



R2E relocation & shielding LS1 preparation

Anne Laure Perrot EN/MEF- LE

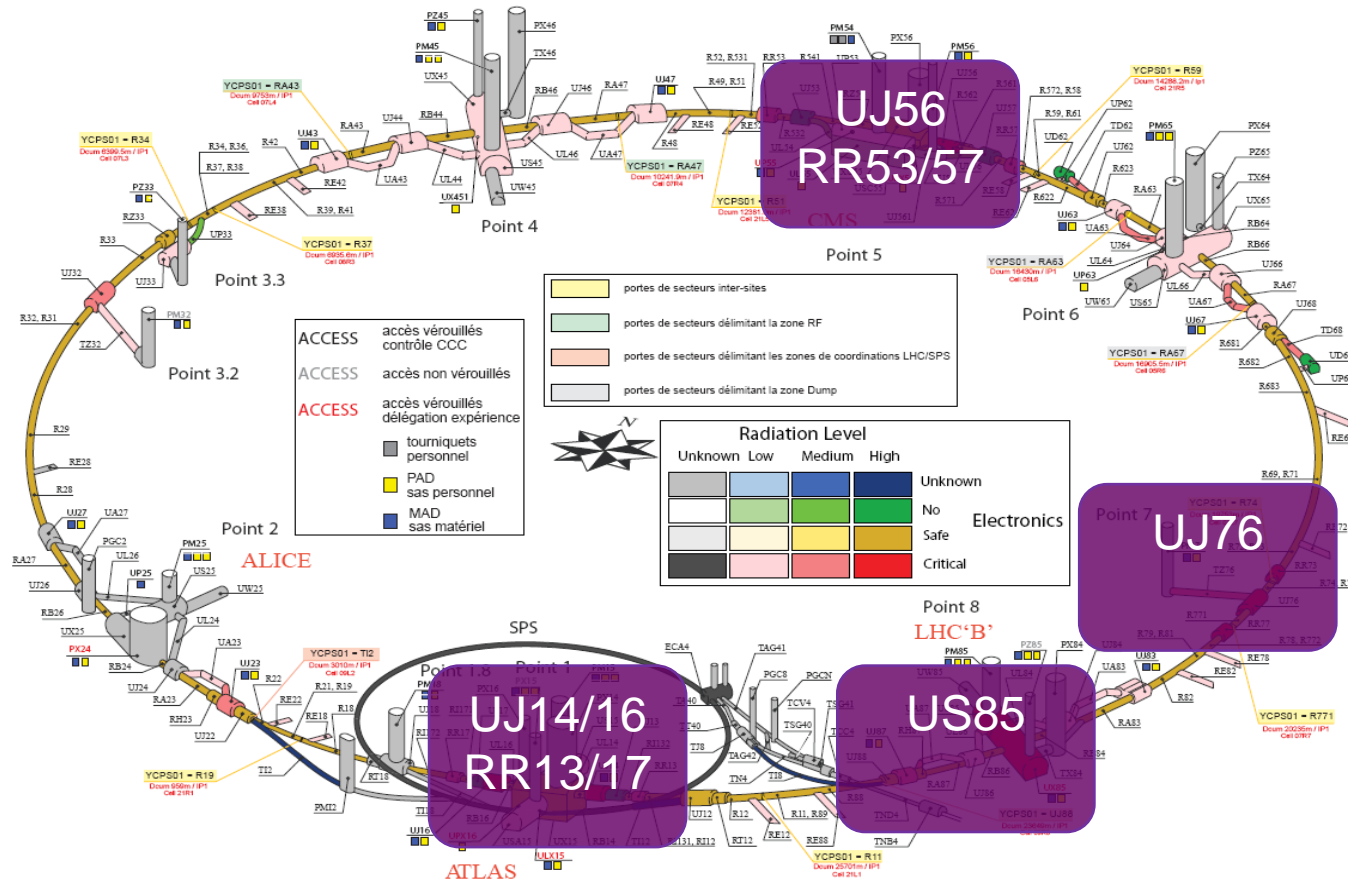
Discussion with OP colleagues, 5th July 2012

