



*East Hall under construction - 1962*

## TDR Status

Erwan Harrouch on behalf of the editorial committee



ENGINEERING  
DEPARTMENT



**EAST AREA RENOVATION**



# TDR Interfaces Mapping

## 1 INTRODUCTION

- 1.1 General description of the East Area before LS2
- 1.2 Problems in the East Area
- 1.3 The motivations for the Renovation of the East Area
- 1.4 Physics justification
- 1.5 Guiding principles for the new design of the East Area

Full consistency



## 2 BEAM LINE DESIGN AND INFRASTRUCTURE UPGRADE

- 2.1 Beamline Design and Layout
- 2.2 Impact on safety, radioprotection, access, ventilation and shielding issues
- 2.3 Impact on magnets and power converters
- 2.4 The new layout of the beamlines, East Experimental Areas and b.251

Optics

Safety

Energy savings

Infr. upgrade

## 3 BEAM LINE - MAIN COMPONENTS

- 3.1 Magnets
- 3.2 Power converters
- 3.3 Vacuum System
- 3.4 Beam Intercepting Devices
- 3.5 Beam instrumentation
- 3.6 Survey systems
- 3.7 Machine Interlocks
- 3.8 Beam controls
- 3.9 Collimators
- 3.1 Radiation shielding
- 3.11 Radiation monitoring

## 4 B. 157 & 352 INFRASTRUCTURE CONSOLIDATION

- 4.1 Civil Engineering
- 4.2 Cooling plant and circuits
- 4.3 Hall Ventilation b.251 and b.157
- 4.4 Primary area Ventilation
- 4.5 Electrical infrastructure – AC
- 4.6 Electrical infrastructure – DC
- 4.7 Cabling and services
- 4.8 Personnel protection systems
- 4.9 Alarms
- 4.10 Networks
- 4.11 Gas systems

General description of the future area (Should be understandable without chapter 3 and 4)

Technical description of the system (Each part should be understandable independently)

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# Contributions status

		Author	Contribution received?	Contribution Checked?	Feedback provided?	Contribution corrected?	Contribution finalized?
1	INTRODUCTION						
1.1	General description of the East Area before LS2	S. Evrard, EN-EA	Green	Green	Green	Green	Red
1.2	Problems in the East Area	S. Evrard, EN-EA	Green	Green	Green	Green	Red
1.3	Physics justification	J. Bernhard, EN-EA	Green	Green	Green	Green	Red
1.4	Motivation & Guiding principles for the new design of the East Area	S. Evrard, EN-EA	Green	Green	Green	Yellow	Red
2	BEAM LINE DESIGN AND INFRASTRUCTURE UPGRADE						
2.1	Beamline Design and Layout	J. Bernhard, EN-EA	Green	Yellow	Red	Red	Red
2.5	Impact on safety, radioprotection, access, ventilation and shielding issues	E. Harrouch, EN-EA & R. Froeschl HSE-RP	Green	Yellow	Yellow	Yellow	Red
2.6	Impact on magnets and power converters	J. Bernhard, EN-EA	Green	Yellow	Yellow	Red	Red
2.7	The new layout of the beamlines, East Experimental Areas and b.251	M. Lazzaroni, EN-EA & G. Dogru EN-EA	Green	Yellow	Yellow	Yellow	Red
3	BEAM LINE - MAIN COMPONENTS						
3.1	Magnets	R. Lopez, TE-MSC	Green	Green	Green	Green	Green
3.2	Power converters	K. Papastergiou, TE-EPC	Green	Green	Green	Yellow	Red
3.3	Vacuum System	V. De Jesus & G. Romagnoli EN-EA, J. De La Gama TE-VSC	Green	Green	Green	Yellow	Red
3.4	Beam Intercepting Devices <b>(EXPECTED BY THE END OF NEXT WEEK)</b>	E. Grenier Boley, EN-SMM	Red	Yellow	Red	Red	Red
3.5	Beam instrumentation	J. Tan BE-BI, G. Romagnoli EN-EA	Green	Green	Green	Green	Green
3.6	Survey systems	P. Dewitte, EN-SMM	Green	Green	Green	Green	Green
3.7	Machine Interlocks	R. Mompo, TE-MPE	Green	Green	Green	Green	Green
3.8	Beam controls <b>(EXPECTED BY THE END OF THE MONTH)</b>	M. Gourber-Pace, BE-CO	Red	Red	Red	Red	Red
3.9	Collimators	A. Ebn Rahmoun, G. Romagnoli, B. Carlsen TCX, EN-EA	Green	Green	Green	Green	Green
3.1	Radiation shielding	R. Froeschl HSE-RP, B. Carlsen EN-EA	Green	Green	Green	Yellow	Red
3.11	Radiation monitoring	R. Froeschl, HSE-RP	Green	Green	Green	Yellow	Red
4	B. 157 & 352 INFRASTRUCTURE CONSOLIDATION						
4.1	Civil Engineering	S. Mcilwraith, SMB-SE	Green	Green	Green	Yellow	Red
4.2	Cooling plant and circuits	F. Dragoni, EN-CV	Green	Green	Green	Green	Green
4.3	Hall Ventilation b.251 and b.157	F. Dragoni, EN-CV	Green	Green	Green	Green	Green
4.4	Primary area Ventilation	F. Dragoni, EN-CV	Green	Green	Green	Yellow	Red
4.5	Electrical infrastructure – AC	S. Bertolasi, EN-EL	Green	Green	Green	Green	Green
4.6	Electrical infrastructure – DC	Jean-Claude Guillaume, EN-EL	Green	Green	Green	Yellow	Red
4.7	Cabling and services	Jean-Claude Guillaume, EN-EL	Green	Green	Green	Yellow	Red
4.8	Personnel protection systems <b>(EXPECTED ON THE 10/05/19)</b>	E. Sanchez, BE-ICS	Red	Red	Red	Red	Red
4.9	Alarms <b>(EXPECTED BY THE END OF THE MONTH)</b>	S. Grau, BE-ICS	Red	Red	Red	Red	Red
4.10	Networks <b>(EXPECTED BY THE END OF NEXT WEEK)</b>	L. Borakiewicz, IT-CS	Red	Red	Red	Red	Red
4.11	Gas systems	D. Jaillet	Green	Green	Green	Green	Green

# Next steps for publication ...

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Dear Erwan,

I am pleased to inform you that the CREB has given in-principle approval to your request for a Yellow Report. We request that the material presented should focus on issues relevant to a general audience and users, including the expected performance and beam parameters. If necessary, more technical material could be presented in separate documents that would be referenced from the Yellow Report.

Please contact Jens Vigen (in cc) for the next steps in preparing the document. Following our standard procedures, the CREB will look at the document again when it is fully ready for publication as a Yellow Report.

Best wishes,

Nick

**Congratulation to all of you !**

Commitment from the project to deliver a high quality document

# Next steps for publication ...

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- Finalize the collection of the contributions (Project Team)
  - Contribution not received by the 7<sup>th</sup> of June will not be integrated in the document
- Preliminary proof-reading from the CREB<sup>(1)</sup> on-going (Based on the available contributions)
  - CREB will provide recommendations to follow (Template, formatting, granularity, ...)
- Aim to produce the final document for the end of June<sup>(2)</sup>,
- Publication expected in July<sup>(2)</sup>,
- Depending on what will be published in the Yellow Report, the project will issue a complete Technical Design Report aside (As a project document) if needed.

<sup>(1)</sup>CERN Report Editorial Board.

<sup>(2)</sup>Planning to be validated with the CREB

- East Area historical pictures

# Little Gift



Safety shoes' tribute



Energy savings

The two persons rules

# Thanks for your attention !



## **EAST AREA RENOVATION**