



# SLHC-PP steering meeting

## Introduction and news items

November 11<sup>th</sup> 2009

Lucie Linssen

# Management changes

- New WP8 leader: Wlodek Dabrowski
  - Elected by WP8 institutes, following move of Marc Weber from RAL to Karlsruhe
  - Approved by governing board
  - Effective date November 20<sup>th</sup> 2009
  - Deputy: Georges Blanchot
- New Project Coordinator and new Deputy Project Coordinator
  - Lyn Evans => Roland Garoby
  - Lucie Linssen => Duccio Abbaneo
  - Proposed date January 1<sup>st</sup> 2010
  - Still to be approved by governing board

# 1<sup>st</sup> annual report

- Submitted 1<sup>st</sup> annual report to the EU at end of May 2009
- Many thanks to all! Technical parts went rather smoothly, financial part is a bigger headache.
- EU came back in July with 9 comments, all of a very formal nature, all linked to form C => corrections/ comments were handled by Mar Capeans.
- First periodic report formally approved: Sep 16th
- Transfer of funds from EU: beginning of November

## SLHC-PP

M.C.  
November 2009

	THEORETICAL VALUES	TRANSFERRED AMOUNTS	TRANSFER DATE
<b>Budget Profile (All in EURO)</b>			
Net amount at start	5,199,992.00		
1st Interim payment	1,700,000.00	<b>1,899,754.90</b>	Nov-09
2nd Interim payment	1,799,992.00		
Final payment	1,700,000.00		
<hr/>			
<b>Prefinancing = (160% x Budget / 3) - 5% x Budget</b>	2,513,329.47	<b>2,513,329.47</b>	Apr-08
Prefinancing Rate	160%		
Guarantee Fund Rate	5%		

### EC Funds Distribution


# Participant	Max Total EC contribution	%	Prefinancing April08	Cross-check (by prorata)	1st Interim payment (Prorata) November09	TOTAL RECEIVED	REMAINING
1 CERN	3,062,484.0	58.89%	1,480,200.60	1,480,200.60	1,118,841.91	2,599,042.5	463,441.5
2 AGH-UST	104,000.0	2.00%	50,266.67	50,266.67	37,995.16	88,261.8	15,738.2
3 CEA-Saclay	465,460.0	8.95%	224,972.33	224,972.33	170,050.25	395,022.6	70,437.4
4 CIEMAT	152,645.0	2.94%	73,778.42	73,778.42	55,767.03	129,545.4	23,099.6
5 CNRS-IN2P3	105,600.0	2.03%	51,040.00	51,040.00	38,579.70	89,619.7	15,980.3
6 CTU	44,940.0	0.86%	21,721.00	21,721.00	16,418.29	38,139.3	6,800.7
7 DESY	99,691.0	1.92%	48,183.98	48,183.98	36,420.91	84,604.9	15,086.1
8 ETH Zürich	89,131.0	1.71%	43,079.98	43,079.98	32,562.95	75,642.9	13,488.1
9 FOM-NIKHEF	64,200.0	1.23%	31,030.00	31,030.00	23,454.70	54,484.7	9,715.3
10 GSI	72,225.0	1.39%	34,908.75	34,908.75	26,386.54	61,295.3	10,929.7
11 Imperial	89,131.0	1.71%	43,079.98	43,079.98	32,562.95	75,642.9	13,488.1
12 INFN	40,000.0	0.77%	19,333.33	19,333.33	14,613.52	33,946.9	6,053.1
13 PSI	108,225.0	2.08%	52,308.75	52,308.75	39,538.71	91,847.5	16,377.5
14 STFC	489,850.0	9.42%	236,760.83	236,760.83	178,960.84	415,721.7	74,128.3
15 UBONN	120,000.0	2.31%	58,000.00	58,000.00	43,840.57	101,840.6	18,159.4
16 UNIGE	35,310.0	0.68%	17,066.50	17,066.50	12,900.09	29,966.6	5,343.4
17 USFD	32,100.0	0.62%	15,515.00	15,515.00	11,727.35	27,242.4	4,857.6
18 RWTH Aachen	25,000.0	0.48%	12,083.33	12,083.33	9,133.45	21,216.8	3,783.2
	5,199,992.0	100.00%	2,513,329.47		1,899,754.90	4,413,084.4	786,907.6