Contents

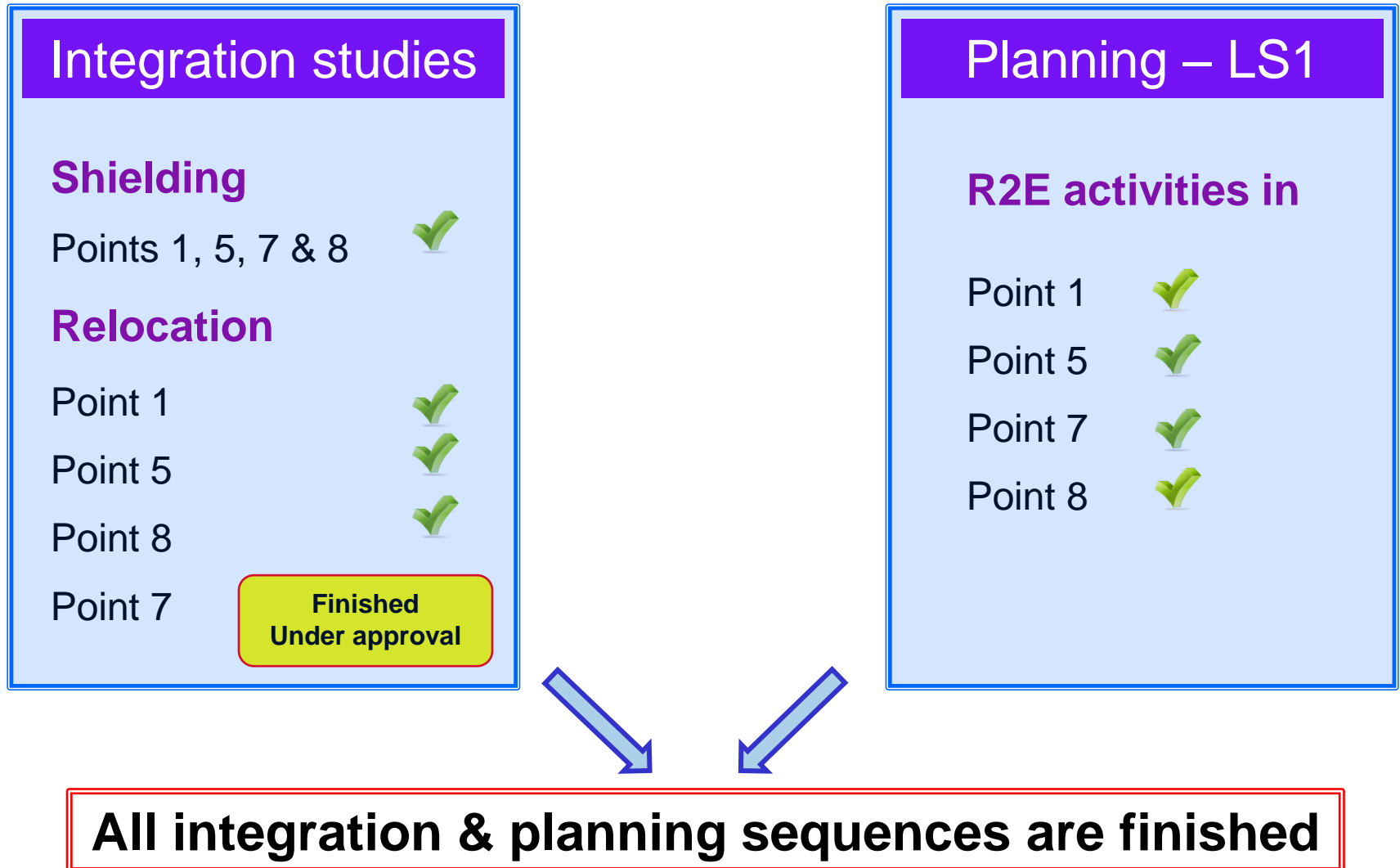
1. R2E shielding & relocation: status of activities
2. LS1 provisional schedule
3. Implementation & worksite organisation
4. Manpower request

