CLIC Handling Engineering Update

MICHAL CZECH – INGO RUEHL

EN-HE

Outline

- Inventory input data tables
- CDR Tunnel cross-section
- Remaining issues

Inventory input data tables

- List of the equipment for the CDR tunnel was done in the past but **IT HAS TO BE UPDATED WITH NEW DATA** (change values or add new items);
- Excel tables for the TBM (circular cross section tunnel) need to be done from the scratch → no list of the equipment done in the past

Input for Transportation Study of CLIC : Big Loops

		2010								2017 UPDATE				2017 UPDATE		
		total	Weight /unit (kg)	Weight /total (kg)	Overall dimension (mm)	Sup	Lift p	MAX	Time	total	Weight /unit (kg)	Weight /total (kg)	Overall dimension (mm)	eight	Weight /total (kg)	Overall dimension (mm)
Drive Beam																
	Quadrupoles	217	920	199640	600x600x500											
	Dipoles	124	870	107880	950x350x500											
	Sextupoles	124	450	55800	460x460x460											
Main Beam																
	Quadrupoles	223	300	66900	300x360x360											
	Dipoles	180	900	162000	2000x300x250											
	Sextupoles	120	100	12000	200x230x230											
TURN-AROUNDs																
Main Beam																
	Quadrupoles	300	300	90000	300x360x360											
	Dipoles	500	900	450000	2000x300x250											
	Sextupoles	400	100	40000	200x230x230											

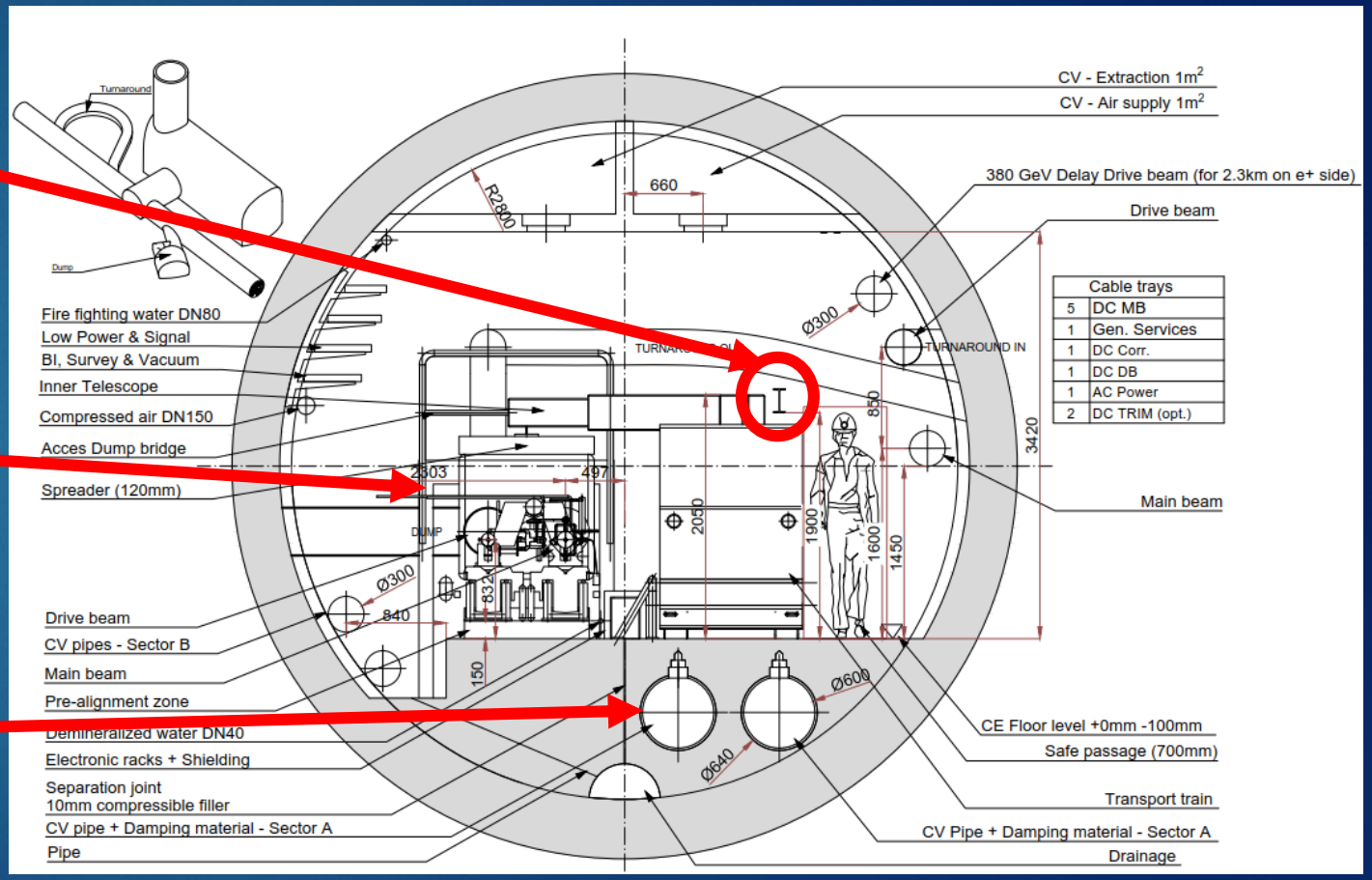
Input for Transportation Study of CLIC : Drive Beam Linac

