0	0	245	245	0	0	0	1.7	0.0

MANPOWER (k\$) SUMMARY:	FY 03 (hrs) (k\$)	FY 04 (hrs) (k\$)	FY 05 (hrs) (k\$)	FY 06 (hrs) (k\$)	FY 07 (hrs) (k\$)	FY 08 (hrs) (k\$)	FY 09 (hrs) (k\$)	FY 10 (hrs) (k\$)	FY 11 (hrs) (k\$)	FY 12 (hrs) (k\$)	Total (hrs)
Mechanical Engineer R	0	0	1000	1000	1000	0	0	0	0	0	3000
	0	0	81.56	81.56	81.56	0	0	0	0	0	244.680
R Total	0	0	1000	1000	1000	0	0	0	0	0	3000
	0	0	81.56	81.56	81.56	0	0	0	0	0	244.680
Total	0	0	1000	1000	1000	0	0	0	0	0	3000
	0	0	81.56	81.56	81.56	0	0	0	0	0	244.680

CONTINGENCY FACTORS:	Risk				Weight			Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	82	82	82	0	0	0	0	0	245

WBS 3.10.2

Description: Maintenance of Movement System

Institution :

Contact

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	1152	0	0	1152	995	0	157	0	5.7	0.0

MANPOWER (k\$) SUMMARY:	FY 03 (hrs) (k\$)	FY 04 (hrs) (k\$)	FY 05 (hrs) (k\$)	FY 06 (hrs) (k\$)	FY 07 (hrs) (k\$)	FY 08 (hrs) (k\$)	FY 09 (hrs) (k\$)	FY 10 (hrs) (k\$)	FY 11 (hrs) (k\$)	FY 12 (hrs) (k\$)	Total (hrs)
Mechanical Engineer R		0	0	1250	1250	1250	1250	1250	1250	1250	10000
		0	0	124.32	124.32	124.32	124.32	124.32	124.32	124.32	994.560
R Total		0	0	1250	1250	1250	1250	1250	1250	1250	10000
		0	0	124.32	124.32	124.32	124.32	124.32	124.32	124.32	994.560
Total		0	0	1250	1250	1250	1250	1250	1250	1250	10000
		0	0	124.32	124.32	124.32	124.32	124.32	124.32	124.32	994.560

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	105.600
Travel R	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	51.556
R Total	0.0	0.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	157.156
Total	0.0	0.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	157.156

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	144	144	144	144	144	144	144	144	1152

WBS 3.10.2.1

Description: Movement System Control

Institution : ANL

Contact

This level of effort is required for the design, procurement, maintenance and operation of the Movement Control System for the detector. The design and procurement effort will be performed through 2006. Thereafter, the level of effort is required for Access planning and implementation at CERN. This effort will be the management, planning, maintenance and operation of the Movement Control System for Accessing the detector elements during shutdown.

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	1152	0	0	1152	995	0	157	0	5.7	0.0

MANPOWER SUMMARY:	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
Mechanical Engineer R		0	0	1250	1250	1250	1250	1250	1250	1250	10000
		0	0	124.32	124.32	124.32	124.32	124.32	124.32	124.32	994.560
R Total		0	0	1250	1250	1250	1250	1250	1250	1250	10000
		0	0	124.32	124.32	124.32	124.32	124.32	124.32	124.32	994.560
Total		0	0	1250	1250	1250	1250	1250	1250	1250	10000
		0	0	124.32	124.32	124.32	124.32	124.32	124.32	124.32	994.560

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	12.0	105.600
Travel R	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	51.556
R Total	0.0	0.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	157.156
Total	0.0	0.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0	157.156

CONTINGENCY FACTORS:	Risk				Weight			Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	144	144	144	144	144	144	144	144	1152

WBS 3.10.3

Description: Configuration Control Envelope

Institution :

Contact

U.S. ATLAS % share of

5.00%

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	2549	0	0	2549	1647	0	902	0	9.8	0.0

**MANPOWER
(k\$)**

SUMMARY:

Mechanical Engineer R

	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
Mechanical Engineer R	0	0	2155	2155	2155	2155	2155	2155	2155	2155	17240
	0	0	205.887	205.887	205.887	205.887	205.887	205.887	205.887	205.887	1647.096
R Total	0	0	2155	2155	2155	2155	2155	2155	2155	2155	17240
	0	0	205.887	205.887	205.887	205.887	205.887	205.887	205.887	205.887	1647.096
Total	0	0	2155	2155	2155	2155	2155	2155	2155	2155	17240
	0	0	205.887	205.887	205.887	205.887	205.887	205.887	205.887	205.887	1647.096