Areas of the LS1 mitigation activities

Main critical areas today considered



Status of the mitigation activities



Groups involved during LS1

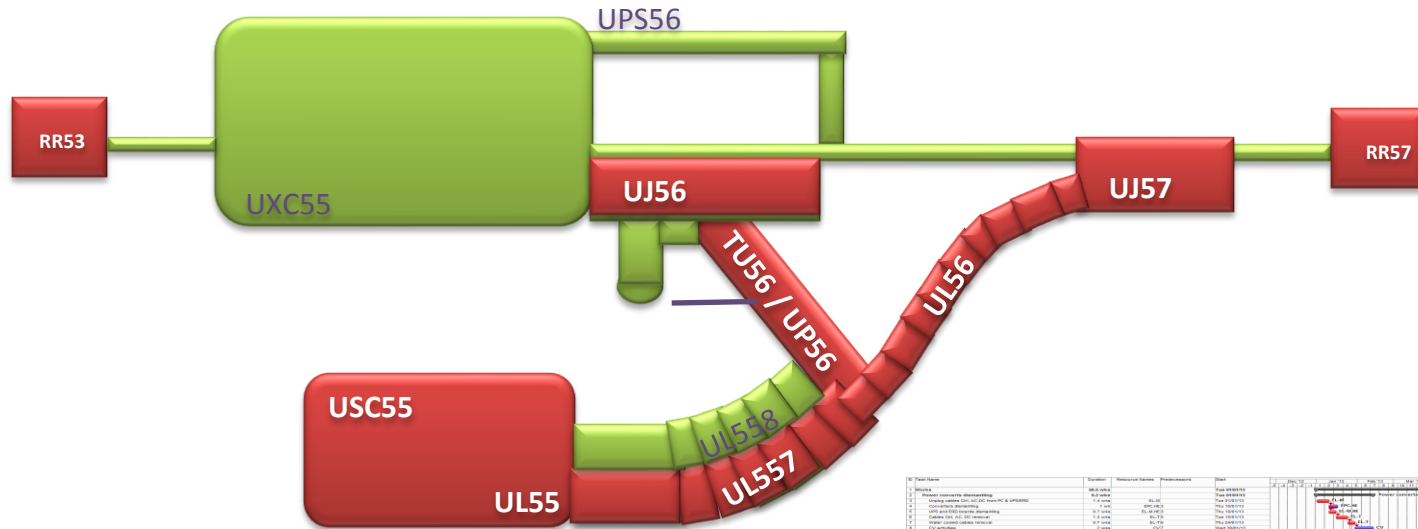
	Equipment / activity
BE/APB	survey eqpt.
BE/BI	BTV, BLM
BE/CO	timing & remote-reset WorldFip
DGS/RP	RAMSES
EN/CV	cooling/ventilation eqpt
EN/EL	electrical eqpt & cabling activity
EN/HE	eqpt. transport shielding inst.
EN/STI	collimator control eqpt
GS/ASE	fire/ODH access
GS/SE-CEP	duct activities
IT/CS	ethernet
TE/CRG	cryogenics eqpt
TE/EPC	power converters
TE/MPE	QPS* PIC* current leads heaters BIS WIC
TE/VSC	vacuum eqpt

15 groups
involved in the R2E
mitigation activities

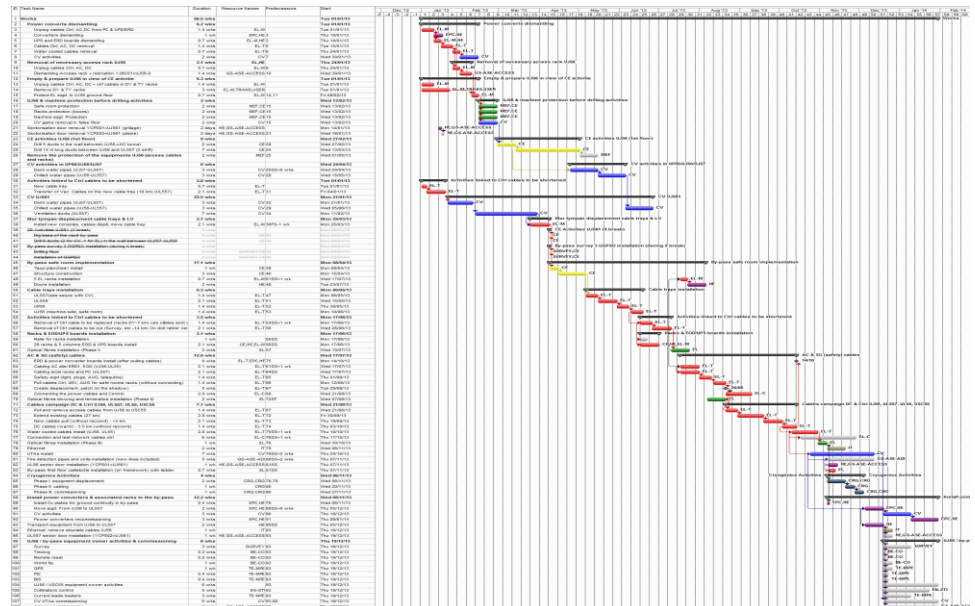
R2E LS1 Provisional Schedule

Work by M. Barberan (EN/MEF)

