

Minutes of the meeting of 20 January 1994 on the PS Fast Wire Scanner project

Present: V. Agoritsas, V. Chohan, E. Falk, F. Hoekemeijer, H. Koziol, J. Olsfors, K. Priestnall, U. Raich, Ch. Steinbach.

Budget

H. Koziol recalls that the original estimation for the project in 1991 was 240 kF. For the next years, the allocations and expenses have been:

Year	Expenses
1991	120
1992	90
1993	120
1994	ca. 55
Total	ca. 385

There are several reasons why the cost turns out to exceed the initial figure. First, there is, of course, inflation (estimated to about 30 kF). Then the upgrading of the 2 old monitors, 2 spare mechanisms, one development unit and some spare VME modules have been added after approval.

Orders

A shopping list had been prepared by J. Olsfors last December:

Item	Price kF
New cables for SS 54 and 89 upgrade (+SOS)	25
ABB motor	2
Power transformer	.5
Crate for ABB modules	2
Filter box for stepping motors	1
2 PM signal amplifiers	.5
VME crate with Motorola MVE147 controller	13
Patch-box for development system	1
PM's, scintillators and supports	8
2 radiation resistant resolvers	2
Total	55

Additional remarks: The development unit will be driven by its own crate and processor. The VME modules will be either spares (ADAS ICV 101, HYTEC VDT 1612 etc.) or borrowed from the CO supply (PENTLAND MPV 908). The power transformer will be ordered soon (special execution). The ABB power module used will be the spare one.

Planning

A draft was distributed before the meeting. It was discussed and completed.

Software

The schedule is very tight, because E. Falk finishes her contract end June and there is still quite a lot of work to do: additions to the specific soft (abort, vacuum interlock etc.), and integration of the Equipment Module. This last task has started with the collaboration of U. Raich.

Tests

The position measurement calibrations will be done as soon as possible for the 2 units to be installed in 75 and 89. The recorded files during the calibration of unit 64 just before installing it turn out not to be usable.

Electronics

Some remarks on the remaining work: It has been decided to mix the 2 signals of each straight section (negative and positive particles) before sending them to the SOS system. This saves channels and is easier to use. The improvement on the stepping motor drivers consists in the introduction of chokes. A safety interlock on the tachometers will avoid the serious consequences of an accidental disconnection of this device in the ring.

Miscellaneous

H. Koziol points out that last December run was a great success for instrumentation as well as for machine physics. The 2 existing new wire monitors performed well and proved to be reliable. However, some discrepancies appeared between SEM-grid and Wire-scanner measurements at the end of the period, when the injection energy was set back to 1 GeV. This is being investigated.

K.H. Schindl has asked us to publish an MD note to summarise the experience gained during this exceptional MD session.

A final note should be written and full documentation of the system must be provided before next Summer.

There will be a seminar on the wire scanner, February 9th, organised by J. Bosser. Four speakers will explain the different aspects of the system: successively, Ch. Steinbach, F. Hoekemeijer, J. Olsfors and E. Falk.

Ch. Steinbach

1.2.94

PS WIRE SCANNER PLANNING (1994)

Discussed on January 20

WIREPLAN.XLS

		<Start							<Easter stop							juin							<June stop							80				
		Janvier		fevrier			mars		avril		mai					juin					juillet					BO								
		10	17	24	31	7	14	21	28	7	14	21	28	4	11	18	25	2	9	16	23	30	6	13	20	27	4	11	18	25	1			
date du lundi		3																																
Semaine		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
SOFT	Complete specific soft																																	
	EM integration																																	
	Documentation and transfer of expertise																																	
	Note publication																																	
Tests	Final Software installation tests																																	
	Simultaneous measurements (both planes)																																	
	Tests with motors 54 and 89 in situ																																	
	Lab calibration for 64, 75 and 89 mechanisms																																	
Electronics	Analog signal to SOS																																	
	Stepping motors noise reduction																																	
	Safety interlock for tachometer																																	
	Vacuum interlock																																	
	PM signal head amplifiers for 54 and 89																																	
	New timing module																																	
	VME connections reorganization																																	
	Installation in 54 and 89 straight section																																	
	Development system installation																																	
Mechanics	Mount 2 motor resolver units																																	
	Mount carbon wire on 89 unit																																	
	Mount 2 reserve mechanical units																																	
Monitors	prepare 4 PM's																																	
	Installation of monitors SS 54 and 89																																	
Absences	Elisabeth																																	
	Frans																																	
	Jan																																	
	Charles																																	

Distribution:

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B. Allardyce
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G. Gelato
S. Hancock

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H. Koziol
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