

**Compte rendu de la réunion du PS sur le budget 1994****le 16 mars 1994**

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1. B. Allardyce explique comment le budget 1994 est constitué (voir annexes). Il a été décidé par le chef de division en accord avec notre Directeur de considérer que notre budget d'exploitation soit de 15'105 M (malgré que 0'355 M ne soit pas encore arrivé) et que notre budget pour les projets DG est de 2'25 M pour CO et de 3'860 M pour Pb-ions (malgré qu'une partie de ces sommes ne soit pas encore arrivée)
2. La Division décide d'engager 1'290 M sur le projet FPP, constitué de 0'750 M de "jobs" déjà commencés, et 0'540 M accepté aujourd'hui; il est essentiel que les travaux urgents de FPP avancent malgré que le budget n'ait pas encore été accordé. Le résultat sera que notre report en fin d'année augmentera si aucun budget FPP n'arrive. L'annexe donne le détail des nouveaux "jobs" acceptés du tableau 6 du fichier "XPSINV.XLS".
3. Les travaux contenus dans le tableau 4 du fichier "XPSINV94" ont été discutés avec quelques corrections et réductions comme résultat. Le tableaux 4, mis à jour, est attaché comme annexe. Nous avons accepté des nouvelles subventions PS (codes 7xx60) pour 500 k au total sur le tableau 4. Les travaux seront financés par l'exploitation de la division en général mais seront mis en négatif dans chaque groupe pour que le total hors tout reste le bon. Cette procédure est similaire à celle adoptée en juin 1993. Pour les "jobs" liés au test pour les ions de décembre 1994, on décide que le financement vienne de la réserve de la division; ces "jobs" ne sont pas encore mûrs. En ce qui concerne le 2ème pulser pour Isolde une discussion aura lieu ultérieurement avec PPE afin d'en partager le financement.
4. On va maintenant ouvrir les nouvelles intersections et corriger les fichiers. P. Noverraz contactera les GL's pour avoir l'information sur le titre du "job" à ouvrir, son PPA, etc.

B.W. Allardyce

- 95% of 1993 exploitation 14.350
- Pb-ion exploitation 0.400
- Expected refund, not yet obtained 0.355
- Total 15.105 *EXPL. 1994*
- Pb-ion project (not incl 300k to SL) 3.200
- Controls project 1.500
- FPP project 0.000

Grand total 19.805 *RS 1994*

**Missing amounts (March 94)**

- Refund promised (see above) 0.355
- Pb-ions (promised) 0.660 *probably June 1994*
- Controls (promised) 0.750
- FPP (no chance, probably) 0.750 *has become (16/3/94) 1.250*
- Main generator overspend (requested) 0.040
- Refund to level of 1993 (no chance) 0.400

## (3) Activities funded by Subventions from the Division

			Past	1994	1995	1996	Total	
70070	FGS	DI	Réserve de la Division		95		95	
70560			End of the project	17	10		27	
71161	FAP	AR	Collaboration with Russians on e-cooling		50	50	100	
71260	FAP	AR	Water cooling pipe replacement, bat 193 (50k from ST in 1995)		30	0	30	
71460	FAL	AR	Electron cooling studies		60		60	
71560			End of the project	226	5		231	
72260	EPP	PA	Replace obsolete beam-transport elements (to East and South Hal	217	30	25	272	
72860	FPP	PA	Ferrite pour KFA 71		20		20	
73060	FIP	HI	Laser ion source studies.	377	125	200	902	
73360			End of the project	201	5		206	
73460	FPP	HI	Improvements to emittance lines LTE and LBE.	2	70		72	
74060	FLP	LP	Test stand for positron converter and capture solenoid	40	60	80	180	
74160	FLP	LP	Cable repl. & protection, plus hose repl. due to degradation,	36	20		56	
74260	FRC	LP	Photocathode lab.	115	65	70	320	
75060	FCO	CO	Subv. PS pour Controls;	22	0		22	
75061	FCO	CO	Collaboration "ESPRIT"	184	10		194	
76060	FCO	BD	Transfer Lines Pick-Ups Upgrading (TT2 & TT70)	19	35	10	64	
76259	FCO	BD	Upgrade of PS pickups specific controles	16	70		86	
76459	FAP	BD	Scintillator plus CCD for fast extracted low-energy pbars	20	20		40	
76560	FCO	BD	New Kicker and FFT for Q Measurement	39	15	20	74	
77060	FPP	OP	Scope replacement in MCR	162	75		237	
79160	FPP	RF	Consolidation linac 2 (amplifs. for ref. line, motor electronics., etc)	73	55		128	
				1766	925	455	270	3'416

← DIV.  
RESERVE

↑  
JOBS DÉJÀ  
SUBVENTIONÉS.

