Status of "Upgrade-proposal" document

Target Dates

20.06.2011:Outline and list of figures(DONE)27.06.2011:Draft 0 (abstract for all sections)(DONE)15.07.2011:Draft 1 (draft version of text)(DONE)

16.09.2011: Draft 2 (polished text + figures) -> distribute to ITS coll. (In Progress)

< 03.10.2011: Comments by ITS collaboration

10.10.2011: Draft 3 with comments from ITS -> distribute to ALICE

< 31.10.2011: Comments from ALICE



2.5 months ago, there was no document, now we have a draft for most chapters ...



Unfortunately, we had to give up our original target dates → they were moved by 3 weeks ...

More details ...

| 1 Introduction | Colorcoding GREEN "Polished" by the chapter editors BLUE Complete Draft version RED Incomplete Draft or empty | 7 Pages | 90% |
|--|--|---------|-----|
| 1.1 Introduction | | | 90% |
| 1.2 Current detector performance and limitations | | | 90% |
| 1.3 Motivations for upgrading | | | 90% |
| 1.4 Experimental cond | ditions | | 90% |

→ Will be reviewed once the other chapters are complete

| 2 Physics Motivation 37 Pages | |
|--|-----|
| 2.1 Current experimental situation in heavy-ion collisions and impact of the ITS upgrade | |
| ····· | |
| 2.2 Physics performance studies for the ITS upgrade | 49% |
| 2.2.1 Simulation methods | 90% |
| 2.2.2 D0 meson reconstruction as a benchmark for detector performance | 90% |
| 2.2.3 Charm baryons (Lambdac) | 90% |
| 2.2.4 B mesons at central rapidity | 40% |
| 2.2.5 Heavy flavour physics performance | 10% |
| 2.2.6 Long range correlations | 10% |
| 2.2.7 Competitiveness | 10% |

 \rightarrow We are sill missing major parts in section 2.2 ...

More details ...

Colorcoding
GREEN ... "Polished" by the chapter editors
BLUE ... Complete Draft version
RED ... Incomplete Draft or empty

| 3 Detector Functional Requirements | 55 Pages | 78% |
|--|----------|------|
| 3.1 Introduction | | 100% |
| 3.2 General Design Considerations | | 100% |
| 3.3 Simulation tools and procedures | | 90% |
| 3.4 Detector parameters | | 90% |
| 3.5 Impact parameter resolution | | 100% |
| 3.6 Tracking performance (efficiency and resolution) | | 100% |
| 3.7 PID performance | | 90% |
| 3.8 Trigger capabilities | | 5% |
| 3.9 Readout rate capabilities | | 5% |
| 3.10 Radiation environment | | 90% |
| 3.11 Redundancy | | 90% |

→ Good progress but ongoing discussion regarding efficiencies for the different scenarios ...

More details ...

| 4 Detector Technical Implementation | 37 Pages | 100% |
|---|----------|-------------|
| 4.1 Introduction | | 100% |
| 4.2 Technology Options for Pixel Detectors | | 100% |
| 4.3 Technology Options for Strip Detector | | 100% |
| 4.4 Readout and control electronics | | 100% |
| 4.5 Irradiation Plans | | 100% |
| 4.6 Testbeam Plans | | 100% |
| 5 Mechanics, Services and Integration | 41 Pages | 83% |
| 5.1 Introduction and System Overview | | 100% |
| 5.2 Conceptual design integration and mechanics | | 90% |
| 5.3 Cooling studies, R&D and prototyping | | 100% |
| 5.4 Beam pipe design | | 100% |
| 5.5 Detector and beam-pipe installation 5.6 Services | | 100% 10% |
| 5.6 Services | | 10% |
| 6 Cost Estimate, Time Schedule and Participating Institutes | 1 Page | 0% |
| 6.0 Empty emptiness | | 0% |

Excellent progress here, chap.6 will be written at the very end ...

09/12/11 St. Rossegger

Conclusion

- Unfortunately, we had to extend the deadlines by three weeks
- READINESS OF THE DOCUMENT -> ~ 70 %

(to be compared to 41% from our last plenary session)

• For the document to be ready for comments, we should aim for the full 100% so that people do not comment on text which will be changed later on ...

