

# SLHC-PP Governing Board

## Feb. 7, 2011 - Saclay

J. Nash/M. Capeans

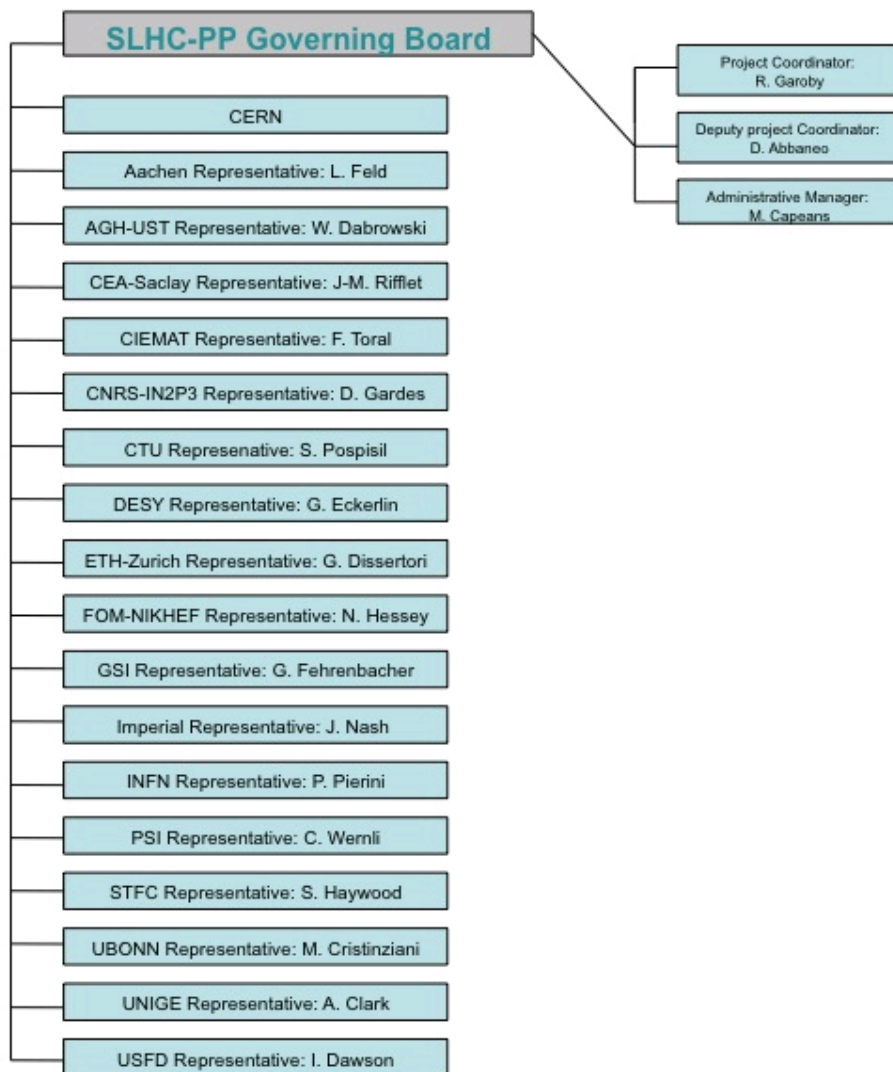
# Agenda

<http://cern.ch/SLHC-PP>

- Approval of the Agenda
- Approval of Milestones and Deliverables for Period 3
  - Discussion of the Annual Report
  - Budget
  - AOB

# Governing Board

<http://cern.ch/SLHC-PP>



# Milestones (until end of 2<sup>nd</sup> year)

<http://cern.ch/SLHC-PP>

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>

Second year of the project:

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="#">Report</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	

# Milestones Year 3

<http://cern.ch/SLHC-PP>

Number	Milestone title	Delivery month	Comment	Link
6.6	Electrical test of collared coil	M28	Test report published	<a href="#">Word Template</a>
6.7	Cold test of corrector magnet	M28	Test report published	<a href="#">Word Template</a>
1.4	Third Annual Meeting and Final Project Review	M36	Presentations on SLHC-PP web site	<a href="#">Agenda</a>

