# **17 Organization and resources**

### 17.1 Project organization

The ATLAS Trigger/DAQ Project is organised in three main sub-projects: the Level-1 Trigger (Nick Ellis), the High Level Triggers (Chris Bee) and the Data Acquisition (Livio Mapelli). The management of the overall project is organised in three levels:

- 1. The TDAQ Management Team (TDMT), whose members are the leaders of the three subprojects with the close involvement of the chairperson of the Trigger/DAQ Institute Board (TDIB, see Section 17.2). One of the three sub-project leaders acts as overall Project Leader on a yearly rotational basis, with the particular role of representing the project towards outside bodies.
- 2. The Trigger/DAQ Steering Group (TDSG), composed of the coordinators of the main sub-systems of each sub-project, the coordinators of cross-system activities and a number of ex-officio members, including the ATLAS Management and the TDIB Chair (see Figure 17-1).



Figure 17-1 The Trigger/DAQ Steering Group (HLT DS stands for HLT Detector Slices, and PSS stands for Physics Selection Strategy)

3. Each sub-project has its own internal organization and management, tailored to the specific features and needs of the system. The organisation of the HLT and DAQ sub-projects is illustrated in Figure 17-2 and Figure 17-3. Both the HLT and the DAQ are organised in 3 sub-systems each and a number of cross-sub-system activities. The organization of the LVL1 trigger sub-project is described elsewhere [17-1].

The submission and approval process of this TDR marks the completion of most elements of the R&D phase of the TDAQ project. The project organization will be adjusted in late 2003 in order to reflect the change of phase of the project, as it moves from design and prototyping to production.



**Figure 17-2** The High Level Trigger Steering Group ('Activities' are working groups cutting across the sub-systems)



Figure 17-3 The DAQ Steering Group ('Activities' are working groups across the sub-systems, extendable to HLT and LVL1 as well)

## 17.2 Resources

The overall ATLAS Trigger/DAQ Collaboration consists of 51 Institutes from 22 countries Each institute is represented in the TDAQ Institute Board (TDIB) [17-2], the policy and decision mak-

ing body of the TDAQ project, presently chaired by Aleandro Nisati. Typical tasks of the TDIB include discussion and decisions on financial and human resource as well as policy making.

The TDIB is assisted by two committees, the Resource Committee and the Speakers Committee.

- <u>TDAQ Resource Committee (TDRC)</u>: The TDIB is advised on finance and resource matters by the TDRC, comprising the TDMT, one member per major Funding Agency and two additional members representing collectively the other Funding Agencies. The TDRC is chaired by the TDIB chair, assisted by a Resource Coordinator (Fred Wickens).
- <u>TDAQ Speakers Committee</u>: This is a 3 member body, presently chaired by Lorne Levinson, mandated to recommend policy regarding conference speakers, to maintain a complete archive of conference presentations and to ensure a fair distribution of conference talks across the TDAQ Collaboration.

#### 17.2.1 HLT/DAQ resources

The HLT/DAQ part of the Collaboration comprises 41 Institutes from 21 countries for a total of ~230 members. The participation of Institutes in the sub-project is summarised in Table 17-1.

Sub-system	Institutes	Coordinator
HLT		
PESA	Alberta, Barcelona, Bern, CERN, Cracow, Geneva, Genova, Innsbruck, Lancaster, Lecce, London RHBNC, London UCL, Mannheim, Moscow SU, Napoli, Pavia, Prague (?), RAL, Rio de Janeiro, Rome I, Rome III, Wisconsin.	V. Vercesi
LVL2 Infrastructure	CERN, RAL, Rio de Janeiro, Rome I, Tel Aviv (?), Weizmann, Wisconsin.	F. Wickens
Event Filter Infrastruc- ture	Alberta, Barcelona, Mainz, Marseille, Pavia, Rome III.	F. Touchard
DAQ		
Online Software	Bucharest, CERN, Geneva, JINR, Lisbon, NIKHEF, St. Petersburg NPI.	M. Caprini
DataFlow	Argonne, Bern, CERN, Copenhagen, Cracow, Frascati, Hiro- shima, KEK, London RHBNC, London UCL, Manchester (?), Mannheim, Michigan SU, Nagasaki, NIKHEF, RAL, Rome I, Shinshu, UCI Irvine.	D. Francis
DCS	CERN, NIKHEF, St. Petersburg NPI.	H. Burckhart

 Table 17-1
 Current institute participation in the HLT/DAQ sub-projects

#### 17.3 References

17-1	ATLAS First-Level Trigger Technical Design Report, CERN/LHCC/98-14 (1998)
17-2	TDIB, http://cern.ch/Atlas/GROUPS/DAQTRIG/IB/ib.html