

HIPPI →



HIPPI Matters

(Steering Committee meeting during CARE'04)

- Comments/ approval of HIPPI'04 summary
- ESAC report
- Financial tables and planning
- Rehearsal of talks at CARE'04
- Future events
- A.O.B.



Comments / Approval of HIPPI'04 Summary



SUMMARY OF



hosted by the Institut für Angewandte Physik



September 29 – October 1, 2004

OUTLINE

1. *Introduction*
2. *Non-technical talks*
 - 2.1. Introduction
 - 2.2. Management (Work Package 1)
 - 2.3. Dissemination (Work Package 1)
3. *Normal Conducting Accelerating Structures (Work Package 2)*
4. *Superconducting Accelerating Structures (Work Package 3)*
5. *Beam Chopping (Work Package 4)*
6. *Beam Dynamics (Work Package 4)*
7. *ESAC preliminary reactions*

ANNEXES

- Annex 1: Agenda
- Annex 2: ESAC charges
- Annex 3: ESAC members
- Annex 4: List of participants



ESAC report



JRA3	Participant (cost model)	Permanent Staff including indirect cost (Euros)	Additional Staff including indirect cost (Euros)	Durable Equipment including indirect cost (Euros)	Consumable and prototyping including indirect cost (Euros)	Travel including indirect cost (Euros)	Expected costs including indirect cost (Euros)	Direct cost	Subcontract	Indirect cost	First received payment (Euros)
1	CEA (FC)	73,972	0	0	42,715	2,779	119,166	0	0	119,166	240,000
3	CNRS-IN2P3	24,000	0	0	18,600	3,400	46,070	38,392	0	7,678	7,500
	CNRS-LPSC	35,000	0	0	0	2,000	37,000	30,833	0	6,167	9,000
	CNRS(FCF)	59,000	0	0	18,600	2,470	83,070	69,225	0	13,845	16,500
4	GSI(FC)	167,800	7,350	38,500	0	1,676	215,326	174,876	0	40,450	127,500
5	IAP-FU(AC)	0	24,954	0	0	2,154	31,638	27,108	0	4,530	108,750
7	FZJ(FC)	240,000	0	0	55,000	4,000	299,000	182,000	0	117,000	115,500
10	INFN Mi(AC)	0	13,970	0	0	1,450	15,420	12,850	0	2,570	22,500
17	CEA (AC)	0	20,650	0	235,175	16,867	272,692	227,243	0	45,449	97,500
20	CEA (FC)	195,757	0	0	13,785	3,854	213,396	99,204	0	114,192	96,000
	Grand total	736,529	66,924	38,500	365,275	37,950	249,708	792,506	0	457,202	824,250

?

Very low

Very low

Very low

?

Round figures don't sound true...

?

Too low

Quite high



JRA3	Participant (cost model)	Permanent Staff including indirect cost (Euros)	Additional Staff including indirect cost (Euros)	Durable Equipment including indirect cost (Euros)	Consumables and Prototyping including indirect cost (Euros)	Travel including indirect cost (Euros)	Expected costs including indirect cost (Euros)				Requested funding (Euros)
								Direct cost	Subcontract	Indirect cost	
1	CEA (FC)	675,000	100,000	350,000	400,000	2,000	1,527,000	1,027,000	0	500,000	450,000
3	CNRS-IN2P3	43,200	16,500	0	3,000	4,000	66,700	55,583	0	11,117	20,000
	CNRS-LPSC	261,000	0	0	35,000	3,000	299,000	249,167	0	49,833	38,000
	CNRS(FCF)	304,200	16,500	0	38,000	7,000	365,700	304,750	0	60,950	58,000
4	GSI(FC)	426,000	127,500	95,300	0	13,300	662,100	529,100	0	133,000	240,000
5	IAP-FU(AC)	0	275,000	0	230,000	5,000	510,000	425,000	0	85,000	210,000
7	FZJ(FC)	479,000	132,000	0	60,000	9,000	680,000	415,000	0	265,000	201,000
10	INFN-Mi(AC)	0	22,990	0	30,000	8,000	60,990	50,825	0	10,165	30,000
17	CERN (AC)	0	360,000	0	150,000	15,000	525,000	437,500	0	87,500	250,000
20	CCLRC (FC)	520,460	351,476	0	257,000	5,000	1,133,936	625,307	0	508,629	128,000
	Grand total	2,404,660	1,385,466	445,300	1,165,000	64,300	5,464,726	3,814,482	0	1,650,244	1,567,000

**SALARIES OF
ADDITIONAL STAFF**

TRAVELS

**TOTAL OF
RESOURCES**

REQUEST



Plans for the next 18 months: WP2



- progress with DTL design (75 % of construction in Russia) (CEA, CERN, LPSC, RAL)
- start of construction of CH prototype (IAP-FU)
- conclusion of beam dynamics with CH DTL for GSI
- start of construction of SCL model (LPSC, CERN, Russia)
- high power tests of CCDTL prototype 1 (CERN)
- construction of CCDTL prototype 2 (Russia)

