

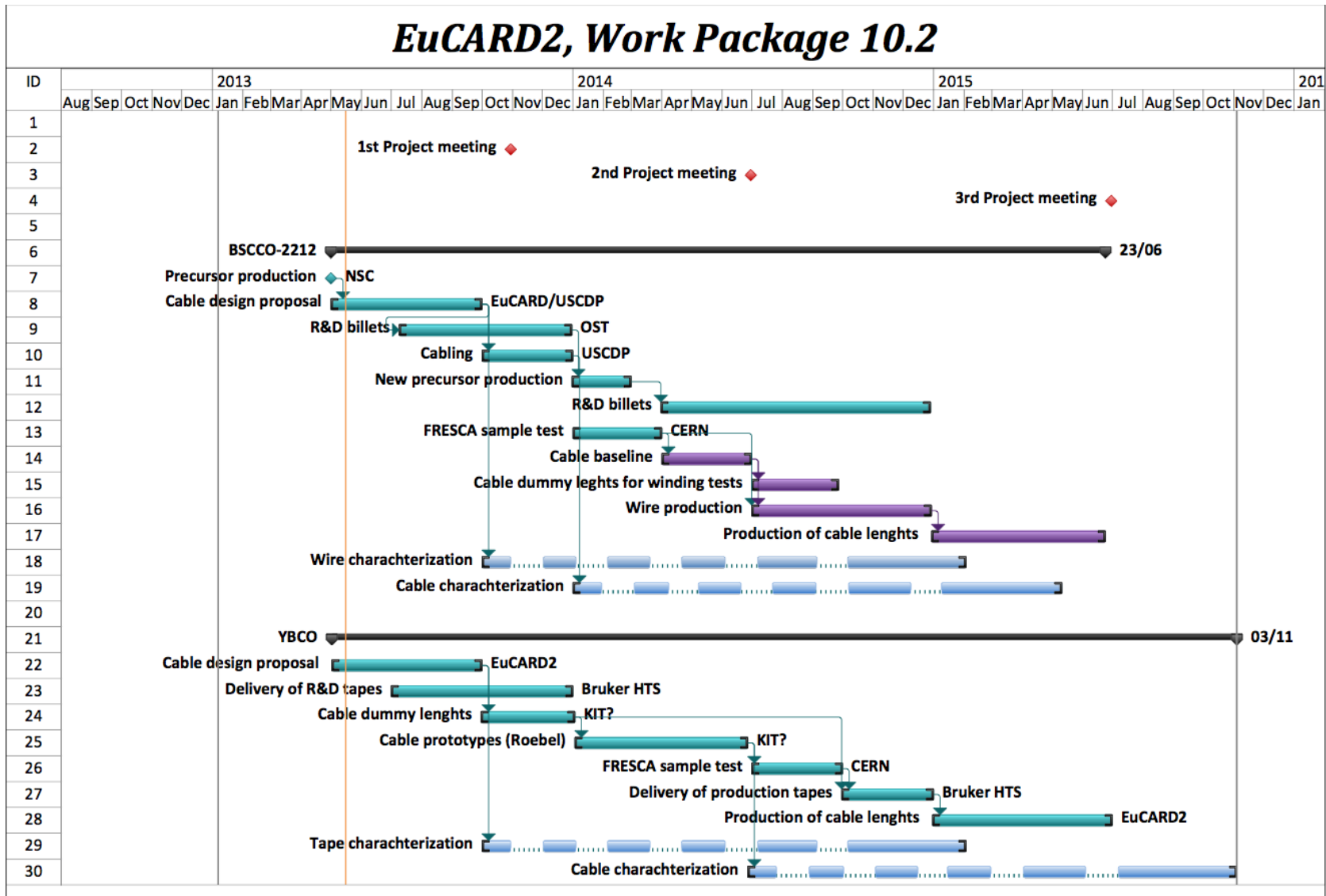
Preparation for WP10.2

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A draft plan discussed

EuCARD2, Work Package 10.2



Comments to the plan

- We need an initial phase of study of cable configurations. This depends critically on the selected magnet design (blocks, cos-theta, *solenoid*)
- YBCO plan is broadly OK (Bruker, please comment)
- BSCCO plan is clear for the coming 12 months (improve wire performance, cable and cable test), but needs further discussion for the following period (EuCARD2 vs. US work share)

WP10.2 contributions (so far)

CERN	KIT	Twente University	Geneva University	INPG	Southampton University	Bruker HTS
BSCCO Material procurement (powders, wire ?)	YBCO Roebel cables manufacturing	Ic vs. strain/stress in strands/tapes and cables	High field testing	To be confirmed:	Losses in cables	To be confirmed:
BSCCO cabling (TBD)	Mechanical properties of Roebel (bending, traction)	AC properties of cables by electrical and calorimetric measurements	Ic vs. strain/stress in wires/tapes	Cable design	Ic testing at increased temperature	YBCO tape and material characterization
FRESCA tests	FBI tests ?		Thermal properties	Wire/tape Ic (angular dependence ?)		
VSM tests		Tape quench experiments				

Kick-off meeting - ideas

- Session 1:
 - Overall plan
 - REBCO materials: performance and issues
 - YBCO production at Bruker HTS
 - BSCCO: performance and issues
 - HTS cables: options and ideas
 - BSCCO cable options and manufacturing experience
 - YBCO cable options and manufacturing experience
- Session 2
 - Technical highlights and issues
 - Electro-mechanical properties of HTS
 - AC properties (magnetization) in HTS materials and cables
 - Protection of HTS materials
- Interface to WP10.3 (joint session)
 - Magnet design options and associated cable specs
 - Magnet protection issues and associated cable specs
- Difficulty: joint session with US only possible after (reasonably) 2 PM