# About deliverables...

- All except 1 deliverable and 1 milestone for the 1<sup>st</sup> year were reached.
- WP7: There has been a delay in the delivery of the cavities, pushing the characterization deliverable back by some 10 months from M12 to M22. .... despite the 10-month delay in the characterization result, the overall schedule towards the final WP7 deliverables is not compromised.
- WP6: Although the project objectives for the first year have been met successfully, the project now suffers from lack of expert manpower. ... This will undoubtedly lead to delays for the upcoming WP6 deliverables and milestones.
- WP6 now formally announces that it needs adding 14 months to the current SLHC-PP schedule in order to fulfill objectives.

# Deliverables 1<sup>st</sup> year

First year of the project:

Number	Deliverable title	Nature	Delivery month	Link
1.2.1	SLHC-PP web-site operational (intranet + public pages)	O	M03	<a href="#">Report</a>
3.1.1	Project management structure and review office for R&D phase in place	O, R	M06	<a href="#">Report</a>
2.2.1	Functioning collaboration communication structure	O	M12	<a href="#">Report</a>
2.2.2	Project web site linked to the technical databases: Machine layout database, hardware baseline database, project notes and reports	O	M12	<a href="#">Report</a>
4.1.1	Project Structures for construction of systems and sub-systems	O, R	M12	<a href="#">Report</a>
4.2.1	Personnel and working practices of the Technical Coordination unit in place	O, R	M12	<a href="#">Report</a>
6.1.1	Basic design of the triplet	R	M12	<a href="#">Report 1 &amp; 2</a>
7.1.1	Finite element thermal study of the Linac 4 design source at the final duty factor	R	M12	<a href="#">Report</a>
7.2.1	In depth characterisation of the two tuners plus cavities developed in the frame of the "HIPPI" JRA , FP6 (tuner/cavity characteristics)	R 	M12	<a href="#">Word Template</a>
8.1.1	Evaluation report on DC-DC conversion technologies	R	M12	<a href="#">Report</a>
8.2.1	Evaluation report on generic serial powering studies and specification of serial powering components	R	M12	<a href="#">Report</a>

# Milestones 1<sup>st</sup> year

## Milestones:

First year of the project:

Number	Milestone title	Delivery month	Comment	Link
1.1	Kick-off meeting	M03	Presentations on SLHC-PP web site	<a href="#">Agenda</a>
6.1	Qualification of magnet components	M08	Qualification document published	<a href="#">Report</a>
3.1	Schedule for the R&D phase	M09	Schedule document	<a href="#">Report</a>
6.2	Basic Magnet design	M10	Magnet design report	<a href="#">Word Template</a>
1.2	First Annual SLHC-PP Meeting	M12	Presentations on SLHC-PP web site	<a href="#">Agenda</a>
5.1	Compilation and evaluation of design parameters and details relevant for the assessment of radiological impact; Identification of critical parameters and potential design constraints	M12	Meeting with stakeholders in accelerator and experiments, to define an agreement on design parameters	<a href="#">Report</a>

