PS/CO/Note 93-06 (Min.)
21.01.1993

LIN3#01

Minutes of an information meeting on Controls for the Lead Linac Project 20.01.1993

present: G. Daems, Ch. Dutriat, W. Heinze, H. Lustig, Ch. Serre, P. Tetu, U. Raich

Various transparencies have been shown and discussed in details. They have been corrected according to the information obtained during the meeting and are attached to these minutes. The following paragraphs refer to the paragraphs of the transparencies LIN3_1.DOC.

1. General Information

- All information given concern mainly the coming 3 months and cover needs on hardware and software for the putting into operation of the ECR, the first emittance measurements and spectrometry
- Location of the DSCs : TY01, CY01, CY02, CY03, BY06, VY02, NYC03, BOYM02. (see transparency 1)
- To be noted: the DSC for reboot and timing has been transferred from the LINAC CR to rack TY01 (build. 351)
- All racks except NY06 (for instrumentation) contain only 1 DSC. Required space (for DSC and terminal): 25 units + 1 patch unit on the bottom of the rack for connecting a workstation (see transparency 2).
- To be checked whether a 220V distribution crate can be added in each DSC rack (bottom of rack).

2. Situation DSC racks

- All required material available
- Patch panel to be foreseen for the SIMATIC and the analog signals for the ECR . (H.L. to inform Ch.H. accordingly)
- **VXI**: person in charge B.F.; nothing foreseen before March
- **List of DSC names** to be given to M.L. (action H.L.)
- **Timing signals**: list to be established by U.R. + G.D. (LIN3 **and** LIN2)
- **Remaining open point:** integration of "terminal server"; has to be discussed with NMN; it has been proposed to use during the putting-into-operation phase normal terminals as in the past.

3. Situation equipment racks

- All material (CO-Group part) available with the exception of the module QADC for the RF-G64 crate (will be delivered by the end of February).
- Person in charge for all mechanical movements
  a) on the instrumentation side: G.Martini
  b) for RF: J.Evans
- Ch.Dutriat (in collaboration with Mme. Bourgarel) will take care for the SemGrid equipment required for the beam observation box from GANIL. It is foreseen to use at the beginning 48 wires, later for operation 24 wires. M.A. agreed on the use of 48 wires (from the point of view EM).
- Faraday Cup: the EM AIO-V for reading the signals is being written (IN/OUT will be controlled via ICV).

4. Workstations

- The workstations for the LINAC CR will be installed by J.J.C.
- To connect PCs it is necessary to extend the "**bureautique Ethernet**" network. To be discussed with A.P. and Cl.Dehavay. Proposed places for PCs :
  a) LINAC CR (consoles)
  b) LINAC2 equipment gallery (various racks)
  c) building 351 in various racks

It is essential to mark clearly the sockets of the 2 different networks !!
- The PCs which shall be used for **control** (not only for **acquisition** !) have to be registered. Requests for this to be made to G.Daems.
- **consoles manager:** U.R. to prepare the relevant information for F.d.M.
- **working sets:** U.R. to give the relevant information to M.L. so that she can enter them into the data base
- **"mobile consoles":** J.J.C. to order 2 "tables" (similar to those for LIN2)

