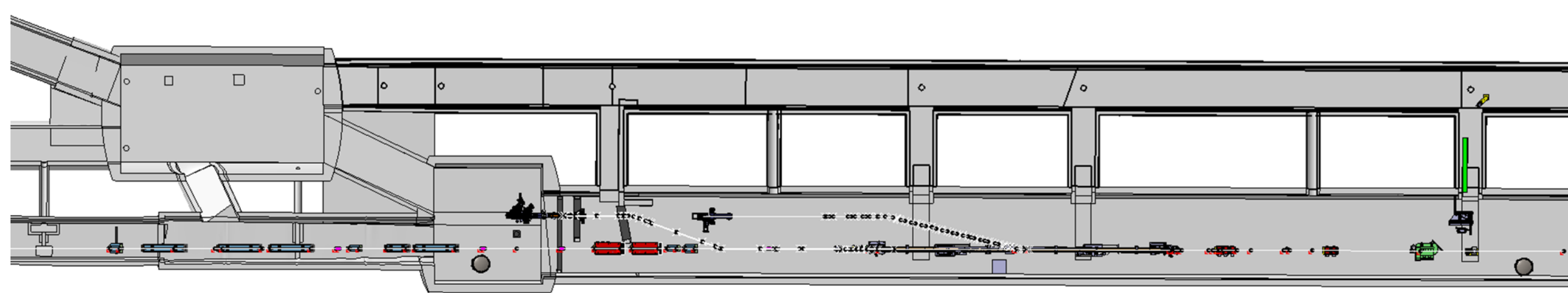


CP electron Source

What do I coordinate ?

Electron source and acceleration equipment, High power RF, RF interlock system
LLRF for the klystrons (I don't worry about timing and synchronization),
I don't worry about the laser until it hits the beamline,
A few solenoids and correctors which are part of the source and acceleration,
Vacuum system of the source,
Some instrumentation in the electron source.
Vittorio, Francesco take over at the exit of the last accelerating structure.

Right ??



CP electron Source

What do we need more or less urgently:

- Finalize conceptual layout (RF)
- Realistic models in the integration layout (MME, Design and integration); end 2024
- Clarify who takes care of which item (Vac, Mag, BI)
- Detailed design of all components, RF, Vacuum, Magnets, Instrumentation (MME design, Vac, Mag, BI) (in the course of 2025)
- Purchasing, testing, installation, commissioning (2026-2027)

CP electron Source

Decisions needed:

- Fix beam parameters for both injectors (Patric, Marlene)
- Do we need electron and RIF seeding from the beginning or one after each other ? (Patric and Marlene)
- Decide on cathodes and therefore UV laser configuration and specs (Edu and Steffen)
- Decide on CLIC/CLEAR in-kind contribution (CLIC/CLEAR committees, September)
- Decide on high power RF configuration (Steffen), goal to launch tender end of the year
- Understand real budget situation (Edda)

AWAKE RF –system options

x-band:

- 50 MW + PC, 10 MW
- 50 MW +PC +phase shifter/attenuator
- 2*25 MW +PC, 10 MW
- 2*25 MW +2*PC +phase shifter/attenuator

S-band:

- 3 x 10 MW +PC
- 10 MW + PC + 35 MW + phase shifter/attenuator
- 35 MW +PC
phase shifter/attenuator
- 45 MW S-band +
phase shifter/attenuator
- 2 x 25 MW ?
- 2 x 10 MW + PC

Possible contributions form CLIC/CLEAR:

