

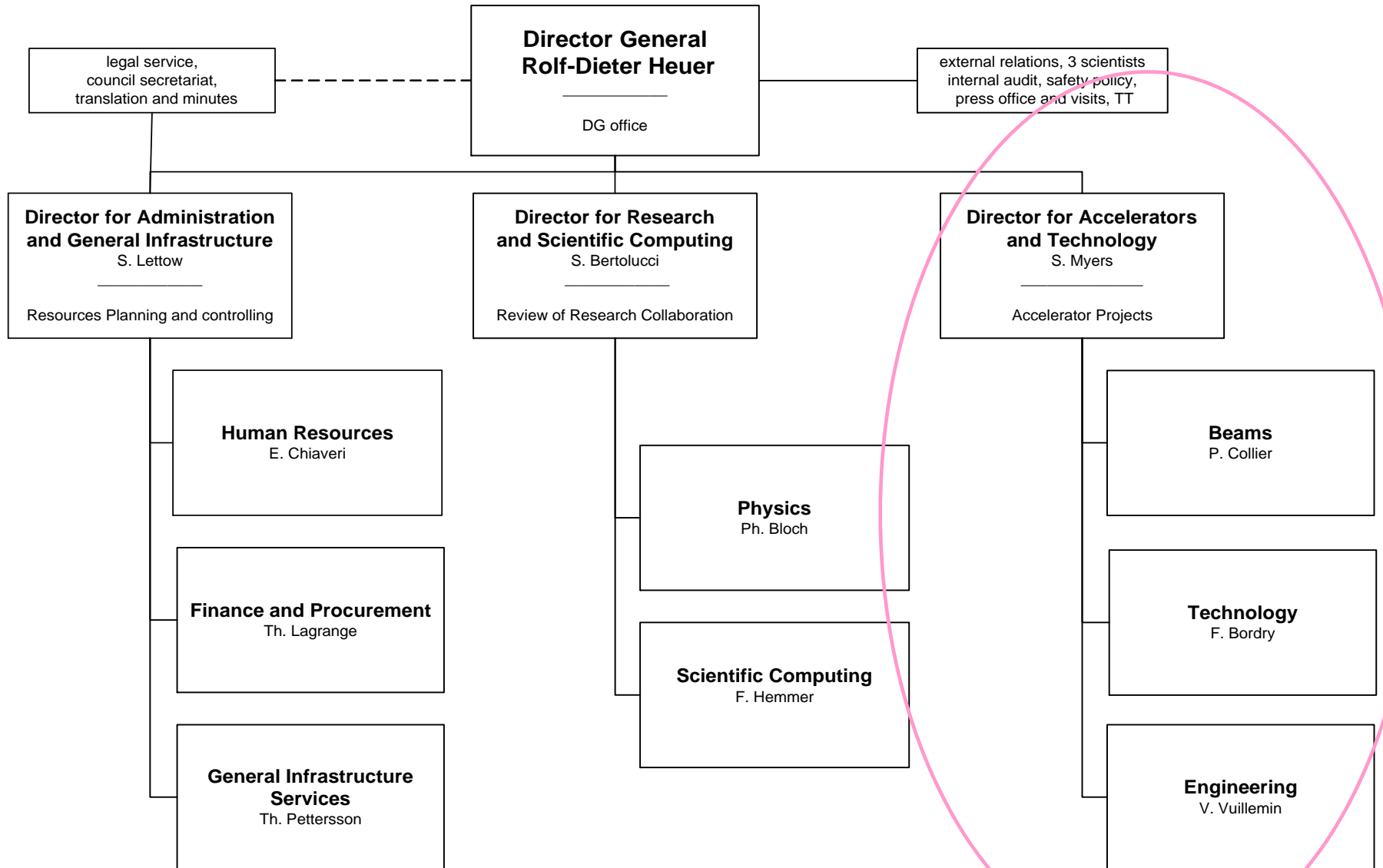
# Accelerator Sector Restructuring

First Meeting 11<sup>th</sup> November 2008

# AGENDA

- Mandate of Sector (S. Myers)
- Goals and “Methodology” of Restructuring (S. Myers)
- Dissemination of Information (S. Myers)
- Questions and Discussion
- Departments; mandates, groups and group mandates
  - Beams (P. Collier)
  - Engineering (V. Vuillemin)
  - Technology (F. Bordry)
- Questions and Discussion

# The Future CERN structure (my understanding)



# Brief Mandate

From the Green Paper to the Council (Sept 2008)

“The Director for Accelerators and Technology will be responsible for the operation and exploitation of the whole accelerator complex, with particular emphasis on the LHC and for the development of the new projects and technologies. This area will comprise the new departments Beams, Engineering, and Technology. The emphasis in the next few years is clearly on the operation, exploitation, and further development of the LHC.....”