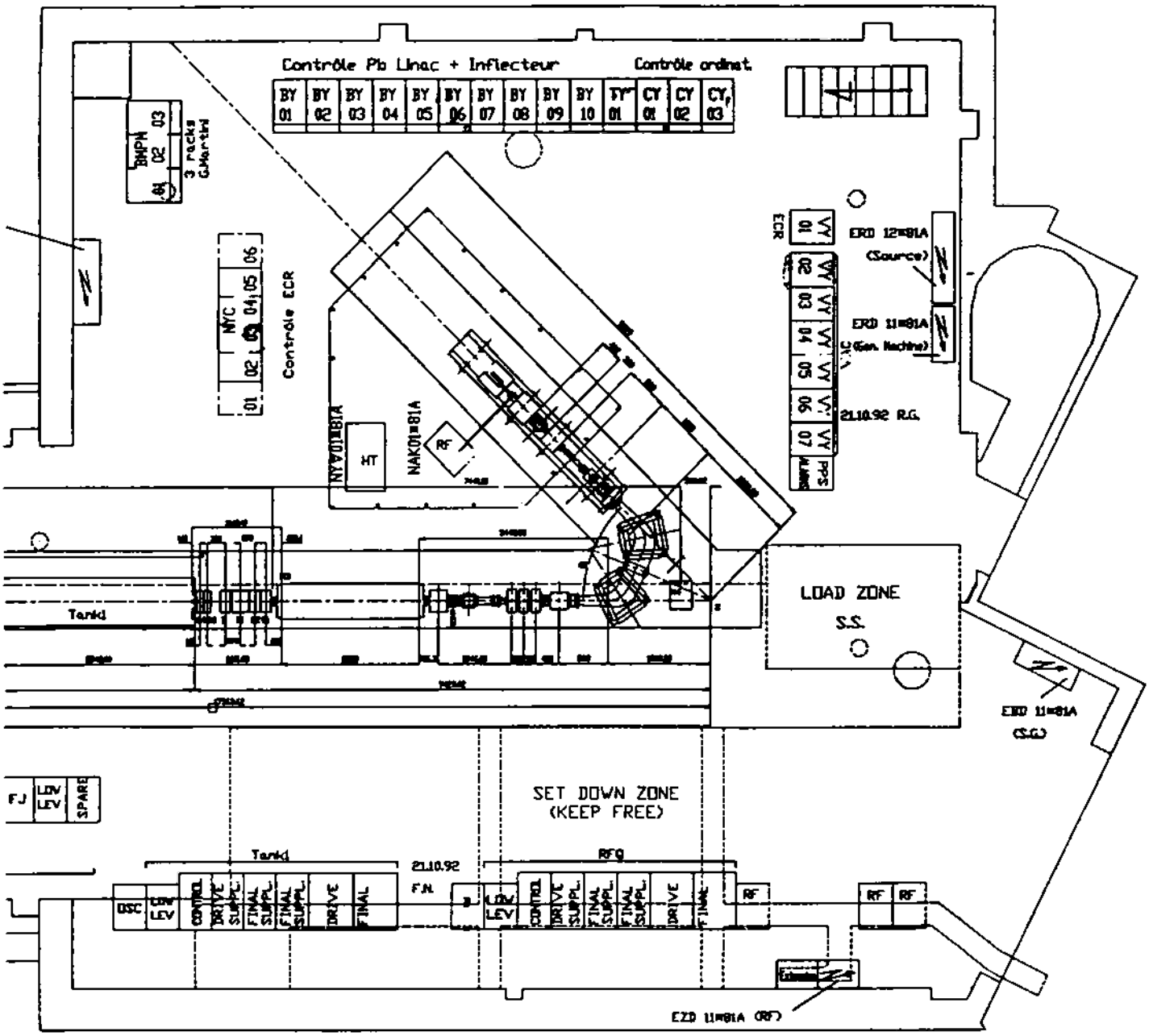
5. Situation software

- **EM ISRCE** for controlling the ECR is being made
- APs for emittance measurements and spectrometry to be finalized in February
- No further APs required for the coming 6 months
- **synoptic for ECR** to be discussed with Ch.H. (U.R.)
- **synoptic for TIMING** to be discussed with J.K. (U.R.)
- software situation for the vacuum to be checked with Gavaggio (H.L.)
- **alarm handling:** nothing to be done for the time being