50 MW x-band klystron

K400 modulator

PPT modulator

S-band PC

X-band PC

10 MW x-band klystron + modulator ?

AWAKE Run 2c planning

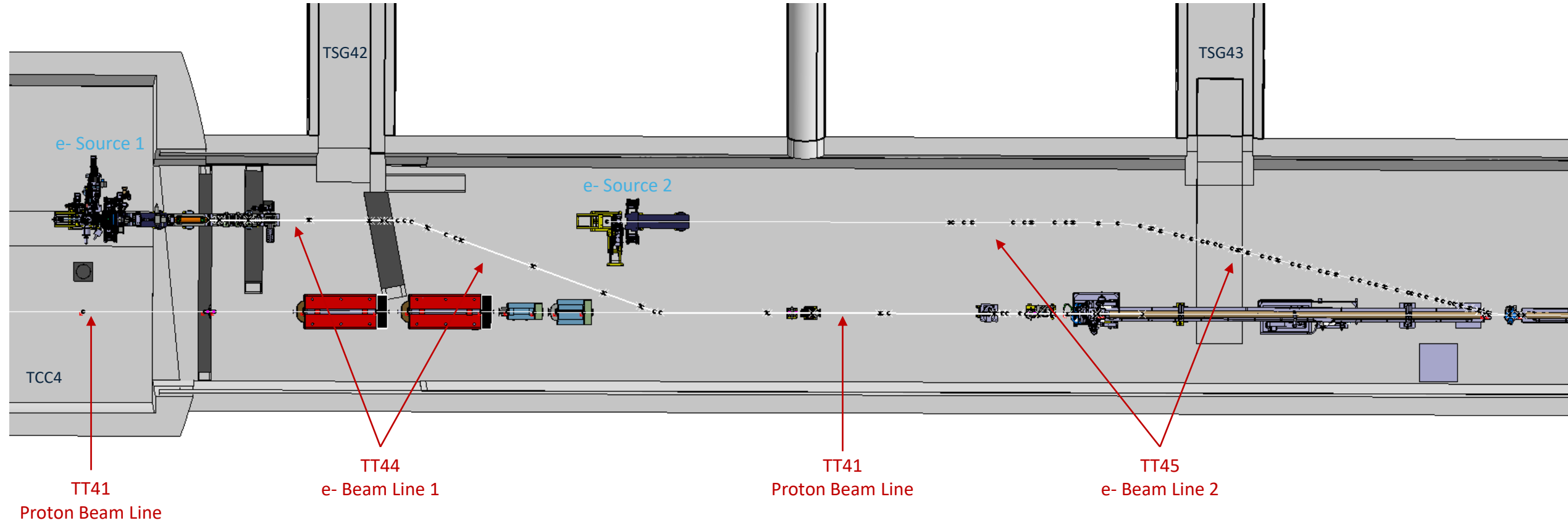
Item	2024	2025	2026	2027	2028	2029
Modulator/ klystrons	Decide configuration Prepare call for tender	Order out	Delivery 12/26	Installation	Commissioning	Operation
Accelerating structure	Short Prototype	Full prototype	Production of two more	Installation	Commissioning	Operation
Gun if needed		Construction		Installation	Commissioning	Operation
LLRF		Procurement Software	Software, test bench	Installation	Commissioning	Operation
Interlock PLC		Procurement	Construction	Installation	Commissioning	Operation
Pulse compressor if needed		Construction	Test	Installation	Commissioning	Operation
Mechanical support/ integration	Conceptual studies	Drawings ready 12/25	Production	Installation	Commissioning	Operation

AWAKE Run 2c planning

Item	2024	2025	2026	2027	2028	2029
Load lock system	Decide on cathodes	Integration study/ Build load lock system if needed	tests	Installation	Commissioning	Operation
Solenoids	design	Procurement	tests	Installation	Commissioning	Operation
Waveguide system x-band	Study configuration	Full/ integration Drawings ready	Procurement	Installation	Commissioning	Operation
Waveguide system s-band	Study configuration	Full/ integration Drawings ready	Procurement	Installation	Commissioning	Operation
				Installation	Commissioning	Operation
				Installation	Commissioning	Operation
				Installation	Commissioning	Operation

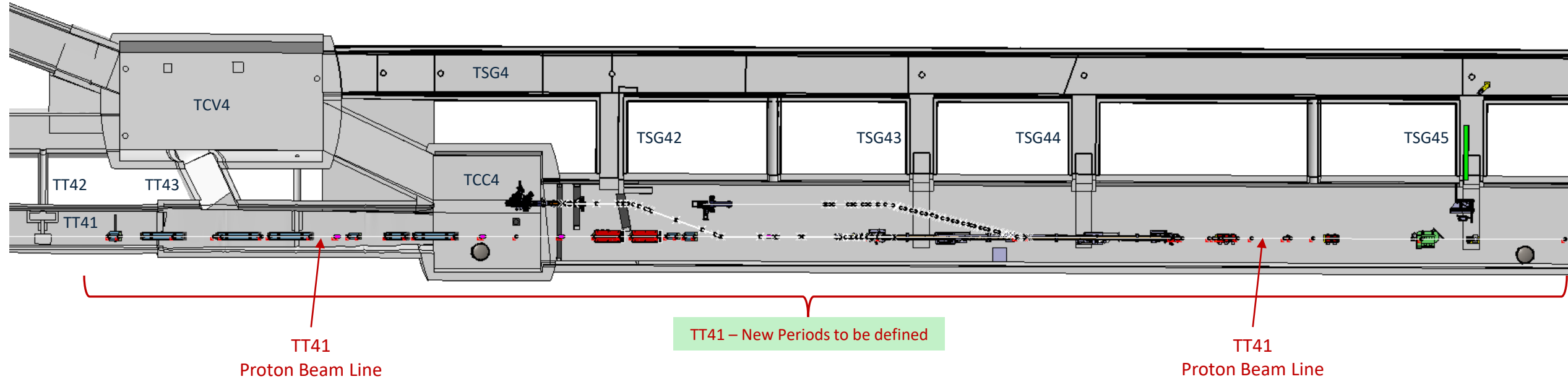
Awake Run 2C – Proton and Electron Beam Lines

