
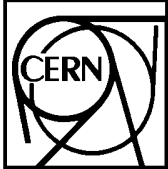



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|--|---|---|-----------------------------|
|                             |  | <b>Review of ATLAS Computing<br/>Scope and Agenda</b> |                             |
| <i>ATLAS Project Document. No.<br/>Project - System -- Type - Sequential No.</i><br><br><b>AT-RO-MX-0001</b> | <i>Institute Document No.</i><br><br><b>EB-98-022</b>                             | <i>Created</i><br>30-Sep-1998                         | <i>Page</i><br>1 of 6       |
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**REVIEW**  
of  
**ATLAS Computing**  
Scope and Agenda

This document presents the organizational details of the planned  
Review of ATLAS Computing.

|   |   |   |                         |  |  |
|---|---|---|-------------------------|--|--|
| <i>Prepared by :</i><br><b>Homer A. Neal</b>  |   | <i>Checked by :</i><br><b>Torsten Åkesson</b> |                         | <i>Approved by :</i><br><b>Peter Jenni</b> |  |
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Distribution: EB Members, Computing Steering Group Members, All Participants mentioned in §2.

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## 1. PURPOSE AND EXECUTION OF THE REVIEW

The objective of this review is to assess the status of the strategic planning and progress of ATLAS computing and to recommend actions that will help achieve the collaboration's goals in this important area.

The current computing strategy is described in the ATLAS Computing Technical Proposal [<http://atlasinfo.cern.ch/Atlas/GROUPS/SOFTWARE/TDR/html/Welcome.html>], which was endorsed by the LHCC in January 1997. ATLAS is expected to present to the LHCC an update of this plan by the end of 1999.

The framework of the present review was endorsed by the Executive Board on the 9<sup>th</sup> of September, 1998. The review agenda proposed below presents a list of issues and questions to be addressed in the review process. The Computing Coordinator and his staff are expected to supply written documentation addressing these issues. Questions that cannot be adequately resolved in this manner will be specifically addressed in special meetings of the committee. It is our expectation that all significant questions and issues will be addressed and properly dealt with by the committee several weeks before the final close-out session, tentatively planned for the 16<sup>th</sup> of February 1999. At this session, the reviewers will present their conclusions to the reviewees, and ample opportunity will be provided for final feed-back.

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## 2. PARTICIPANTS IN THE REVIEW

### Review Committee:

Homer A. Neal, Univ. of Michigan,  
Chair

Technical reference panel  
Bob Jacobson, LBL/BaBar, *remote*  
Gauthier Hamel de Monchenault,  
CEA/BaBar

Fabiola Gianotti (CERN/Milano)  
Stephen Haywood (RAL)  
Tatsuo Kawamoto (Tokyo)  
Alexander Solodkov (IHEP)  
Karl Jakobs (Mainz)  
Valerio Vercesi (Pavia)  
Jean-Francois Laporte (CEA)

Ex officio members ATLAS:

T. Åkesson  
P. Jenni

For information:  
ACOS  
EB

### Computing contact team:

Overall strategy: Juergen Knobloch  
Software strategy: Helge Meinhard  
Data base strategy: RD Schaffer  
Simulation: Andrea Dell'Acqua  
Reconstruction: Gilbert Poulard  
Analysis tools: Maya Stavrianakou  
Software development tools: Steve Fisher  
Frameworks: Lassi Tuura  
World wide comp.: Krzysztof Sliwa  
Infrastructure at CERN: Sverre Jarp

The review team will produce a written report for the ATLAS management and Executive Board containing relevant observations and recommendations. Based on this review, the ACOS will propose implementation recommendations to be considered by the Executive Board, which will decide on the ultimate actions.

## 3. SCOPE OF THE REVIEW AND SPECIFIC ITEMS

The scope of this review is to assess whether, in effort and strategy, ATLAS computing is on course to meet the needs of the project and of its collaboration members during the construction, commissioning and start-up of the experiment, as well as for the entire life of the experiment.

