Discussion on the second T0 module in the Lab

- What were the main scientific goals of this module ? Interconnects, thermal/alignment tests, statistics
- What kind of tests are planned, alignment and thermal ?
- What do we want to change if possible ?
 Quads, vacuum system, Acc-structures
- What is the status of the components for TO(2)
- Do we need a second TO ?
- Can we test interconnects with the T1 module ?
- Do we need (8) structures to test interconnects ?
- Cost and schedule
- Related question, over all plan, T1, Module transport





CLIC TBM Prototype in LAB

- Layout update
- Status of components production for TBM





Layout Update



Initial sequence of TBMs in the LAB



The most challenging task due to layout update is the modification of the supporting/alignment system:

- No modifications in DB supporting system
- Two options for MB (see next slide)









- T0-T0 SS supplied by Microcontrol company
- T1 SS parts are designed by CERN, girder is delivered by Boostec

OPTION 1:

- Swop TO#1 and T1
- Split "Microcontrol" system, use both parts of this system
- New actuator station should be designed and built



OPTION 2:

- Remove 1 "Microcontrol" girder with actuation station
- Use partially the components of supporting system for CLEX TBM T0#2 and T1 (will not be needed for CLEX) pos. 1-5



The design and fabrication work will be necessary for both options. To be discussed with more details.







TBM T0#1 is assembled and under test:









SAS mock-up: all parts are received, assembly is started

Task Name	Status
Brazing of disks stacks (2 batches)	Done
Brazing of single waveguides (4 batches)	Done
Brazing of WFM waveguides (4 batches)	Done
Intermediate machining of brazing interfaces	Done

The brazing will be continued after finalization of all the brazing tasks for CLEX

Straightness measurement: EDMS 1376331 Detailed planning: EDMS 1376259



PETS mock-up: both PETS needed for TBM are delivered and tested at CERN - OK

PETS#1 and #2 Leaktightness test: EDMS 1361480



TBM Prototype T0#2@LAB. Status of components



Component	Design		Production Status		Expected
·	3D %	2D %	Parts %	Assembly	
SAS	100	100	100	Brazing	June'14
PETS	100	100	100	100	-
RF Network waveguides	100	100	100	Brazing	June'14
DB BPM	100	100	100	100	-
Vacuum tank	100	100	100	100	-
Vacuum network	100	100	100	100	-
Compact Loads mock-ups	100	100	100	100	-
Cooling tubes/fittings	100	90	100	100	-
Supporting system	100	100	100	100	?
U-clamps	100	90	100	100	-
TBM ASSEMBLY					?



SAS mock-up: all parts are received, assembly is started

New simplified design is under way:



<u>RF network: all parts are received, assembly is not started, detailed planning: EDMS 1376366</u> PETS mock-up: all parts are received, assembly is partially completed

The assembly will be continued after finalization of all the assembly tasks for CLEX



Detailed planning: EDMS 1376355



TBM Prototype T1@LAB. Status of components



Component	Design		Production Status		Expected
	3D %	2D %	Parts %	Assembly	
SAS	75	0	0	0	?
PETS	100	100	100	30	-
RF Network waveguides	100	100	100	Brazing	Dec'14
DB BPM	100	100	100	100	-
Vacuum tank/network	100	100	100	100	-
Compact Loads mock-ups	100	100	100	100	-
Cooling tubes/fittings	100	100	100	100	-
Supporting system	100	100	100	100	?
U-clamps	100	100	100	100	-
TBM ASSEMBLY					?