**Summary**

**Meeting 23-June-2021**

**(APA group)**

1. **Discussion on the stress peaks method using as reference the APA detector Structural Analysis pdf** – From Mariana: Use the elasto-plastic (bilinear model) method and the analytical method for one load case (LC-5) and the analytical method. It is confirmed the use of 5% as total strain limit per Eurocode EN1993-1-5 app.C par.C8 note 1. For all the other cases where the FEA results shows stress peaks higher than the allowable strength then it is suggested to use the analytical method only. Giuseppe: Verify the allowable total strain recommended by the AISC standard.
2. **Discussion on the buckling analysis methods using as reference the APA detector Structural Analysis pdf** – From Mariana: Use the FEA linear buckling analysis and the analytical methods for one or two cases only. Generate an attachment to the APA analysis plan with the purpose to organize and justify the buckling analysis for fewer cases due to common BCs and limited applied load variations. Note – CERN group will share the buckling analysis template used for the APA shipping frame.
3. **Re-checked the summary document related to the Meeting 16-June-2021** – From Jan: Re-phrase the point 5. Could you help to understand how to include the effects of the APA shipping frame structure into the APA sub-model for the Harmonic Analysis LC 3-3 and the Shock-road transport LC 3-4? If APA shipping frame effect are negligible it will be important to learn the adopted criteria. *Jan and Mariana: Due to long time simulations it is assumed to be conservative to run the Harmonic Analysis LC3-3 considering the APA detector decoupled from the shipping frame and neglect the contribution from the ASF. While the Shock-road transport LC 3-4 PSD curve is included in the excel spreadsheet under the Response Spectrum – Shock sheet.*
4. **Brief discussion on the criteria proposed to analyze the wires preload based on APA structure deformation** – Waiting confirmation from the CO on the proposed approach.