Task Name	Milestones	Deliverables	2005												2006										
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7				
WP2: NORMAL CONDUCTING STRUCTURES																									
Drift Tube Linac																									
DTL design			[Bar from month 1 to 12]																						
Decision on prototyping			[Bar from month 1 to 12]																						
DTL coupler prototype design			[Bar from month 1 to 7]																						
DTL coupler prototype construction and testing			[Bar from month 7 to 12]																						
DTL beam dynamics design			[Bar from month 1 to 12]																						
H-mode Drift Tube Linac																									
RF model CH tank1 RF design			[Bar from month 1 to 7]																						
RF cold model design & construction			[Bar from month 1 to 7]																						
RF model construction			[Bar from month 1 to 7]																						
Beam dynamics design CH tank1			[Bar from month 1 to 12]																						
CH model cavity tests	Dec-05 Intermediate report		[Bar from month 1 to 12]																						
CH-prototype design			[Bar from month 1 to 11]																						
CH-prototype construction		Dec-06: Prototype ready	[Bar from month 1 to 12]																						
H-DTL beam dynamics study	Jun-05 Design report		[Bar from month 1 to 7]																						
Side Coupled Linac																									
RF model RF design			[Bar from month 1 to 7]																						
RF model mechanical design			[Bar from month 1 to 7]																						
RF model construction and testing			[Bar from month 7 to 12]																						
Cell Coupled Drift Tube Linac																									
Pre-prototype construction	Jun-05 Intermediate report		[Bar from month 1 to 12]																						
Pre-prototype high-power RF tests			[Bar from month 1 to 11]																						
Contribution to ISTC prototype mechanical design	Jun-06 Prototype ready		[Bar from month 1 to 7]																						
Revision of design after prototype testing		Dec-06: Design report	[Bar from month 1 to 12]																						



Plans for the next 18 months: WP4



- pre-prototype characterization for chopper structure A & B (CERN & RAL)
- construction of prototype chopper structure A (CERN)
- chopper driver construction for chopper A (CERN)
- dump construction + start of beam–line assembly (CERN)
- start of construction of prototype chopper structure B (RAL)

Task Name	Milestones	Deliverables	2005												2006									
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7			
WP4: CHOPPING																								
CHOPPER STRUCTURE A																								
Pre-prototype construction	Jun-05 Design report		[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
Pre-Prototype testing	Mar-05 Intermediate report		[Task bar from month 1 to 3]			[Task bar from month 4 to 12]												[Task bar from month 1 to 7]						
Driver construction, testing			[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
Full scale prototype design			[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
Full scale prototype construction		Aug-06: Prototype ready	[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
Pre-prototype testing w/o beam			[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
CHOPPER LINE																								
Dump design			[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
Dump construction	Jun-05 Intermediate report		[Task bar from month 1 to 3]			[Task bar from month 4 to 12]												[Task bar from month 1 to 7]						
Beam line assembling			[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
CHOPPER STRUCTURE B																								
Pre-prototype design and test	Jun-05 Intermediate report		[Task bar from month 1 to 3]			[Task bar from month 4 to 12]												[Task bar from month 1 to 7]						
Prototype design	Jun-06 Design report		[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									
Prototype construction			[Task bar from month 1 to 12]												[Task bar from month 1 to 7]									



- progress with systematic comparison of space-charge codes (all)
- progress with integration of the instrumentation at UNILAC with the control system (GSI)
- first experiment at UNILAC for code bench marking (GSI)
- end of construction of BSHM + first checks (CERN)
- collimators design (CERN)

Task Name	Milestones	Deliverables	2005												2006								
			1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7		
WP5: BEAM DYNAMICS																							
Code development																							
3D space charge routines dev., testing			RA																				
LORASR development	Dec-05 Intermediate report														IAP-FU								
Transport in 3D map implementation															CEA								
Improvement, modelling high current			GS																				
Code preparation for 3 MeV test stand	Jun-06 Intermediate report		CE																				
Codes preparation for SC linacs			FZ																				
Code benchmarking															GS								
Experiment at UNILAC preparation, simulations			GS																				
First experiment campaign at UNILAC															GSI								
Diagnostics and collimation																							
Profile measurement prototype design, construction	Mar-05 Prototype ready		GSI																				
Profile measurement testing			GS																				
Non-interceptive bunch measurement design			GSI																				
Non-interceptive bunch measurement const. and testing	Jun-05 Components ready		GS																				
Halo meas. device design, construction	Jun-05 Prototype ready	Jun-05 Final report	CERN																				
On-line transmission control															GS								
Beam profile monitor design			FZJ																				
Collimators design			CERN																				



- **Plenary talk (Thursday 4 - 11h00)**
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- **CARE Governing Board (Friday 5 - 12h10)**
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- **BENE (Tuesday 2 - 14h50)**
BENE_Hdrivers_RGaroby.ppt



	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
CARE & HIPPI												
CSC meetings												
Workshop WP2												
Workshop WP3			???									
			INFN-Milano									
Workshop WP4				13 & 14 RAL								
Workshop WP5					14 & 15 RAL							
HIPPI yearly meeting									28 till 30 RAL			
CARE yearly meeting												
Other collaborations												
IPHI-SPL	27 & 28 CERN											
ISTC		???										
Miscellaneous												
PAC05					16 till 20 Knoxville USA							