# Deliverables 2<sup>nd</sup> year

Number	Deliverable title	Nature	Delivery month	Link
1.1.1	Periodic Report (progress of work + use of resources + financial statement)	R	M14	<a href="#">Report</a>
4.2.2	Key structural requirements (information repository, tools, coordination framework, safety and quality systems, integration office) and scheduling and reporting mechanisms in place	O, R	M18	<a href="#">Template</a>
6.2.1	Construction of the model	D	M18	<a href="#">Template</a>
7.1.2	Design of a high duty factor plasma generator	R	M18	<a href="#">Report</a>
7.2.2	Design of RF system architecture including modelling of RF components, simulation of the RF system and simulation of beam dynamics of the full LINAC; RF system and high power modulator specifications	R	M18	<a href="#">Template</a>
3.2.1	Document the technical scope of the upgrade including an initial cost-estimate	R	M24	
5.1.1	Validation of simulation tools with measurements at LHC	R	M24	
5.1.2	Estimation of radiation and activation levels for critical areas of the experiments at SLHC	R	M24	
5.2.1	Estimation of radiation and activation levels for critical areas of SLHC and its injectors	R	M24	
6.2.2	Assessment of the design	R	M24	
8.2.2	Custom serial powering circuitry and evaluation of generic high-current serial powering ASIC	P,R	M24	



# Milestones 2<sup>nd</sup> year

Number	Milestone title	Delivery month	Comment	Link
7.1	List of required improvements for the design of the high duty factor plasma generator to function at a high duty factor	M14	Report approved by partners	<a href="#">Report</a>
2.1	Financial management system (initial version)	M18	Initial version released	<a href="#">Template</a>
4.1	Upgrade Project Scope defined	M18	Report published	<a href="#">Report</a>
6.3	Complete cold mass design	M18	Design Report published	<a href="#">Template</a>
6.4	Complete cryomagnet design	M22	Design Report published	
6.5	Cryogenic and power test of the model	M22	Test report published	
1.3	Second Annual SLHC-PP Meeting	M24	Presentations on SLHC-PP web site	
2.2	EVM software (initial version)	M24	Initial version released	
3.2	Upgrade project structures adapted to the implementation phase	M24	Documented as WEB structure	

# Aim of this meeting

Review progress of experiment work packages WP3, WP4, WP5, WP8

- Prospects for upcoming deliverables and milestones
- Longer-term prospects for your work package

Status of collaboration with the work package partner institutes

Bring up any further issues/concerns related to the individual WP

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Preparation of next annual meeting, Ciemat Febr 4-5 2010

# Annual meeting, Ciemat Feb. 4-5 2010

Program proposal, first iteration

Plenary presentations on Phase I; Public event at CERN on Phase II in May 2010

Thursday February 4th

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11h00	Welcome	15'	Ciemat director
11h15	Accelerator development activities in Spain	30'	Fernando Toral or Luis Tabares
11h45	Experiment and detector development in Spain	30'	Juan Fuster
12h15	Status Linac4 project	30'	Maurizio Vretenar
12h45	Status new inner triplet project	30'	Ranko Ostojic

12h45 break

14h45 18h00 Parallel sessions

14h45-16h15

WP 2	Gijs de Rijk
WP 3	Steinar Stapnes
WP 4	Jordan Nash

16h15-17h45

WP 5	Thomas Otto
WP 6	Stephan Russenschuck
WP 7	Richard Scrivens
WP 8	Wladek Dabrowski

# Annual meeting, Ciemat Feb. 4-5 2010

Program proposal, first iteration  
Governing board still to be included

Friday 5th February  
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9h00	The LHC commissioning	45'	Lyn Evans
9h45	First data with and performance of the Atlas detector	30'	?
10h15	First data with and performance of the CMS detector	30'	?
10h45	break		
11h15	Overall status of SLHC-PP	30'	Lucie ?
11h45	Status of WP 2	30'	Gijs de Rijk
12h15	Status of WP 3	30'	Steinar Stapnes
12h45	Status of WP 4	30'	Jordan Nash
13h15	break		
14h45	Status of WP 5	30'	Thomas Otto
15h15	Status of WP 6	30'	Stephan Russenschuck
15h45	Status of WP 7	30'	Richard Scrivens
16h15	Status of WP 8	30'	Wladek Dabrowski
16h45	break		
17h15	Discussion on the organization of the public event	30'	Roland Garoby
17h45	Conclusions	30'	Lyn Evans and Roland Garoby