

## Minutes of ABS meeting held on Tuesday, October 31

**Present:** B. Autin, V. Ducas, M. Lindroos, M. Martini.

**Topic:** Organisation of accelerator data bases in the PS complex

### 1. Introduction

The full implementation of automatic beam steering in the PS complex requires a data base in conformity with CERN standards, namely of ORACLE type. A close collaboration has been set-up with the team of J. Schinzel (AT) who develops an object oriented navigator for ORACLE. The investment in the construction of a data base must not be limited to a specific application and, if the initial motivation was indeed for process automatization, it became quickly clear that all the machine documentation should be encompassed by the data base. This a sizeable project which has been started for the PS Booster and which will be further developed in the future. The purpose of the meeting was to define a strategy which conciles the general development of the data base with the application to beam optics.

### 2. General data base

M. Lindroos and V. Ducas show how to access the ORACLE navigator called ACCIS, acronym for ACCelerator Information System, and describe the content of the PS Booster data base in the form of a *layout* which visualizes the organization of the data. Each block of the layout can be seen as a table which has as many rows as elements in the block and as many columns as *attributes* of a given element. The data can be re-configured for specific applications such as CAD, survey, RF, optics, ... by means of *reports*. For the time being, data is entered via Excel through a procedure which is not yet standard. One of the immediate goals is to prepare a documentation which allows any lay user to transfer the data scattered in various notes and reports to the definitive data base and to retrieve the data in a way suited to his application. The general concept is indeed to have a user friendly system which can be operated by non expert people. Contact persons have been suggested: M. Bole-Feysot (PA), I. Cuperus (CO), M. Zanolli (PA), B. Dumas (PSB). They would contribute to data collection, data handling and implementation of the system. Clearly, CO should play a major role.

ACCIS can be accessed in three steps:

1. Access to source disk:

**ProgramManager->Accessories->CernPhoneBook->SearchFor:** type *Schinzel*

Click *Josi*

Click **HomeDirectory**, type *Yes*. Then the files of J. Schinzel can be read from a disk denoted by a letter provided at the end of the process, say *P*.

2. In **FileManager**, select *P:\home\josi\config\objects.fmx* and double-click the file.

3. In the ACCIS window, type *booster, ps, T:dblhc01:A* and you are in the booster database (see attached transparency).

### 3. Application to beam optics

It will be the task of Vincent Ducas who will work with the ABS team until March 1997 to adapt the general data base to beam steering applications. The various parts of the PS complex have been reviewed and milestones defined.

<i>Machine</i>	<i>Milestone</i>	<i>Date</i>
PSB (1,2,3,4), BT, BTP	PSB-PS transfer	01-04-96
Linac 2, BI	Injection into PSB	30-06-96
PS (Linear regime < 10GeV), HTE, HTP	Coherent oscillations and closed orbit of p, e <sup>+</sup> , e <sup>-</sup>	30-11-96
PS (26 GeV), TT2, TT70	Ejection from PS of p, e <sup>+</sup> , e <sup>-</sup>	31-03-97

Some parts of the PS complex are missing but not forgotten in this schedule: LIL, EPA, CTF II, Linac 3, LEAR, Isolde, South and East Hall. They will be treated later or in parallel according to staff availability.

### 4. Next meeting

As a rule, the ABS meetings will be held on every second Tuesday at 4 p.m. in room 19-3-031 starting

Tuesday, November 14

*Agenda:*

1. Status of current work
2. Contributions to EPAC'96

Bruno Autin

*Distribution:*  
ABS team  
PS/DI group  
Group Leaders  
J. Schinzel (AT)

Component

B1.DHZ20 (PSBOOSTER)

Frozen:  Obsolete:

Component attributes

Seq.	Prompt	Attribute
1	Description	Horizontal correction dipole
2	Type	10af
3	Effects beam on level	1234
4	Position (ref. point in sector item) [m]	41.700
5	Position: horizontal offset [mm]	
6	Position: vertical offset [mm]	
7	Level (PSB ring level)	
8	1: Bdl [Tm]	0.00359
9	1: Bdl at current [A]	10
10	2: Bdl [Tm]	
11	2: Bdl at current [A]	
12	Magnetic length [mm]	400
13	Mechanical length [mm]	295

List Find Edit

Component attributes details

Save OK Duplicates

Sequence number for displaying attribute level of values  
 Desc. B

Graphics: NAVLOV.OGR: Main Layout

- PSB (PSBOOSTER)
  - BI (PSBOOSTER)
  - BR (PSBOOSTER)
    - PERIOD 1 (PSBOOSTER)
    - PERIOD 2 (PSBOOSTER)
    - PERIOD 3 (PSBOOSTER)
    - PERIOD 4 (PSBOOSTER)
    - PERIOD 5 (PSBOOSTER)
    - PERIOD 6 (PSBOOSTER)
    - PERIOD 7 (PSBOOSTER)
    - PERIOD 8 (PSBOOSTER)
      - BRS1 (PSBOOSTER)
        - BRI.QN08L1 (PSBOOSTER)
        - BRI.ON08L1 (PSBOOSTER)
        - BRI.KN08L1 (PSBOOSTER)
        - BRI.DHZ8L1 (PSBOOSTER)
        - BRI.DVT8L1 (PSBOOSTER)
        - BRI.TSW8L1 (PSBOOSTER)
        - BRI.JWB8L1 (PSBOOSTER)
        - BRI.UP8L1 (PSBOOSTER)
        - BRI.BHZ8L1 (PSBOOSTER)
        - BRI.SL18L2 (PSBOOSTER)
        - BRI.QF08L1 (PSBOOSTER)
        - BRI.QN08L3 (PSBOOSTER)
        - BRI.ON08L3 (PSBOOSTER)
        - BRI.KN08L3 (PSBOOSTER)
        - BRI.UES8L3 (PSBOOSTER)
        - BRI.QDE8L1 (PSBOOSTER)

Graphics: NAVLOV.OGR: CONTROL

**CONTROL PANEL**

Messages:

Showing Information: