



PERSONAL SAFETY SYSTEM

PSS

ThomX (IGLEX)

M.A.C – 21/06/2018 – LAL

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Review of the year

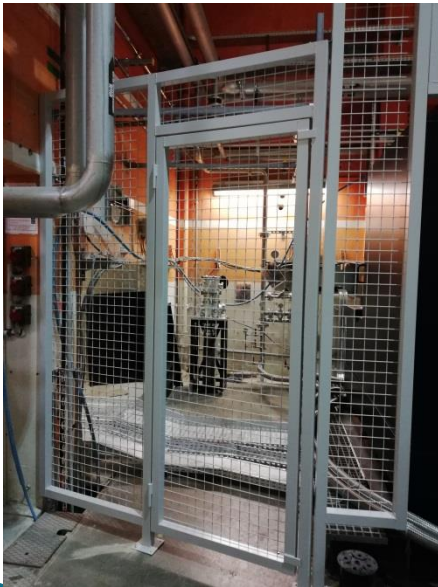
- ▶ Drafting of IGLEX special technical specifications (ready by july)
- ▶ New safety guards
- ▶ 1st public tender (published in November during 3 months) with unsatisfactory technical offer
- ▶ 2nd public tender (published in mid-April during 1 month)
- ▶ End of May : analysis of technical offers and company selection
- ▶ Test bench building enable to run PSS simulations
- ▶ TIA Portal training one (specific to our requirements)



New safety guards

- ▶ Comply with industry standard (machinery directive 2006/42/EC)

Access to RF tunnel area



Access to basement area



Access to casemate roof area



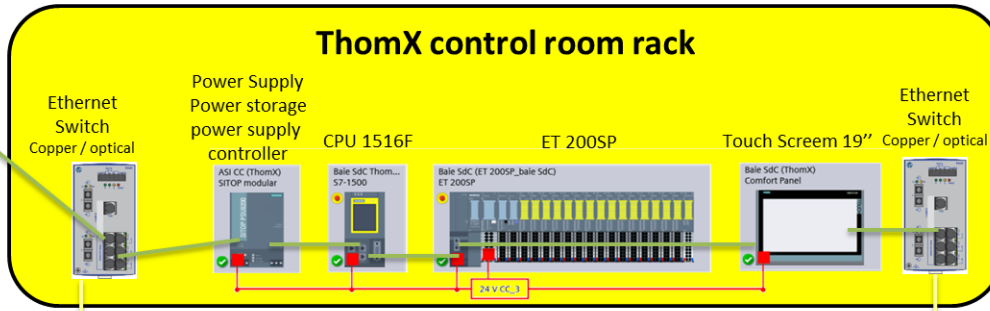
Access to casemate area



PLC topology

SIL3
Functional Safety
PLe

Radiation Detection
IGLEX

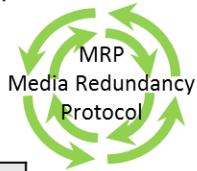


IN/OUT	
DI	16
DQ	16
FDI	120
FDQ	4
AI	10

Safety level :
SIL3 (Safety Integrity Level)
Self check + redundancy

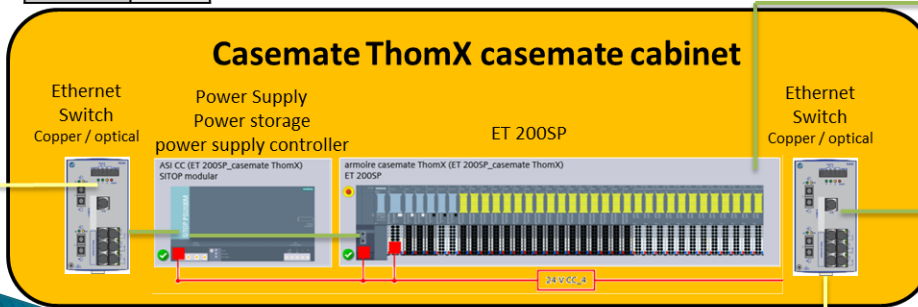
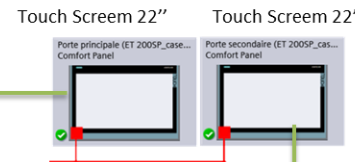
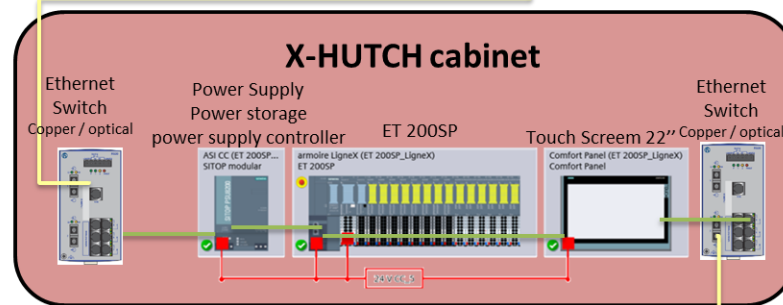
Performance Level required :
PLe

— : optical link
— : copper link



IN/OUT	
DI	80
DQ	48
FDI	112
FDQ	60

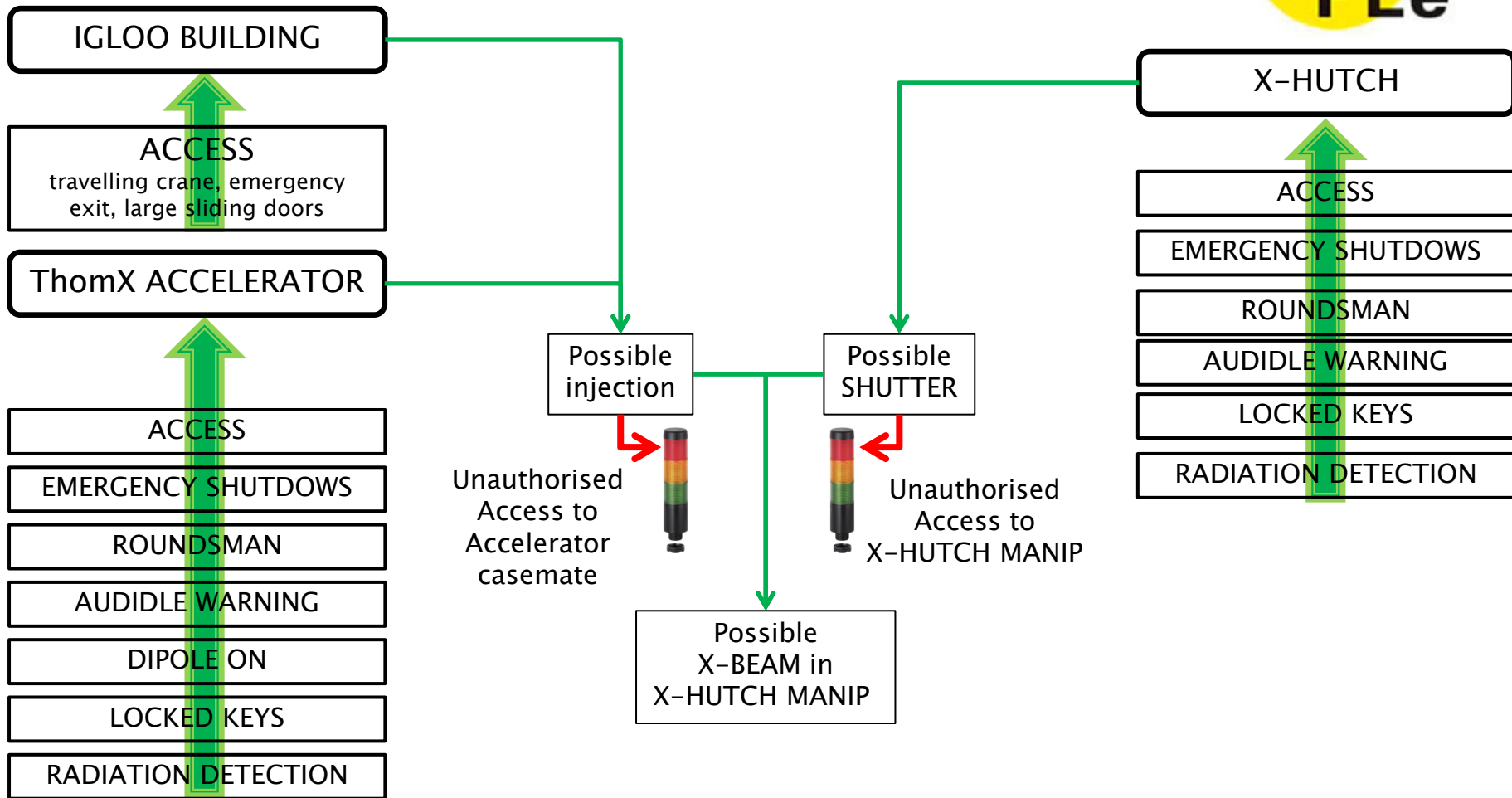
IN/OUT	
DI	48
DQ	32
FDI	72
FDQ	48



PLC: Programmable Logic Controller



Flowchart



Test bench



- ▶ Test of redundancy ring topology
- ▶ Validation of equipment
- ▶ Validation of cabling
- ▶ Validation of program logic

In the next few months

- ▶ Follow-up installation PSS (ThomX and Andromède)
 - ❖ Its establishment in early being planned for the month of July.
 - ❖ Lead time installation (4 months)
 - ❖ Acceptance of the work
- ▶ Programming PLC (ThomX and Andromède)
- ▶ Test