

## 2<sup>nd</sup> SoC workshop CERN - Minutes – June 8, 2021 – Overview

<https://indico.cern.ch/event/996093>

### Notes:

- These minutes were collected by J. Hegeman.
- They provide a record of the questions and answers following the presentations. For the presentations themselves including recordings, please, refer to the indico timetable.

### Tuesday – June, 8th:

- R. Kopeliansky, ATLAS Overview:
  - Q: This requirements document is a very nice approach. Will this be applied to Phase-2 only, or, since ATLAS already has a significant number of SoCs in the current upgrade, will this also be back-ported to Phase-1?  
A: This particular document is specific to Phase-2. We did use all our Phase-1 experience in the formulation of the document though.
- F. Meijers, CMS Overview:
  - Q: Are you sure that the processing power of the SoC is not sufficient to 'do anything serious'?  
A: It is definitely sufficient for control and monitoring, and probably also for low-rate 'local' DAQ. It is not sufficient for the core DAQ tasks at a trigger rate of O(750 kHz).
  - Q: ATLAS uses Zynqs in the real-time path for the L1 trigger.  
A: This is not the case in CMS.
- M. R. Shukla, Overview of SoC-related Activities in the Accelerators & Technology Sector:
  - Q: Q: You have started the effort towards a harmonisation of the Linux distribution for your sector. Are you going in the direction of Yocto or buildroot?
  - A: This is still being studied. Maybe even something else completely.
  - Q: For the choice of Linux, are you considering using the CERN IT choice of Linux distribution?  
A: We are first waiting for the CERN IT recommendations. The CERN IT choice may not 100% fit the needs of an embedded system (since they are targeted towards desktops and servers). This is an ongoing evaluation project at the moment.