6. Planning and Priorities

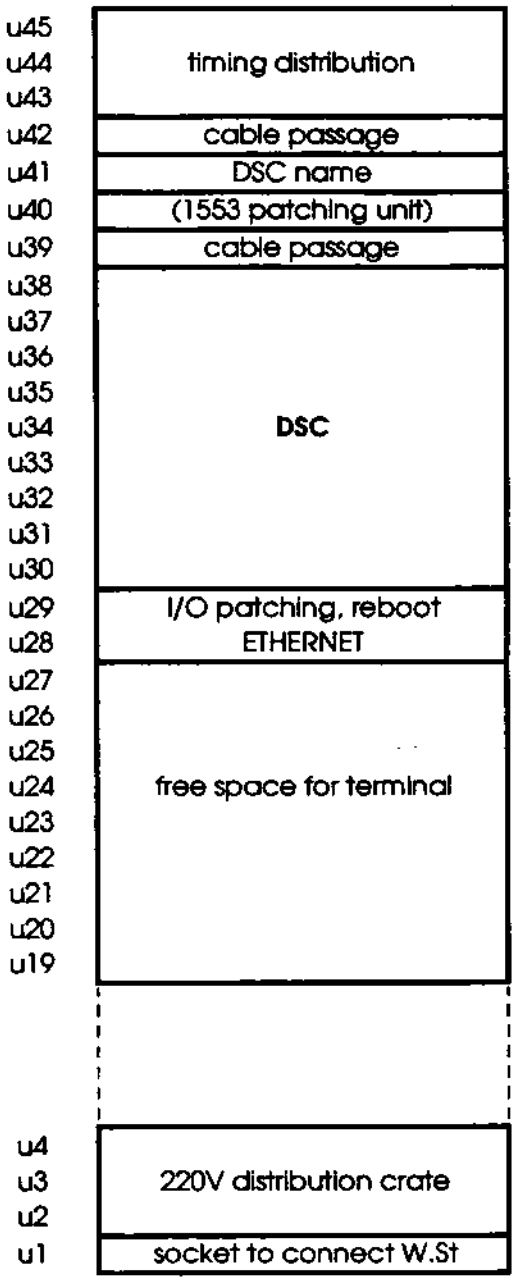
Due to the present man power situation it has once more been stressed that work in conjunction with **LIN2 has top priority !!**

ANNEXES: location of DSC racks, layout DSC racks, copy of transparencies
LIN3_1.DOC (5 pages)



	DESCRIPTION	POS	MATIERE	OBSERVATION		
	DIS / ASS	-		S. DIS / S. ASS -		
LINAC 3	XXXXX				NOM	DATE
REZ-DE-CHAUSSEE Bat 351R M				DESSINE	[illegible]	14.12.92
				CONTROLE		
				VU		
LINAC 3				1=50	FICHIER ACAD\FB1000.DWG	
					REMPLACE 09.12.92	
					LIN3-8000-1	A

rack layout for DSCs



1. General Information

1.1 Purpose of the meeting

- to give a short overview on the status of the preparations for the start-up of the ECR and the first measurements
- to define responsibilities (who does what)
- to check which material has to be installed and to be made operational
- to check that the necessary material is available

1.2 DSC rack locations and standard layout

presentatation of the 2 transparencies

- location of DSC racks
- general layout of a DSC rack

2. Situation DSC racks

2.1 material

- 220V distribution		already in place
- VME crates , including VME units for the DSCs DPBTIM, ~POW, ~RF, ~ECR,~VACU, ~INS1	[6/8]	CO (Cloye)
- crate "Timing Distribution"	[6/8]	CO (Cloye)
- cable path units, rails, blind panels		HI (Bourgeois)
- 1553 patch panels	[4]	CO (Cloye)
- Ethernet / Reboot panel (underneath DSC)	[6/8]	CO (Cloye)
- Ethernet patch panel (to connect W.Sts.)	[5]	CO (Cloye)
- patch panel Lemo 0 / Lemo 00	[?]	CO (Heinze)