# Goals of Restructuring

The present structure of the accelerator and technical departments has been geared for the construction phase of the LHC. The new structure has, as primary objective, the **optimisation of the operational performance of the LHC** and the other experimental facilities.

## Goals (Prioritized)

1. Facilitate maximization of the **operational performance of all accelerators with priority for LHC**
2. Make more effective use of existing staff by
  1. Elimination of **duplication**
  2. Identification/elimination of activities with reduced importance
  3. Identification/establishment of **new activities** which are needed for the operation of the LHC
  4. Re-grouping of activities with enhanced synergy (activity and time synergy)

# Goals of Restructuring

The new structure should pay particular attention to **LHC upgrades and future new projects.**

The exercise will also permit a **better balance** of the scientific and technical responsibilities in each of the new departments

# Methodology

An analysis has been made of the major scientific activities in the present departments (AB, AT, and TS)

Compiled a list of activities needed for the new structure

These activities were distributed within the three new departments

## My Guidelines

- Departments of around 350-400 staff
- 5- 8 groups
- (a group will be devoted to one or more of the activities)
- **One** deputy group leader, **one** deputy department head

Each new department is not totally identifiable with the old departments (AB, AT, and TS will no longer exist!)

Each new department is an equal partner in contributing to the operational efficiency of the accelerators

Activities in the Accelerator Sector and possible (according to me) grouping

Activity	Changes	Departments			
		Beams	Technology	Engineering	Site
Accelerator Access	✓	3		3	3 (?)
Accelerator Controls	✓	1			
Accelerator Operations		1			
Accelerator Physics	✓	1			
Beam feedback		1			
Beam Instrumentation		1			
Beam Transfer		3	3	3	
Civil Engineering	✓			2	2
Collimation	✓	3	3	3	
Cooling & Ventilation				1	
Cryogenics			2	2	
Electrical Engineering				1	
Electronic Modules	✓		2	2	
Experimental Support	✓	2		2	
Facilities Management	✓				1
Industrial Controls	✓	3	3	3	
Injection/Extraction		2	2		
Machine Interlocks & Protection	✓	2	2		
Magnet Measurements	✓		1		
Manufacturing	✓			1	
Normal Magnets	✓		1		
Power Converters	✓	3	3	3	
Radio-Frequency (CLIC included)		3	3	3	
Shutdown Work	✓	3	3	3	
Site Access	✓				1
Supra Magnets	✓		1		
Surface Treatment	✓		2	2	
Survey and Alignment	✓	3	3	3	
Targets & Dumps	✓	3	3	3	
Transport				1	
Vacuum	✓	3	3	3	



# Beams Department

<b>Beams</b>	<b>Totals Combining present staff (2009 FTEs)</b>	<b>Origin (present structure)</b>	<b>Staff from AB</b>	<b>Staff from TS</b>	<b>Staff from AT</b>	<b>Staff from IT</b>	<b>Open Posts</b>
<b>Accelerator and Beam Physics</b>	<b>59.2</b>	<b>AB-ABP, TS-SU, +</b>	<b>38.0</b>	<b>21.0</b>	<b>1.0</b>		<b>1.0</b>
<b>Beam Instrumentation</b>	<b>58.9</b>	<b>AB-BI</b>	<b>58.0</b>				<b>2.0</b>
<b>Controls</b>	<b>52.7</b>	<b>AB-CO</b>	<b>51.0</b>				<b>1.0</b>
<b>Operations</b>	<b>89.2</b>	<b>AB-OP</b>	<b>85.0</b>				<b>5.0</b>
<b>Radio Frequency</b>	<b>80.9</b>	<b>AB-RF</b>	<b>80.0</b>				<b>3.0</b>
<b>Administration, Safety and Resources</b>	<b>18.5</b>	<b>AB-ADM, AB-SU</b>	<b>20.0</b>				
<b>Head Office</b>	<b>1.0</b>	<b>AB</b>	<b>1.0</b>				
<b>Beams total</b>	<b>360.4</b>		<b>333.0</b>	<b>21.0</b>	<b>1.0</b>		<b>12.0</b>