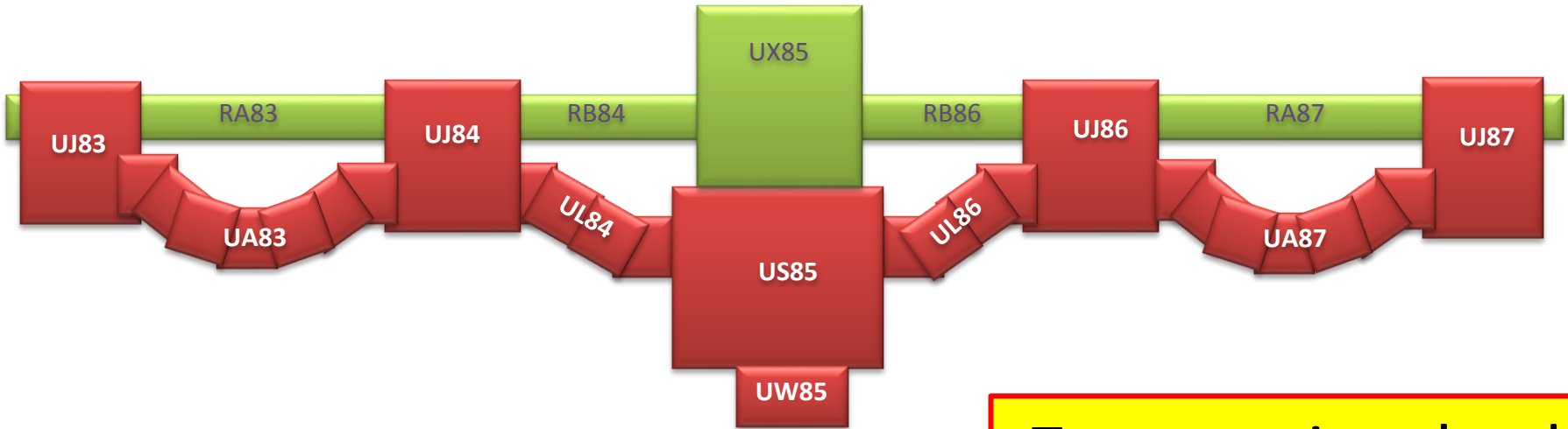
POINT 5



12 groups involved
57 weeks activities



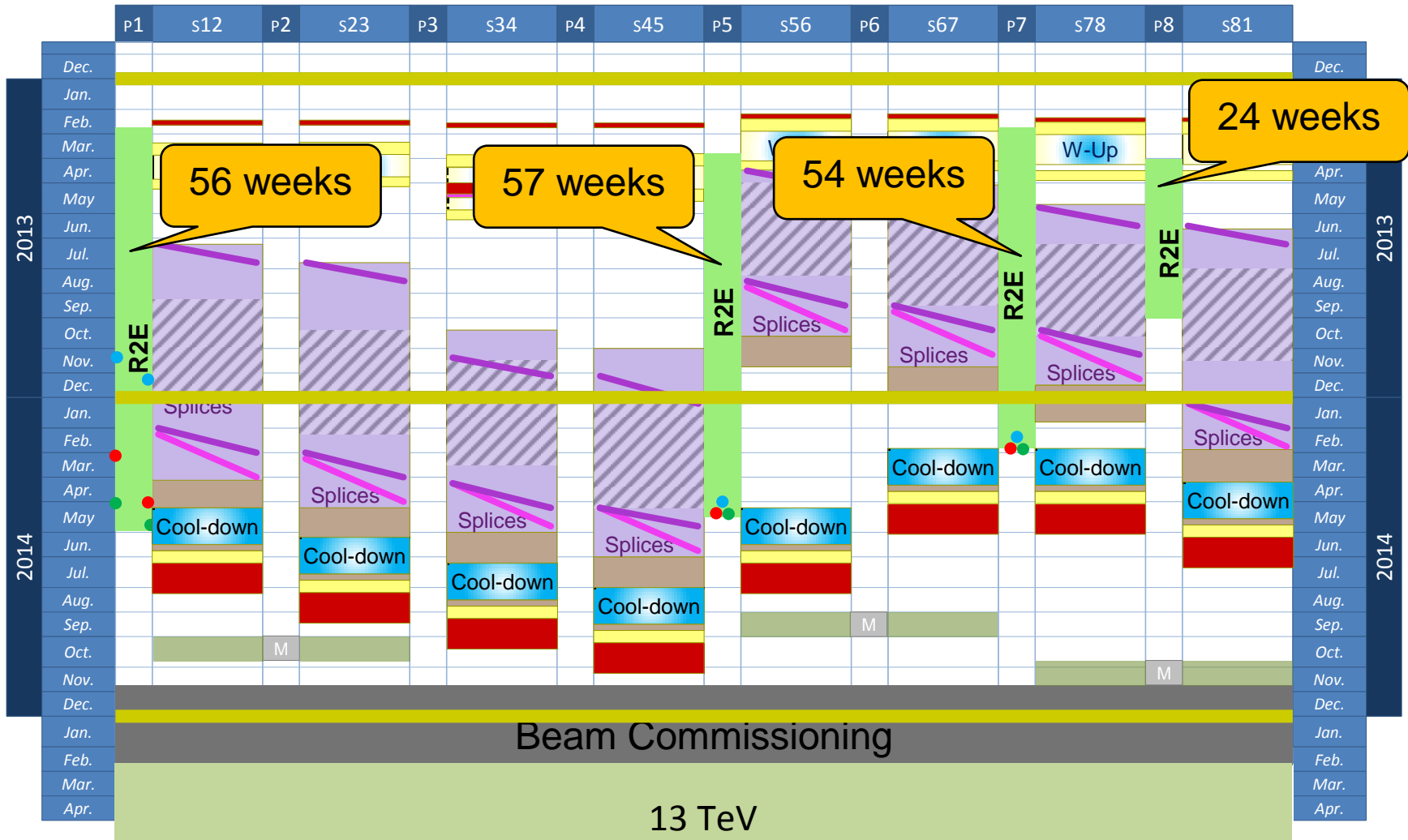
POINT 8



7 groups involved
24 weeks activities

ID	Task Name	Duration	Resource Names	Predecessor	Start
1	Works	26.5 wks			Tue 01/01/13
2	WorkFp repeaters relocation (US85 to 3 units U4870 units U483)	1 wk	BE-CO		Tue 01/01/13
3	CV activities	10 wks			Tue 08/01/13
4	Water central distribution (US85-Level 2 to UJ85)	8 wks	CV2		Tue 08/01/13
5	Ventilation control cabinet (UJ87 to U487)	2 wks	CV4		Tue 05/03/13
6	Ethernet	8 wks			Tue 08/01/13
7	Displacement CV equipment	2 days	IT ASS		Tue 08/01/13
8	UPS (US85-Level 1 to U483)	8 wks			Tue 26/02/13
9	Metallic structure on the floor (before relocation UPS) U483	1 wk	AFS-1 wk		Tue 26/02/13
10	Cables trays installation UJ84	4 wks	EL-T9		Tue 05/03/13
11	Relocation U483	3 wks	EL-W10		Tue 02/04/13
12	EL + Cryo activities: QURA (US85-level 2 to UJ84)	6 wks			Tue 23/04/13
13	Cables disconnection	1 wk	CRG,EL,11		Tue 23/04/13
14	Transport	1 day	HE 13		Tue 30/04/13
15	Cabling	6 wks	CRG,EL,11		Tue 23/04/13
16	Move equipment from storage to Uis and UAs	1 wk	HE TRANS,15		Tue 04/05/13
17	CE activities	4.5 wks			Tue 11/06/13
18	Rail for the movi shielding	1.5 wks	CE 16		Tue 11/06/13
19	Shielding implementation	2 wks			Thu 20/06/13
20	'chicane' wall in US85 ground level	2 wks	HE 18		Thu 20/06/13

R2E LS1 Provisional Schedule



Courtesy of K. Foraz

R2E relocation & shielding Web Site

Site Actions ▼ Page Publish Maria Barberan Marin ▼

R2E shielding and relocation activities > General Information > Home
This site contains information concerning the EN/MEF activities for the R2E shielding and relocation implementation

R2E shielding and relocation activities MEF - Machines & Experimental Facilities MEF/ LE - Liaison to Experiments Search this site... ?

R2E web site

General Information

EN/MEF mandate for R2E
Participants R2E meetings
Useful Links

Agenda
Forthcoming Meetings
Next Agenda
R2E Minutes
R2E Presentations

Planning

Recycle Bin
All Site Content

General Information

This site contains general information regarding R2E, the EN/MEF mandate for R2E and the participants of the "R2E shielding and relocation activities"- meetings.