2017								
	total	Weight /unit (kg)	Weight /total (kg)	Overall dimension (mm)	Support points	Lift points	MAX acceler.	Time available

CLIC CDR TUNNEL CROSS-SECTION

Information to be updated:

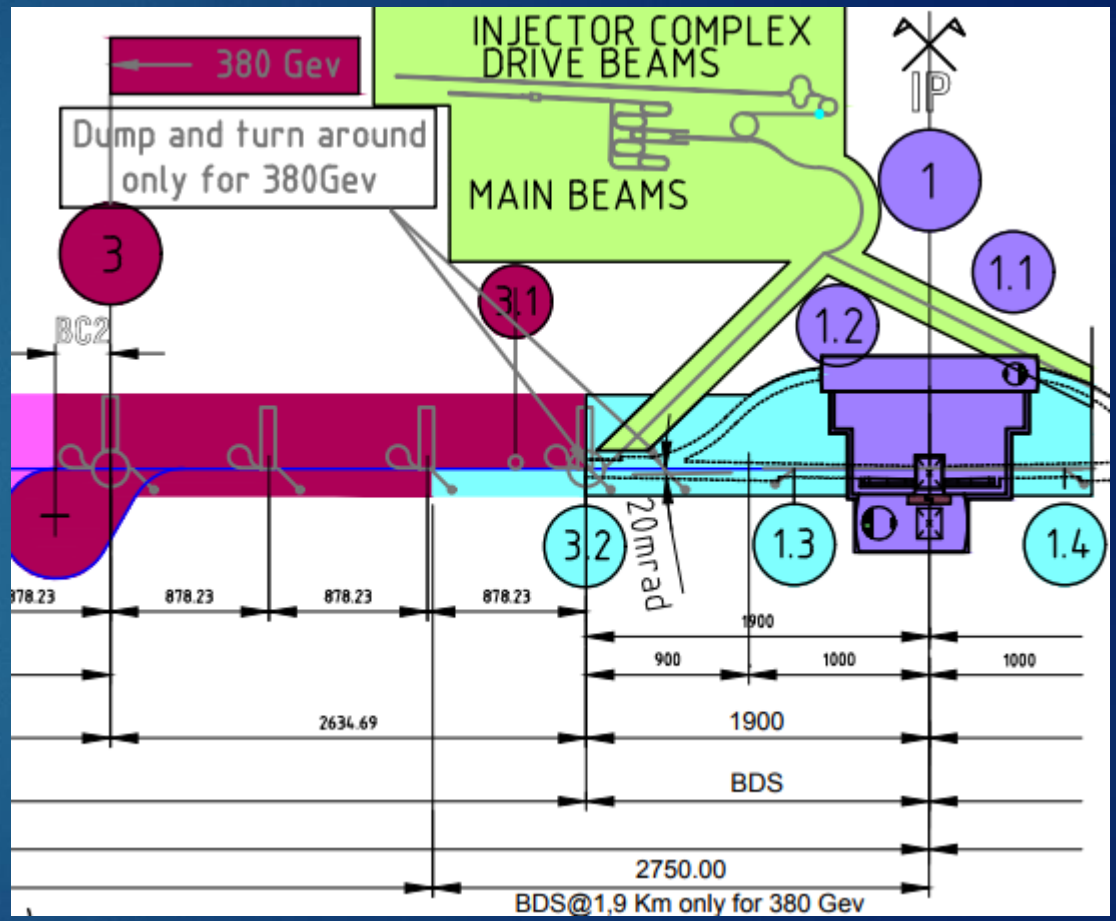
- HEB rail in the transport zone;
- All the equipment that needs to be installed to be listed (excel);
- Access from the other side of the machine (maintenance, installation, transport)?
- Top view needed (vehicle support system integration).
- Powering of the vehicle tbd (guiding, rails, batteries placement, etc.) – status of the CV pipes (position, access, etc.)