**MATERIAL
SUMMARY:**

Other R
Travel R

R Total

Total

	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	90.0	723.760
Travel R	0.0	0.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	177.900
R Total	0.0	0.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	901.660
Total	0.0	0.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	105.0	901.660

**PROFILE
SUMMARY:**

	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	319	319	319	319	319	319	319	319	2549

WBS 3.10.3.1

Description: Configuration Control

Institution : BNL-M&O

Contact

This level of effort is required to support the Configuration Control of the detector. This effort will be peaking through 2008 when the Detector is finally closed and completed. After 2008, a level of effort is required for Configuration Control for planned work during shutdown periods, and the planned Upgrade effort for 2010. This effort is based at BNL.

U.S. ATLAS % share of 5.00%

Cost Summary:	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
(All)	1701	0	0	1701	1480	0	222	0	7.5	0.0

MANPOWER (k\$)	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
SUMMARY:											
Mechanical Engineer R	0	0	1655	1655	1655	1655	1655	1655	1655	1655	13240
	0	0	184.977	184.977	184.977	184.977	184.977	184.977	184.977	184.977	1479.816
R Total	0	0	1655	1655	1655	1655	1655	1655	1655	1655	13240
	0	0	184.977	184.977	184.977	184.977	184.977	184.977	184.977	184.977	1479.816
Total	0	0	1655	1655	1655	1655	1655	1655	1655	1655	13240
	0	0	184.977	184.977	184.977	184.977	184.977	184.977	184.977	184.977	1479.816

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	43.760
Travel R	0.0	0.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	15.0	177.900
R Total	0.0	0.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	221.660
Total	0.0	0.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	20.0	221.660

CONTINGENCY FACTORS:	<i>Risk</i>				<i>Weight</i>				Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule		
	0	0	0	0	0	0	0	0	

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	213	213	213	213	213	213	213	213	1701

WBS 3.10.3.2

Description: Configuration Control @ CERN

Institution : BNL-M&O

Contact

This level of effort is required to support the Configuration Control of the detector. This effort will be peaking through 2008 when the Detector is finally closed and completed. After 2008, a level of effort is required for Configuration Control for planned work during shutdown periods, and the planned Upgrade effort for 2010. This effort is based at CERN.

U.S. ATLAS % share of

5.00%

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	680	0	0	680	0	0	680	0	0.0	0.0

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	680.000
R Total	0.0	0.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	680.000
Total	0.0	0.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	85.0	680.000

CONTINGENCY FACTORS:	<i>Risk</i>				<i>Weight</i>			Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	85	85	85	85	85	85	85	85	680

WBS 3.10.3.3

Description: EC Muons Configuration Control

Institution : Brandeis University

Contact

This level of effort includes the Configuration Control of the End Cap Muon System. This End Cap Muon System has special problems related to the Muon Alignment System, which requires clear lines of sight for this optical system. A constant level of effort is essential during installation and commissioning through 2008 to ensure the alignment system is not obscured by detector elements. After 2008, this level of effort will be required for Access studies and interference studies for the Upgrade. In addition placement specifications for the movements during access and installation are required throughout the life of the detector.

U.S. ATLAS % share of

5.00%

Cost Summary:	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
(All)	167	0	0	167	167	0	0	0	2.3	0.0

MANPOWER (k\$)	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
SUMMARY:											
Mechanical Engineer R	0	0	500	500	500	500	500	500	500	500	4000
	0	0	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	167.280
R Total	0	0	500	500	500	500	500	500	500	500	4000
	0	0	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	167.280
Total	0	0	500	500	500	500	500	500	500	500	4000
	0	0	20.91	20.91	20.91	20.91	20.91	20.91	20.91	20.91	167.280

CONTINGENCY FACTORS:	Risk				Weight			Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	21	21	21	21	21	21	21	21	167

WBS 3.10.4

Description: Installation and Maintenance Data Base

Institution : BNL-M&O

Contact

This level of effort is required for development and maintenance of ATLAS Installation and Maintenance Data Base to satisfy INB requirements. The effort supplements the effort by the Installation Group until 2008, afterwhich this group will have responsibility for the entire effort. The database must be maintained during all Access, maintenance and Upgrade work.