For questions and suggestions regarding this web page please contact Dorothea.Pfeiffer@cern.ch

https://espace.cern.ch/MEFactivitiesforR2E/R2E_home/Home.aspx

Implementation & worksite organisation

Implementation & worksite organisation

Organisation during the LS1 installation

Point coordinator
in charge

1. Day-to-day in-situ management & supervision

(rapidly react/solve problems of all nature as they occurred, direct contact with the groups supervisors, cleaning/ waste management)

2. Safety supervision

(sites managers to enforce safety and environment protection rules, 'VIC', follow the implementation of safety measures/procedures)

3. Integration: non conformities follow-up

(weekly reports, intermediate survey scans)

4. Material delivery & contracts: weekly follow – up

5. Planning: follow – up and adaptation

(detailed installation planning & critical path weekly updated, impact on/of the non R2E works)

6. **Communicating**

(periodical reviews of the activities, non conformities & planning)

Point coordinator
involved

Implementation & worksite organisation

Point coordinator activities

- In charge of one/two LHC Points (points 1 & 8, point 5, point 7) -> 3 persons needed
- Fluent in French (daily discussions in situ with firms personal)
- Before LS1:
 - Participation in R2E relocation meetings from September 2012 (Fridays 10h30-12h30, 2 meetings/month)
 - Visits in situ during TS3 (September) and Christmas break to get knowledge of the environment/ equipment to be relocated
 - be aware of the material delivery, storage, safety issues, installation procedures etc...
In other words....get knowledge of the work/activities
- During LS1:
 - see previous slide AND...
 - Daily organisation of in-situ status meeting with the group supervisors
 - Daily short report to Anne Laure (by phone)
 - Weekly report status to 'Friday meetings'

Manpower request

Ressources for the coordination & follow-up of the R2E mitigation activities

	2011 Manpower [FTE]	2012 Manpower [FTE]	LS1 Manpower [FTE]
Overall coordination – work package holder	0.8	0.8	0.8
Layout modifications and database management	0.1	0.1	0.1
Shielding (design, purchase, logistics)	0.5	0.25 (to 0.5)	0.25
Integration activities	2	1	0.5 to 1
Planning activities	0.2	0.2	0.2
Work supervisors in - situ			3



t.b.d.

Addendum

	Equipment / activity	Activity in Point 1	Activity in Point 4	Activity in Point 6	Activity in Point 5	Activity in Point 7	Activity in Point 8
BE/APB	survey eqpt.	-	-	-	✔	-	-
BE/BI	BTV, BLM	-	-	-	-	✔	-
BE/CO	timing & remote-reset WorldFip	✔ -	- -	- -	✔ ✔	✔ ✔	✔ ✔
DGS/RP	RAMSES	-	-	-	-	✔	-
EN/CV	cooling/ventilation eqpt	✔	-	-	✔	✔	✔
EN/EL	electrical eqpt & cabling activity	✔	✔	✔	✔	✔	✔
EN/HE	eqpt. transport shielding inst.	✔ ✔	-	-	✔ ✔	✔ done	✔ ✔
EN/STI	collimator control eqpt	✔	-	-	✔	-	-
GS/ASE	fire/ODH access	✔ ✔	-	-	✔ ✔	✔ ✔	done -
GS/SE-CE	duct activities	-	-	-	✔	✔	-
IT/CS	ethernet	✔	✔	✔	✔	✔	✔
TE/CRG	cryogenics eqpt	✔	✔	✔	✔	✔	✔
TE/EPC	power converters	✔	-	-	✔	✔	-
TE/MPE	QPS* PIC* current leads heaters BIS WIC	✔ ✔ ✔ - -	-	-	✔ ✔ ✔ ✔ -	-	- - - - ✔
TE/VSC	vacuum eqpt	-	-	-	-	✔	-

Implementation & worksite organisation

Process towards LS1 installation

March 2012

integration and planning studies finished

(i.e. new locations= defined; activities= identified; works sequences= defined)



Planning/manpower

Merge the R2E LS1 planning
with the overall LHC LS1
planning



Estimate the real intervention
slots for each group



Finalise the material requests

Finished by summer 2012

Material

All material requests identified



Contracts / material orders
launched vs delivery deadlines



Follow-up of the material
delivery

Documentation for installation

ECRs



Safety documentation
&
Installation procedures
&
Installation drawings

Finished by Autumn 2012