# Engineering Department

<b>Engineering</b>	<b>Totals Combining present staff (FTEs)</b>	<b>Origin (present structure)</b>	<b>Staff from AB</b>	<b>Staff from TS</b>	<b>Staff from AT</b>	<b>Staff from IT</b>
<b>Manufacturing</b>	76	TS-MME	0	76	0	0
<b>Cooling &amp; Ventilation</b>	50	TS-CV	0	50	0	0
<b>Transport</b>	29	TS-HE	0	29	0	0
<b>Electrical Engineering</b>	58	TS-EL	0	60	0	0
<b>Tech Coord [Accelerators and Experimental Facilities]</b>	59	AB-ATB-SBA +TS-LEA +AB- ABP-RTL +TS-ICC	26	32	0	0
<b>Targets, collimators &amp; dumps</b>	33	AB-ATB-EET / IF / LPE / TCD + TS-LEA	31	2	0	0
<b>Controls and electronics</b>	45	AB-CO-IS + AB-CO-MA + IT-CO + TS-DEM	14	15	0	16
<b>TOTAL</b>	<b>350</b>		<b>71</b>	<b>264</b>	<b>0</b>	<b>16</b>
<b>Admin and Head Office</b>	22	TS-AS3 + TS-HDO		22		
<b>Total with Admin and Head Office</b>	<b>372</b>		<b>71</b>	<b>286</b>	<b>0</b>	<b>16</b>

# Technology Department

Technology Department	Totals Combining present staff (FTEs)	Origin (present structure)	Staff from AB	Staff from AT	Staff from TS	Not from section
Superconductors/HTS - SC Magnet design - Magnetic Measurements	51.9	AT-MCS-ML + AT-MCS-MDE + AT-MCS-SC + AT-MEI-SD + AT-MEI-MM ++AT-MEI-FP	0.0	49.9	0.0	2.0
Magnet integration and repairs- Warm Magnets	40.6	AT-MCS-CI + AT-MCS-MF+AT-MCS-MNC	0.0	41.6	0.0	-1.0
Machine Protection & ELQA & Quench protection	24.0	AT-MEI-TF+AT-MEI-PE+AB-CO-MI	7.0	15.0	0.0	2.0
Cryogenics	67.1	AT-CRG	0.0	67.1	0.0	0.0
Vacuum+CCS	69.5	AT-VAC and TS-MME-CCS	0.0	48.5	21.0	0.0
Injection/Extraction and Beam transfer	49.4	AB-BT	49.4	0.0	0.0	0.0
Power Converters	65.0	AB-PO	63.0	0.0	2.0	0.0
<b>Total</b>	<b>367.5</b>		<b>119.4</b>	<b>222.1</b>	<b>23.0</b>	<b>3.0</b>
ADM	13.3	AT-ADM	2.0	11.3		
TE DH and DHO	3.0		1.0	2.0	0.0	
<b>Total with Admin and Head Office</b>	<b>383.8</b>		<b>122.4</b>	<b>235.4</b>	<b>23.0</b>	<b>3.0</b>

- Yet to be done
  - Projects management and organization

- **“Project Leaders**

- The new projects within the sector of Accelerators and Technology are the luminosity upgrade of LHC and the electron-positron linear collider CLIC. The respective project leaders are Lyndon Evans (UK) and Jean-Pierre Delahaye (FR) who will continue in their respective functions. Since both project leaders will reach retirement age within the next few years their respective successors will be nominated next year”.

- J-P. Delahaye has committed to stay until at least mid 2010 for the completion of the conceptual design report including a preliminary performance report and a cost estimate. His successor **may** be named at the end of 2009. There are several valid candidates inside CERN and certainly several outside for this very high profile and very political job.

- Scientific Committee Structure
    - Sector wide
    - Departmental committees
  - Safety

# Dissemination of Information

- People present at this meeting should inform their staff and colleagues about what you learned today

# Questions and Discussion