ACOS Report

ATLAS Software Workshop

March 1999

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Slides on: http://nicewww.cern.ch/atlas/wwwslides/acosrep990316/index.htm

ACOS Agenda

- Minutes from last meeting

(http://atlasinfo.cern.ch/Atlas/GROUPS/STEER/MINUTES/min981210.html)

- Domain Reports
- Reports from DIG, SPIDER, MONARC
- Computing Review
- Next LCB
- AOB

Minutes available:

http://atlasinfo.cern.ch/Atlas/GROUPS/STEER/MINUTES/min990219.html

Domain Reports

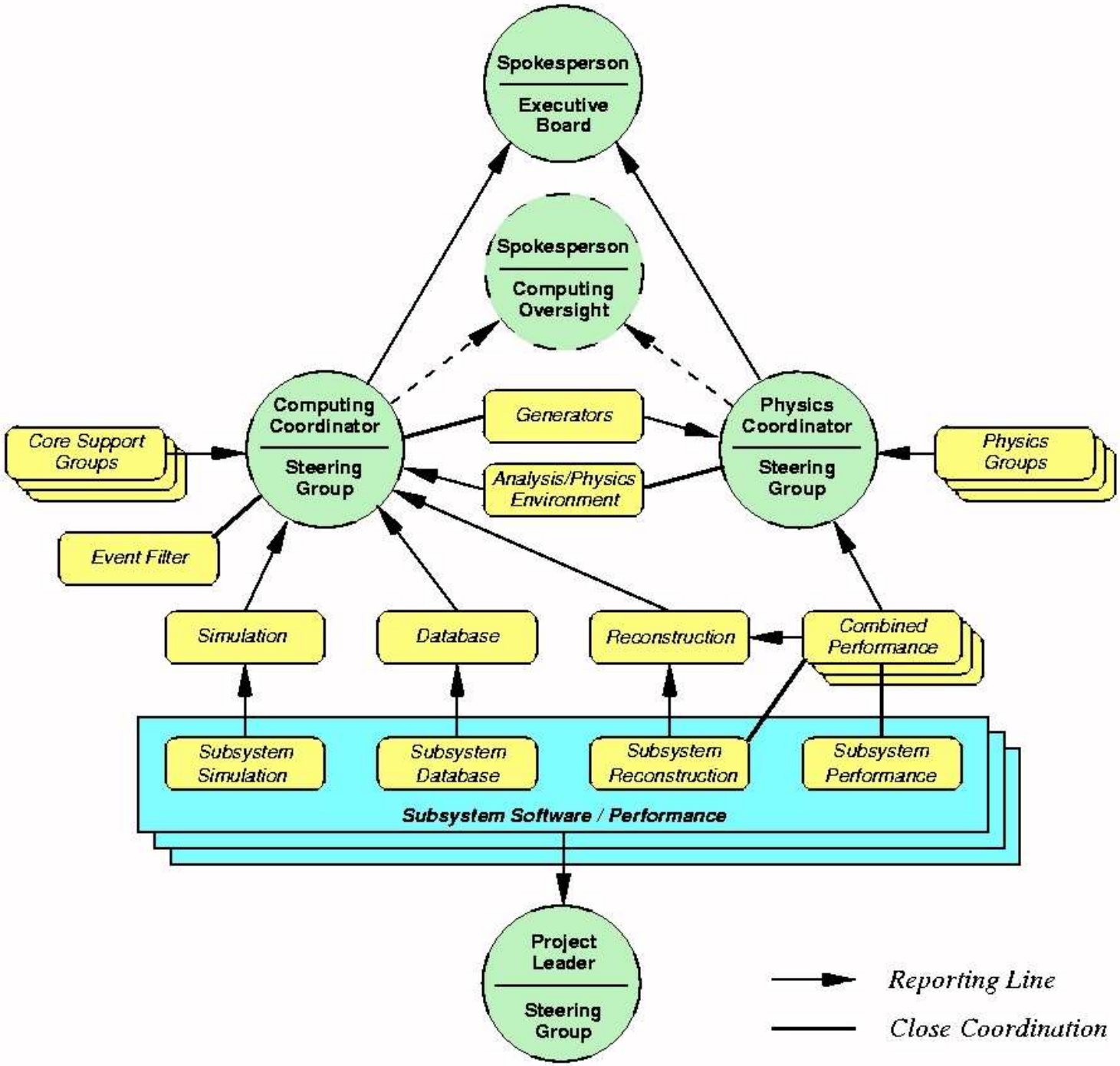
- Inner Detector - D. Barberis
  - Main focus Physics TDR
  - Pixels 300 -> 400 μm long
  - Test beam - G4 simulation
  - Evolved geometry to DICE
- LAr - M. Seman
  - Milestones to be readjusted
  - Considering joint LAr - Tile testbeam reconstruction
- Tiles - S. Solodkov
  - 4-day GEANT4 course
- Muon - G. Poulard
  - Problems with muon ID
  - GEANT4 for testbeam
- Trigger - T. Hansl-Kozanecka
  - C++ transition smoothly
- Database - RD Schaffer
  - 1 TB milestone completed
- Detector description - RD
  - May milestone - CHAOS
- Calibration&Alignment
- Analysis Tools (M. Stavrianakou)
  - Requirements milestone missed