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

<http://cern.ch/SLHC-PP>

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>

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

<http://cern.ch/SLHC-PP>

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="#">Report</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	

Number	Deliverable title	Nature	Delivery month	Link
1.1.2	Periodic Report (progress of work + use of resources + financial statement)	R	M26	<a href="#">Report</a>
6.3.1	Construction corrector magnet package	P	M26	<a href="#">Word Template</a>
2.1.1	Common fund, Financial Management System (software) and user requirements and user guide document	O	M30	<a href="#">Word Template</a>
2.1.2	Quality Assurance plan for the implementation phase	R	M30	<a href="#">Word Template</a>
7.1.3	Construction of the plasma generator and sub-systems (e.g. 2Hz RF generator, hydrogen gas injection and pumping)	D	M30	<a href="#">Report</a>
7.2.3	Production of a prototype electronic system and other elements for a full system demonstration; Definition of demonstration procedure	P	M30	<a href="#">Word Template</a>
8.1.2	Prototypes and viability report	P, R	M30	<a href="#">Report</a>
3.2.2	Schedule for the upgraded detector parts and for the S-ATLAS installation	R	M32	<a href="#">Word Template</a>
6.2.1*	Construction of 2 instrumented collar packs	D	M32	<a href="#">Template</a>
6.2.2*	Assessment of the collaring procedure and definition of final coli size	D	M33	
2.1.3	Earned Value management system (software) with user requirements and user guide document	O	M36	
3.1.2	Establish the initial Memorandum of Understanding for the upgrade	R	M36	
3.1.3	Develop detailed cost books for the upgrade including the installation phase	R	M36	
3.2.3	Technical documentation, drawing and CAD information for the existing experiment and the upgraded elements	R	M36	
4.1.2	Cost book and MoU for the upgrade and installation phase	R	M36	
4.2.3	Pilot design and schedule for the upgrade project published.	R	M36	
5.3.1	Impact Study (dose rates, environmental impact and waste production from activated material) for SLHC	R	M36	

[n.ch/SLHC-PP](http://n.ch/SLHC-PP)



# Deliverables Year 3

<http://cern.ch/SLHC-PP>

6.1.2	Complete Interaction Region design	R	M36
6.3.2*	Assembly of a 2m long prototype quadrupole	D	M36
7.1.4	Plasma generation and study of the thermal and vacuum conditions	R	M36
7.2.4	Full test and validation of RF system. Final report	D	M36
8.1.3	Integration in full-scale detector modules	D	M36
8.2.3	Full-scale super-module with custom serial powering circuitry	D	M36
1.1.3	Periodic Report (progress of work + use of resources + financial statement)	R	M38
1.1.4	Final report	R	M38

# Periodic Report

	Chapter	Responsible	Pages	
T E X T	1	Publishable Summary	R.Garoby	4
	2	Project objectives for the period	R.Garoby	2
	3	Work progress and achievements during the period 3.1 Progress within the individual work packages (Summary of progress, Significant results, Deviations from Annex I, Reasons for non achieved objectives, Statement use or resources and deviations, Corrective actions) 3.2 Overall personnel effort in Period 2	WP leaders M.Capeans	12
	4	Deliverables and milestones tables	K.Ross	TABLES
	5	Project management • Management of the Consortium, Problems occurred, Changes • List of meetings and publications • Project planning, Impact of deviations in miles. & deliv	M.Capeans WP leaders R.Garoby	6
F I	6	Explanation of the use of the resources	M.Capeans	TABLES
	7	Financial statements – Form C and Summary financial report	M.Capeans	FORCE

# Periodic Report

<http://cern.ch/SLHC-PP>

**Deadline for Submission: + 60 days after end of Period 3 (May 31<sup>st</sup> 2011)**

Resp.	Action	Date
WP leaders	Text <b>sent to:</b> <b>K.Ross</b> (WP3,4,8) <b>C.Noels</b> (WP2,6,7)	22.4
K.Ross	Periodic Report Draft 1 available for comments	2.5
K.Ross	Final Draft sent to all SLHC-PP members	19.5