2.2 cabling

- 220V normal + ASC	ST (already ordered)
- Ethernet	ST (already ordered)
- Reboot	ST (already ordered)
- 1553 cable for	
STEP (5 members)	ST (already ordered)
POW (3 members)	ST (already ordered)
RF (1 member)	ST (already ordered)
- x.25 (vacuum)	VAC group
- link SIMATIC --> patch --> DSC	HI (Ch.H.)
- link ECR analog signals --> patch --> DSC	HI (Ch.H.)
- CAMAC ---> crate "timing distribution" of all DSCs	HI (J.K.)
- PLS cables (details to be checked !)	HI (J.K.)
- short cables inside racks patch panels <---> DSC units	CO (Cloye)

2.3 remaining work / open questions

- what do we do with VXI (nothing but ordering done so far)
- how do we connect the signals from SIMATIC (patch panel ?)
- new DSCs to be added to DB
- which timing signals are required in which DSC
- details on PLS cables (type, from where to where, responsibility)
- what to do with the "terminal server" (purpose of the server, hardware,cables from where to where,cable type, responsibility)

3. Situation Equipment racks

3.1 Stepping Motors (rack NYC04) [5 channels for first part]

material

- 1553 patch panels	(2)	CO (Cloye)
- crates G64, including units	(3)	CO (Cloye)
- amplifiers		BD (Martini)

cabling

- 1553 patch panels ---> G64	CO (Cloye)
- G64 --> amplifiers / equipment	BD (Martini)

3.2 RF (rack NYC06) [1 RF system for first part]

material

- 1553 patch panels	(1)	CO (Cloye)
- crate G64, including units	(1)	CO (Dehavay)

cabling

- 1553 patch panel ---> G64	CO (Cloye)
- G64 --> equipment	RF (J.Evans)

3.3 POWER SUPPLIES [3 units for ECR]

material

- patch panels (?), RTI unit	CO (Cloye)
- G64 (excl. RTI unit)	PO (B.Godenzi)

cabling

- 1553 patch panel ---> G64 (RTI unit)	CO (Cloye)
- G64 --> equipment	PO (B.Godenzi)

3.4 remaining work / open questions

- extend 1553 link to LEBT power supplies needed for "spectrometry" and "emittance measurements"
- how do we handle FCs (controls requirements ?)
- how do we handle the SemGrids needed for the first emittance measurements; where sits the electronic equipment

4. Situation Workstations

material

- 3 workstations and 5 PCs (for LIN3 **and** LIN2)
  to be installed or used at a convenient place;
  first use probably exclusively in build. 351 near equipment; an installation in LINAC CR requires first the removal of old equipment from the consoles

remaining work / open questions

- consoles manager ?
- working sets ?
- what do we want to do with passwords
- is there some successor existing for "mobile consoles"

5. Situation Software

5.1 Equipment Modules

a) modules to be used from the very beginning

- POW-V
- STEP-V
- RFLIN
- VPUMP, VGAUG, VVALV
- PTIM
- MSH
- DCD
- BEAMST

b) modules to be used later

- TRAF
- AIO-V

c) remaining work/open questions

- write EM ISRCE — CO (Cl.H.S.)
- finish final version of EM STEP-V — CO (H.L.)
- members of the various EMs to be entered in DB — CO (H.L.)
- what to be used for read/write analog values

5.2 Application Programs

- Emittance Measurements (still to be finalized)
- Spectrometry (still to be finalized)

5.3 remaining work / open questions

- do we need further EMs
- do we need further application programs (now / later)
- which synoptics to be made; do we need some already in March / April
- alarm handling

copies: to those present
M. Arruat
J. J. Cloye
Cl. Dehavay
D. Dekkers
J. Evans
R. Gavaggio
B. Godenzi
H. Haseroth
Ch. Hill
J. Knott
M. Lezaizant
F. Di Maio
G. Martini
N. de Metz-Noblat
A. Pace
F. Perriollat
Cl. H. Sicard

file "lead linac internal documents"(B.B.'s office)