TCC4 Area :



Awake Run 2C – Proton and Electron Beam Lines

Proton Beam Line : TT41

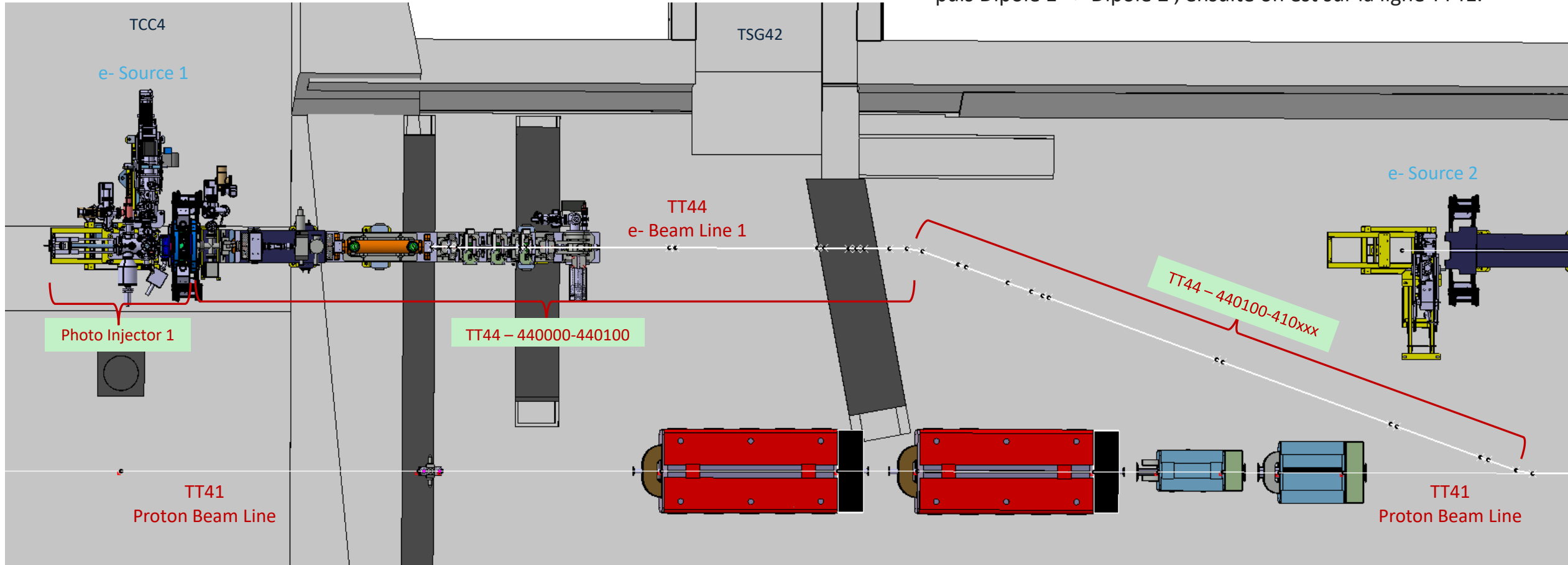


Ligne TT41 : même nom, il faudra juste redéfinir les nouvelles périodes en fonction des nouveaux équipements.

Awake Run 2C – Proton and Electron Beam Lines

Electron Beam Line 1 : TT44

Ligne TT44 : Nouvelle ligne e- (1), en gardant la même «échelle» que la ligne TT43 et la même convention (nouvelle période à chaque dipôle), il y aura 2 périodes : Photo-injecteur => Dipôle 1, puis Dipôle 1 => Dipôle 2 , ensuite on est sur la ligne TT41.



Awake Run 2C – Proton and Electron Beam Lines

Electron Beam Line 2: TT45

Ligne TT45 : Nouvelle ligne e- (2), en gardant la même « échelle » que la ligne TT43 et la même convention (nouvelle période à chaque dipôle), nous avons un souci. Les périodes théoriques font plus de 10m, et avec l'échelle existante la numérotation dépasse le chiffre 99 qui est le chiffre maximum... Il faudra discuter pour voir comment solutionner ce problème.

