

## Working group on fieldbuses In Controls at CERN

Present composition of the working group

R. Barillère/IT, G. Baribaud/SL, D. Blanc/ST, A. Bland/SL, D. Brahy/LHC,  
M. Beharrell/IT, R. Brun/LHC, E. Carlier/SL, P. Gayet/LHC,  
L. Guerrero/IT, J.M. Jouanigot/IT, F. Locci/PS, R. Rausch/SL

- **Mandate**
- **What is done so far**
- **What we are doing presently**

GB. LHC-CP 21-22 March 2002

## Mandate of the working group on fieldbuses In Controls at CERN

- **review the evolution of the three fieldbuses standardized in 1996**
- **extend the recommendation if necessary**
- **select a process control layer for WorldFIP**
- **study the availability of the sensors and actuators**
- **recommend fieldbus protocols if appropriate**
- **recommend cabling and connectors**
- **review the support for the recommended fieldbuses**
- **estimate the possible potential of Ethernet for controls**

Interim report published

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### **review the support for the recommended fieldbuses**

- A support was created in 1996 (« starting phase »)
  - Profibus: D. Brahy in LHC/IAS
  - WorldFIP: R. Brun in SL/RF moved to LHC/IAS
  - CAN: M. Beharrell IT/CO
- Needs for a new CERN-Wide support service
  - Entering the implementation phase
  - Use industrial support as much as possible
  - Laying cables is starting
  - Standardization of components and procedures
  - Purchase of large quantities of standard components
  - Qualification of fieldbus networks
  - Long term maintenance, exploitation

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### **review the support for the recommended fieldbuses**

- Identification of real requirements
- A draft document is being discussed
- Some « hot » points
  - Should CAN be supported CERN wide ?
  - Where are the limits of responsibility of the support service ?
  - Should they ensure a « Piquet »-like service ?
  - Definition of installation procedures
  - Contention problems
  - What about the reorganization ?
  - How to deal with Ethernet, IT Division
  - Grouping with PLC support and other items
  - Study some organization scenarios
  - Evaluation of required resources

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### Status:

- The working group progresses serializing problems
- Urgent to have a support service
- Very good collaboration spirit

Questions