PK DE CHANGEMENT

**(4) New requests for funding by Subventions from the Division**

				Past	1994	1995	1996	Total
70xxx	FCO	DI	Collaboration on symbolic computing for accelerators		50	50		100
71xxx	FAP	AR	Movement and interlocks of target station		30	0		30
	FAP	AR	AAC instrumentation (spectrum analyser, etc)		60	60		120
	FAP	AR	Purchase of new compressors		30	60		90
	FAP	AR	Pressure gauges		40			40
72xxx	FAL	PA	LEAR septa consolidation (1 el-static septum & 2 HT gen. spares)		75	25		100
	FPP	PA	Remise en etat KFA71 (part or whole(?) of job c29 of FPP)		200			200
	EIS	PA	Construction of a second pulser for Isolde		90			90
	FLP	PA	New coils for EPA injection septa		50	100		150
73xxx	FIP	HI	RFQ for high intensity ions (if laser ion source gives good results)		250	250	250	750
		HI	Multi-slit emittance measurement, linac 2.		25	50		75
		HI	Fast wire scanner for PSB		0	120		120
		HI	Provision of Q measurements at PSB ( work is in BD group).		40	40		80
74xxx	FLP	LP	Positron spectrometer for LILW, section 28			80		80
	FLP	LP	Adaptation transversale LIL-EPA			60		60
	FLP	LP	Solenoids and bridge coils as spares for positron collector				100	100
	FLP	LP	Pulsed HI.BSH00 and HTE.BHZ10 for PPM beam to LEA area.		60			60
76xxx	FCO	BD	Multi-purpose test tank in the lab for detectors, incl. Si strips.		100			100
	FCO	BD	Disentanglement of BT's and PU's in TT2 and TT70		40	60		100
	FCO	BD	Replace SEM grids & mechanisms in PSB measuring line		0	200	100	300
	FCO	BD	VME modules for PS diagnostic controls renov. slice, 1994		85			85
	FCO	BD	Modify PS pickup electronics for ion operation (better S/N ratio).		0	100		100
	FCO	BD	Closed orbit measurement at PSB with h=1.			50		50
	FCO	BD	SEM grid at Booster Injection for 1 ring.			100		100
	FCO	BD	New SEM grids at PS injection with smaller wire spacing.			100	100	200
	FCO	BD	Renovation of the whole MTV system in the PS complex.			250	250	500
77060	FPP	OP	Replace fast sampling oscilloscopes in MCR	141		80	80	301
	FCO	OP	Informations generales PS par CATV		30	60	50	140
78xxx	PO	Consolid. alims HT pour septa e/s pour ejection SE61(Passoni-Villa).		80	80			160
		Alim de test OCEM (new type of power conv.)		35			35	
		Spares for the main generator, SIMADYN.		30	30		60	
	EPP	PO	Replacement of 8 power converters R3 in the East area		60	360	140	560
	EPP	PO	Replacement of 4 power converters R4 in the East area		100	300		400
EPP	PO	Re-arrangement of power converters in East area, EGB and ERB3.		75	50		125	
79xxx		RF						
<b>Totals</b>				<b>141</b>	<b>1'585</b>	<b>2'665</b>	<b>1'070</b>	<b>5'461</b>

To negotiate with PPE.

1)

2)

1)

3)

1)

These jobs have high priority for 1994 according to GL's.

- 1) Shift later due to insufficient manpower.
- 2) Another 60k will be spent by AT Division.
- 3) Should be CO project, but must be done in 1994 and has been reduced from 150k.