Computing Review

- Just released before ACOS
- Endorses general strategy
  - Object Orientation
  - C++
  - Objectivity
  - Component model
- Discuss
  - Organization
  - Software Process
  - Regional Centres
- P. Jenni + T. Akesson
  - ATLAS computing is not on the right track
  - Implies important changes
  - Action plan for next EB 9.4.
  - New software will be written by people involved in systems and physics TDR
  - Computing is now in the focus of the collaboration
  - The collaboration should now be massively involved - keeping available software experise

Organizational Structure

- Discontinue DIG & ACOS
- Establish Computing Steering Group (CSG) - taking most of DIG tasks
  - Computing, physics, database, simulation, reconstruction, event filter coordinators
  - Management
  - 3 additional members
- Establish Computing Oversight Board (COB) - meeting regularly
  - Management, Computing & Physics Coordinators


Spokesperson
Executive Board
Spokesperson
Computing Oversight
Computing Coordinator
Steering Group
Physics Coordinator
Steering Group
Generators
Analysis/Physics Environment
Core Support Groups
Physics Groups
Event Filter
Simulation
Database
Reconstruction
Combined Performance
Subsystem Simulation
Subsystem Database
Subsystem Reconstruction
Subsystem Performance
Subsystem Software / Performance
Project Leader
Steering Group
Reporting Line
Close Coordination

Organizational Structure - Round Table

- Involve people working on physics TDR
- Training is important
- Another meeting with formal links from countries
- Formal commitment of institutes required
- Assemble tasks in work packages
- Address also maintenance of FORTRAN software
- Core group important
- Schism
  - overemphasized - would be solved anyhow after physics TDR
  - is mostly psychological
  - prolonged by physics TDR
  - should be overcome from both sides
  - Hope that new physics coordinator will improve the relation between the two communities
- Inner Detector plans on smooth transition to C++

Organizational Structure - Round Table -2

- Organigramme
  - Too many links.
  - Interfaces not clearly defined.
  - Explain in a separate document.
  - Reorganization necessary.
  - Proposed organization would widen the gap.
  - Need two bodies: one technical, one for policy decisions
  - Define mandate of each physics and computing coordinators
- Need a forum to discuss architecture
- Separation of reconstruction and simulation at a high level
  - is wrong - should pursue commonalities
  - experience has been disastrous
- DIG has never been a MOOSE left-over

ASP

- 90% of the ACOS members express astonishment about dismissal of the ASP
- Quality control is important
- Rules are not questioned
- Coding rules are not sufficient
- We are in a process of making the review procedure more gentle.
- Design and code reviews could be part of the learning process.
- The process need to be better communicated.
- Have to reduce the threshold
- StP is considered too difficult
- Improve process
- Simplify documentation

Regional Centres and MONARC

- Avoid duplication of work between MONARC and ATLAS
- Strong ATLAS participation in MONRC
- Decisions will be taken by ATLAS
- Regions to decide whether to establish regional centres.
- Central effort to help with requirements, resources, funding, ...
- MONARC work on analysis tools and databases is of general interest
- World-wide-computing group could be reorganized to develop a strategy for ATLAS regional centres.