Resp.	Action	Date
Mar	Send Table of Personnel Resources to each Institute	8.4
Partners	Draft Financial Information <ul style="list-style-type: none"> <li>• Form C in FORCE</li> <li>• Tables of Explanation of Use of Resources* <b>sent to Mar</b></li> </ul>	25.4
Mar	Feedback on Financial info to Partners	27.4
Partners	FINAL FORM C in FORCE 2 originals signed and <b>sent to Mar</b>	16.5
Mar	Consolidation of Finances	19.5

# Final Report

<http://cern.ch/SLHC-PP>

- Three pieces due
  - Part 1 Publishable summary addressed to the general public
    - Around 40 Pages
  - Part 2 Dissemination information
  - Part 3 Report on Societal Impact
- Mar to explain details tomorrow
  - Each institute will have to collect some information for this report

# Payments so far ...

<http://cern.ch/SLHC-PP>

#	Participant	Max Total EC contribution	Ceiling	Prefinancing Received (2008)	Payment 1 (2009)	Total Received	% Received	To be paid to reach ceiling	TO BE PAID @ END
1	CERN	3,062,484.0	2,756,235.6	1,633,324.8	1,122,910.8	2,756,235.6	90%	0.0	306,248.4
2	AGH-UST	104,000.0	93,600.0	55,466.7	30,152.9	85,619.5	82%	7,980.5	10,400.0
3	CEA-Saclay	465,460.0	418,914.0	248,245.3	170,668.7	418,914.0	90%	0.0	46,546.0
4	CIEMAT	152,645.0	137,380.5	81,410.7	37,984.0	119,394.7	78%	17,985.9	15,264.5
5	CNRS-IN2P3	105,600.0	95,040.0	56,320.0	993.7	57,313.7	54%	37,726.3	10,560.0
6	CTU	44,940.0	40,446.0	23,968.0	16,478.0	40,446.0	90%	0.0	4,494.0
7	DESY	99,691.0	89,721.9	53,168.5	1,408.5	54,577.0	55%	35,144.9	9,969.1
8	ETH Zürich	89,131.0	80,217.9	47,536.5	32,681.4	80,217.9	90%	0.0	8,913.1
9	FOM-NIKHEF	64,200.0	57,780.0	34,240.0	23,540.0	57,780.0	90%	0.0	6,420.0
10	GSI	72,225.0	65,002.5	38,520.0	11,593.0	50,113.0	69%	14,889.5	7,222.5
11	Imperial	89,131.0	80,217.9	47,536.5	30,771.0	78,307.5	88%	1,910.4	8,913.1
12	INFN	40,000.0	36,000.0	21,333.3	14,666.7	36,000.0	90%	0.0	4,000.0
13	PSI	108,225.0	97,402.5	57,720.0	30,747.5	88,467.5	82%	8,935.1	10,822.5
14	STFC	489,850.0	440,865.0	261,253.3	76,351.8	337,605.1	69%	103,259.9	48,985.0
15	UBONN	120,000.0	108,000.0	64,000.0	44,000.0	108,000.0	90%	0.0	12,000.0
16	UNIGE	35,310.0	31,779.0	18,832.0	12,947.0	31,779.0	90%	0.0	3,531.0
17	USFD	32,100.0	28,890.0	17,120.0	11,770.0	28,890.0	90%	0.0	3,210.0
18	RWTH Aachen	25,000.0	22,500.0	13,333.3	9,166.7	22,500.0	90%	0.0	2,500.0
		5,199,992.0	4,679,992.8	2,773,329.1	1,678,831.4	4,452,160.5	86%	227,832.4	519,999.2

# Actions

<http://cern.ch/SLHC-PP>

- Approve Milestones and Deliverables
- Approve plan for completing project and reporting