

PLC & Fieldbus Survey – May 11th 2023

Executive Summary

29 participants

Two presentations

- <https://indico.cern.ch/event/1272496/>
- PLC survey
- Fieldbus survey and recommendations

PLC Survey

- First summary of the survey's answers
- Some answers were just received yesterday
- Analysis and recommendations from the survey will be presented in a future meeting
- Forum would be interested to have a presentation on the usage of B&R PLC. To be scheduled in the future.

Fieldbus Survey and Recommendations

- Clarification that the 2013 recommendations were only addressing Ethernet based fieldbuses, and the 1996 recommendations are still valid
- Discussion on the proposed recommendations
- Recommendations summarized and updated in the following slide

Fieldbus Recommendations to the CTTB

1. Maintain the support of currently centrally supported fieldbuses

CAN, EtherNet/IP, FIPIO, MODBUS, PROFIBUS/PROFINET families, White Rabbit, WorldFIP

2. Foster ethernet based fieldbuses

Migrate from serial to ethernet based fieldbuses whenever possible for existing installations

Ethernet based fieldbuses should be favored for new installations

3. Explore wireless fieldbuses

Mandate a group or task force to evaluate and validate existing solutions

e.g. PROFINET over IEEE 802.11

4. Update the 2013 list of recommended fieldbuses

Add explicitly WorldFIP

Clarify that PROFINET profiles are recommended

5. Mandate a task-force to formalize and establish the recommendations

A more formalized process to establish, agree and follow the recommendations is needed through a dedicated task force

The forum is a good place to collect inputs, but does not necessarily have the legitimacy to establish the recommendations