**(4-bis) New requests for funding by Subventions from the Division, for December 1994 ion test**

71xxx	FIP	AR	Two bumpers for multiturn injection into LEAR, for LHC-ions.		50			50
	FIP	AR	Fast spectrum analyser		80			80

*Acceptés  
aujourd'hui*

**(5) Activities funded by DG Reserve via the FPP consolidation project, 7xx93 and underway**

			Past	1993	1994	1995	1996	1997	Total	
72093	FPP	PA	Septa movements, job c1.		40	10			50	
72593	FPP	PA	Septa consolidation, job c2, was 72560.		100	100	50		250	
72893			PFN cables, , Job b1, TERMINE	700	-115				585	
73393	FPP	HI	Transverse damoers at PSB, job c8, also i17, was 73560		100	100	50		250	
76093	FPP	BD	Second set of fast wire scanners in PS, formerly 76059, job b2 of F	190	-65	55			180	
76193			BLM'S Booster, job b3, TERMINE	4	5				9	
76493	FPP	BD	Transfer line pick-ups PSB/PS, formerly 76460			210			265	
78093	FPP	PO	3 alims for septa SE61, job c31 of FPP project.			100	50		200	
78293			Alims pulses, job b4, TERMINE	47	5				52	
78393	FPP	PO	Rempl. de l'electronique dans lignes TT2 & 70, wa 78360; job b5 of	37	-5	100			132	
79493	FPP	RF	Renov RF; incl ferrite cooling discs repl. (ex 79460); job b6 of FPP		55	250			555	
				978	-120	750	770	150	0	2528

Jobs already agreed for 1994

**(6) Details of all the FPP consolidation project jobs for PS, including those in table 5 above..**

			Past	1993	1994	1995	1996	1997	1998		
	FPP	PA	Replacement of all fast kicker PFN , formerly 79060 , job b1 of FPP	T	E	R	M	I	N	E	Job b1 10)
76093	FPP	BD	Second set of fast wire scanners in PS, formerly 76059, job b2 of F	190	50	55					Job b2
	FPP	BD	Renovation of BLM's at Booster, also 76159; job b3 of FPP	T	E	R	M	I	N	E	Job b3 10)
	FPP	PO	Installation alims pulsees FE16 et 58, formerly 78260, job b4 of FP	T	E	R	M	I	N	E	Job b4 10)
78393	FPP	PO	Rempl. de l'electronique dans lignes TT2 & 70, wa 78360; job b5 of	37	85	100					Job b5
79493	FPP	RF	Renov RF; incl ferrite cooling discs repl. (ex 79460); job b6 of FPP		75	250	250				Job b6
72093	FPP	PA	Replace PS and PSB septa moving elements			40	10				Job c1
72593	FPP	PA	Study of new septa for PSB and construction of new SMH42			100	100	50			Job c2
	FPP	HI	Replacement of 4 DC quads & supplies by pulsed ones at linac2.				100	100			Job c3
	FPP	HI	Spare for RFQ2 (power supplies for solenoids, etc)	T	E	R	M	I	N	E	Job c4 10)
	FPP	HI	Ion source test stand (protons)			70	70	70			Job c5 6) ←
	FPP	HI	HEBT and measuring lines controls rejuvenation	T	E	R	M	I	N	E	Job c6 8)
	FPP	HI	PSB injection kicker power supply (25 years old)						400	100	Job c7
73393	FPP	HI	Renovation of PSB transverse dampers, also job i17, was 73560			100	100	50			Job c8 4)
	FPP	HI	Loss collimators in PSB, stage 1 and stage 2.				250	250	250		Job c9
	FPP	HI	Measurement targets in PSB				250	250			Job c10
76493	FPP	BD	Transfer line pick-ups PSB/PS, formerly 76460		35	55	210				Job c11 9)
	FPP	HI	Surveillance of PSB and equip halls for temperature and flooding			50	50				Job c12 6) ←
	FPP	HI	Temperature surveillance of PSB magnets, replace obsolete syste	T	E	R	M	I	N	E	Job c13 8)
	FPP	HI	Shielding or compens. of PSB injection line against PS fringe field.	T	E	R	M	I	N	E	Job c14 8)
	FPP	PO	PSB main magnet and quad. power supplies renewal(3 elements)	T	E	R	M	I	N	E	Job c15 1)
	FPP	PO	Replacement of PCB components in divers supplies			250	250	250	250		Job c16 7)
	FPP	PO	PSB to PS transfer line power supply renewal (13 elements)			165	260	100			Job c17
	FPP	PO	Low energy corr. multipoles power supplies renewal (120 elements)				350	190			Job c18
	FPP	PO	Bump 42 power supply renewal (5 elements)			150	190				Job c19 6) ←
	FPP	PO	Bdl and Q-strip corrections, renovation of supplies (14 elements)				400	90			Job c20
	FPP	PO	PSB injection quads & dipoles (15 elements)			100	100	60			Job c21 6) ←
	FPP	PO	PS gamma transition , renovation of supplies (4 elements)					200	100	20	Job c22
	FPP	PO	Electronics renovation for PS supplies					120	120	120	Job c23
	FPP	RF	Beam control electronics renovation			120	50	50			Job c24 6) ←
	FPP	RF	RF power loop electronics renovation (for 20 generators)			50	100	100	100	50	Job c25 2)
	FPP	RF	200 MHz gap replacements	T	E	R	M	I	N	E	Job c26 3)
	FPP	RF	10 MHz and 200 MHz systems renovation for PS machine			50	50	50	50	50	Job c27
	FPP	PA	Fast kicker systems: solid state triggers			80	80	80	80		Job c28
	FPP	PA	Fast kicker systems: general renovations			50	50	50	50	50	Job c29
	FPP	PA	Fast kickers: HT generator electr. (modernisation for 40 systems)			200	200	200	200	200	Job c30
78093	FPP	PO	Renov.partielle des 3 alims septa de l'ejection lente SE61.			50	100	50			Job c31 5)
	FPP	PO	Alimentation pulsee pour septum SMH42			50	120				Job c32 11) ←
				227	245	2'135	3'690	2'360	1'600	590	10'847