CLIC CDR TUNNEL CROSS-SECTION

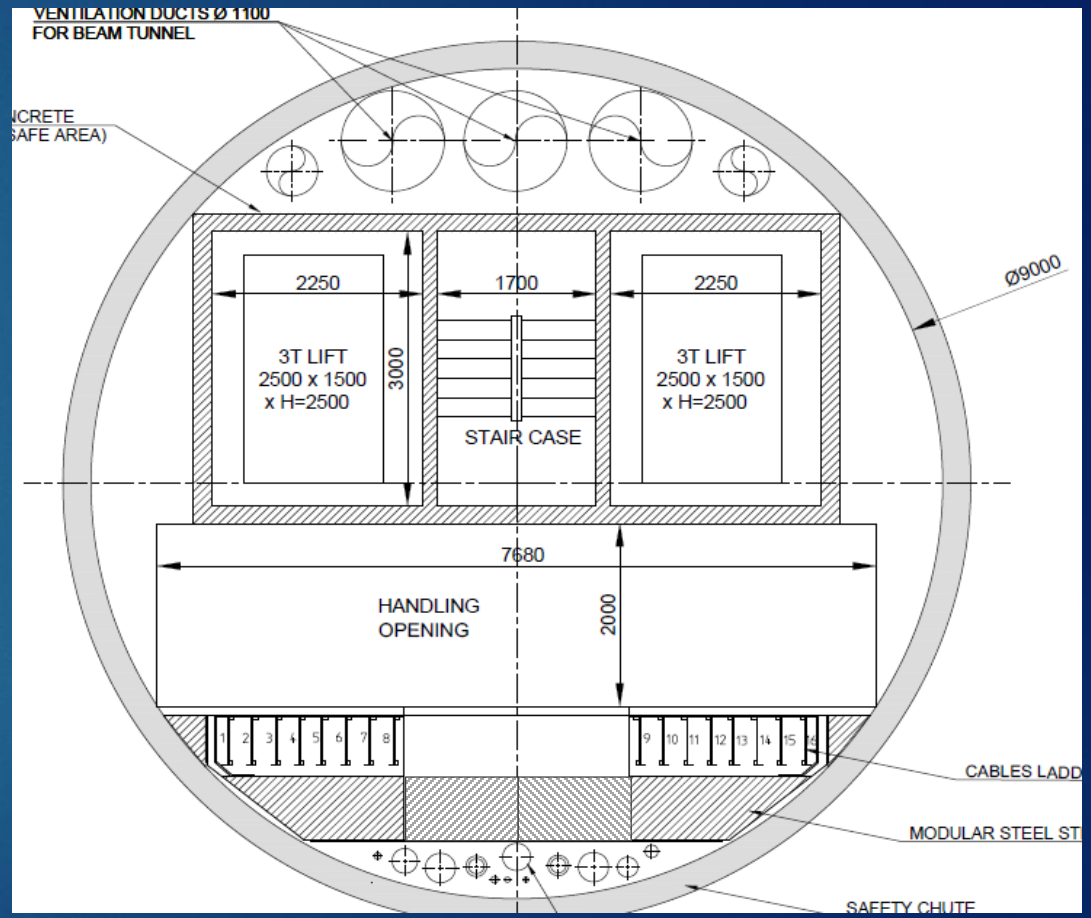
Information needed in order to provide transport means to the drive beam and turnaround out tunnel:

- Equipment table;
- Cross section.



What is next?/ Remaining questions

- List of the equipment needed in order to proceed with the shaft (tremie and lifts) design;
- Should we consider two types of shaft for different tunnel cross-section (CDR and TBM)?



What is next?/ Remaining questions

- **IN ORDER TO MOVE FORWARD THE TABLE OF THE EQUIPMENT NEEDS TO BE FILLED**