U.S. ATLAS % share of

5.00%

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	1124	0	0	1124	1107	0	17	0	6.5	0.0

**MANPOWER
(k\$)
SUMMARY:**

	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
Computer Professional R	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508
R Total	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508
Total	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508

**MATERIAL
SUMMARY:**

	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	3.706
Travel R	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	13.342
R Total	0.0	0.0	3.0	3.0	3.0	0.5	0.5	0.5	0.5	0.5	17.048
Total	0.0	0.0	3.0	3.0	3.0	0.5	0.5	0.5	0.5	0.5	17.048

**PROFILE
SUMMARY:**

	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	90	90	90	171	171	171	171	171	1124

WBS 3.10.4.1

Description: Installation Data Base

Institution : BNL-M&O

Contact

U.S. ATLAS % share of

5.00%

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	0	0	0	0	0	0	0	0	0.0	0.0

CONTINGENCY FACTORS:	<i>Risk</i>				<i>Weight</i>			Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

WBS 3.10.4.2

Description: Installation Data Base @ CERN

Institution : BNL-M&O

Contact

U.S. ATLAS % share of

5.00%

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	1124	0	0	1124	1107	0	17	0	6.5	0.0

MANPOWER (k\$) SUMMARY:	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
Computer Professional R	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508
R Total	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508
Total	0	0	880	880	880	1760	1760	1760	1760	1760	11440
	0	0	85.116	85.116	85.116	170.232	170.232	170.232	170.232	170.232	1106.508

MATERIAL SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total w/ overhead (k\$)
Other R	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	0.5	0.5	3.706
Travel R	0.0	0.0	3.0	3.0	3.0	0.0	0.0	0.0	0.0	0.0	13.342
R Total	0.0	0.0	3.0	3.0	3.0	0.5	0.5	0.5	0.5	0.5	17.048
Total	0.0	0.0	3.0	3.0	3.0	0.5	0.5	0.5	0.5	0.5	17.048

CONTINGENCY FACTORS:	Risk				Weight			Cont %
	Technical	C o s t	Schedule	Des i g n	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	90	90	90	171	171	171	171	171	1124

WBS 3.10.5

Description: TC Project Office

Institution : BNL

Contact

US ATLAS support of ATLAS Technical Coordination Project Office

One FTE/year of base support for the TC Project Office (D. Lissauer)**Details of Estimate:**

U.S. ATLAS % share of 5.00%

Cost Summary: (All)	Base Cost (k\$)	Cont Cost (k\$)	Cont %	Total Cost (k\$)	EDIA Labor (k\$)	Mfg Labor (k\$)	EDIA Matls (k\$)	Mfg Matls (k\$)	FTEs All	FTEs Other
	1613	0	0	1613	1613	0	0	0	8.0	0.0

MANPOWER (k\$)	FY 03 (hrs)	FY 04 (hrs)	FY 05 (hrs)	FY 06 (hrs)	FY 07 (hrs)	FY 08 (hrs)	FY 09 (hrs)	FY 10 (hrs)	FY 11 (hrs)	FY 12 (hrs)	Total (hrs)
SUMMARY:											
Sr Research Scientist B/I	0	0	1760	1760	1760	1760	1760	1760	1760	1760	14080
	0	0	201.687	201.687	201.687	201.687	201.687	201.687	201.687	201.687	1613.496
B/I Total	0	0	1760	1760	1760	1760	1760	1760	1760	1760	14080
	0	0	201.687	201.687	201.687	201.687	201.687	201.687	201.687	201.687	1613.496
Total	0	0	1760	1760	1760	1760	1760	1760	1760	1760	14080
	0	0	201.687	201.687	201.687	201.687	201.687	201.687	201.687	201.687	1613.496

CONTINGENCY FACTORS:	Risk				Weight			Cont %
	Technical	C o s t	Schedule	Des i gn	Technical	C o s t	Schedule	
	0	0	0	0	0	0	0	0

PROFILE SUMMARY:	FY 03 (k\$)	FY 04 (k\$)	FY 05 (k\$)	FY 06 (k\$)	FY 07 (k\$)	FY 08 (k\$)	FY 09 (k\$)	FY 10 (k\$)	FY 11 (k\$)	FY 12 (k\$)	Total (k\$)
	0	0	202	202	202	202	202	202	202	202	1613