Jobs already underway in 1994

Jobs of high priority for 1994 according to GL's.

Jobs finished or deleted

- 1) Delete from FPP list, job i2..
- 2) Cannot start this job because of lack of manpower
- 3) This job already done, using spare parts obtained free from SPS.
- 4) This job has high priority and should be paid from FPP. Also LHC, job i17.

5) Job added in Dec 1993 and considered as high priority

6) High priority for 1994

7) Needs negotiating with ST to get from energy budget.

8) Delete, no longer needed

9) Was 76460 but now on new code 76493

10) Finished in 1993

11) New job added March 1994

*Jobs accepted  
aujourd'hui*

**(7) Project for Preparation of PS complex for LHC .**

				1993	1994	1995	1996	1997	1998	1999		
	FPP	HI	RFQ2 prep and installn (finished in March 1993, funded by LHC)	T	E	R	M	I	N	E	Job i1	1)
	FPP	PO	Modify PSB power supply for 1.4 GeV (mag. & 2 quads).			750	1000	750			job i2	5)
	FPP	ST	Increased water cooling for PSB magnets (ST Division).				3400				job i3	
	FPP	PA	Kickers and bumpers at PSB ejection (PA group, Metzmacher)			1000	1000	500			job i4	
	FPP	PA	PSB-PS septa to be pulsed rather than DC (PA group, Thivent)			400	400	400			job i5	
	FPP	PO	Septa power supplies, 5 elements ( PO group, Royer)			500	250	100			job i6	6)
	FPP	AT	PSB to PS transfer line magnets (8 dipoles, 2 quads), AT Division			100	400				job i7	
	FPP	PO	PSB to PS transfer line power supp. (8 dipoles, 2 quads), Royer			450	100				job i8	
	FPP	RF	PSB RF h=1, Krusche, RF group			2500	2000	500			job i9	2)
	FPP	RF	PSB RF h=2, RF group, Krusche			200	200				job i10	2)
	FPP	RF	PS RF h=84 & 168; 40 & 80 MHz systems, RF group, Krusche			650	1850	1400	200		job i11	4)
	FPP	BD	Beam diagnostics, BD group			400	300	300			job i12	
	FPP	RF	PPM of intensity in Linac 2 (RF and HI groups)			150	50				job i13	
	FPP	PO	PS injection bumpers (PO group)			150					job i14	
	FPP	RF	PS injection oscillation dampers (BD group)			200	200	100			job i15	
	FPP	RF	PSB and PS low level RF beam control modifications (RF group)			100	200	100			job i16	
	FPP	BD	Renovation of PSB transverse dampers, also job c8, code 73393	T	E	R	M	I	N	E	job i17	3)
<b>Totals</b>					400	7550	11350	4150	200	0	23650	

Jobs finished or deleted

Job of high priority and underway in 1994

- 1) Job completed in 1993
- 2) These jobs require extensive preparation work which has not been done, so these jobs have to be re-programmed in time
- 3) This job is under way in FPP as job c8
- 4) Job is for prototype in 94 and 95
- 5) The total of 2.5M includes 1M which should really come from the PCB budget held by ST; also job c15.
- 6) This job needs to advance at the same rate as job c2.

PAS DE CHANGEMENT