Specific points to be addressed in the review include:

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- Project schedule and milestones
- Procedures for stimulating and evaluating pilot software projects
- ATLAS computing organisation
- Refocussing of ATLAS computing strategy toward production of deliverables
- Provision of analysis framework during construction, commissioning and experiment start-up
- Quality assurance during software production
- Software testing and qualification procedures
- Software configuration management
- Reporting-lines for software production (lines to computing coordinator, system steering groups, combined performance groups)
- Project management issues associated with distributed software development
- Databases for event repository, calibration and geometry
- Coupling between offline and event filter software
- Assessment of software longevity and maintainability
- Facilitation of involvement of ATLAS institutes in overall software effort
- Development and utilization of modern collaborative tools
- Role of regional centers and guidelines for their establishment
- Assessment of manpower needs
- Plans for providing training opportunities for collaboration members desiring to learn new software technologies

#### **4. FORM OF THE REVIEW**

The chairman will assign specific items to individual reviewers who will be expected to report their findings and conclusions at the meetings of the full committee.

The review will make use of existing and newly requested documents; discussions with members of the collaboration and with members of the computing coordination group, with ACOS and consultations with physicists and technical experts external to the collaboration when appropriate. The Committee recognizes that the views of the members of the collaboration are crucial to a full assessment of the state of ATLAS Computing and every effort will be made to solicit their input.

To facilitate the work of the Committee itself, as well as to keep interested members of the collaboration informed of the state of our deliberations, relevant documentation will be included (or referenced by a link) on the web page <http://www.cern.ch/Atlas/GROUPS/SOFTWARE/ReviewPage.html> The content will include agendas for upcoming meetings, documentation provided by the Computing Coordinator.

The Committee is well aware that very significant progress has been made in ATLAS Computing, and that a considerable amount of the needed infrastructure is in place. But, given the core purpose of a review, namely, to find the areas of concern and risk and to propose appropriate remedies, the flavor of the review may, of necessity, at times seem intrusive. We ask the forbearance of those being reviewed and the cooperation and comity of the entire collaboration as we proceed with this undertaking. Also, we remind everyone that there are few sectors of an experiment that collaborators feel more fervent about than software. With this

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review we have an opportunity to bring ourselves closer together as we build a more cohesive and robust software system for the experiment to which many of us will be devoting a decade or more of our lives.

## 5. PROPOSED AGENDA FOR MEETINGS

### Meeting-1:

Date: Tentatively Scheduled at CERN for October 28, 1998 at 9h00

Place: CERN 40-4-C01

|  |     |
|--|-----|
| <i>Introductory Remarks</i>                            | 10' |
| <i>Status and overview of ATLAS computing</i>          | 45' |
| <i>Discussion</i>                                      | 60' |
| <i>Identification of the key review issues</i>         | 60' |
| <i>Task assignments to members of review committee</i> | 60' |
| <i>Executive session of Committee</i>                  | 60' |

### Meeting-2:

Date: (near November ATLAS Week)

Place: CERN 40-4-C01

|  |
|--|
| <i>Updates</i>                                       |
| <i>Reports from reviewers and technical panel</i>    |
| <i>Additional reviewer assignments</i>               |
| <i>Summary of emerging tentative recommendations</i> |

### Meeting-3:

Date: (near December meeting of Software Group)

Place: CERN 40-4-C01

|   |
|---|
| <i>Introductory Remarks and updates</i>                     |
| <i>Reports from reviewers and discussion of open issues</i> |

|  |                             |                              |                           |
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*Review of draft recommendations and observations*

Final close-out Meeting

Date: 16th of February 1999 at 9h00

Place: CERN 40-4-C01

*Formal presentation of recommendations*

*Feedback from Computing Coordinator and ACOS*

*Discussion of any report modifications*

*Plans for reporting findings to EB and Collaboration*

## **6. AVAILABLE DOCUMENTATION**

The following documentation will be made available on the web site <http://www.cern.ch/Atlas/GROUPS/SOFTWARE/ReviewPage.html> prior to the first meeting of the Committee. Additional relevant material will be added as the work of the Committee progresses.

(This section is being updated)