

# Minutes of the 15<sup>th</sup> PAF working group meeting

16 January 2006

\*\*\*\*\* FINAL VERSION \*\*\*\*\*

Participants:

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M. Benedikt, R. Garoby, F. Ruggiero, W. Scandale, E. Shaposhnikova.

## 1) PAF report for Strategy Group Symposium in Orsay:

- The PAF document was approved by J. Engelen and has been officially submitted for the CCSG Symposium in Orsay.
- The document should also be given a CERN number (EDMS) for internal publication. The proper publication structure for PAF documents will be discussed with S. Myers (→Michael, Roland).

## 2) Beta-beam ion production:

- C. Rubbia is working on a new method for radio-active ion production. This method is based on stable ion beams, circulating in a low-energy (several MeV/u) synchrotron. The radio-active ions are produced via interception with a gas-jet. By adjusting properly the shape of the gas-jet, a 6D-cooling of the circulating beam can be achieved (cf. ionisation cooling for muons). This production technique could possibly provide the required beam intensities for the beta-beam.
- The properties of the radio-active ion beam after extraction from the synchrotron will be very similar to a beam obtained from a classical ISOL target. For the beta-beam this means that the complete accelerator chain remains unchanged.
- Carlo is presently finalizing a detailed report on his method that will be available in the next weeks. Michael and Mats are in contact with Carlo on that subject.

## 3) Work organisation inside PAF:

- The findings and analysis presented in the Orsay report will serve as basis for future work organisation inside PAF. It is however clear that any further (deeper) studies of the different scenarios will need strong endorsement of the management of AB and AT departments. Strong support of many specialists will be crucial to advance quickly in the analysis.
- Roland will provide a list of subjects to be addressed with suggestions of work-coordinators from the PAF team. As next steps, deliverables for each of the topics (description of scenario, cost estimate, resource-time-profile) and ways to structure and compare the various options will have to be defined. The goal is to present a clear outline of the work organisation to R. Aymer at the end of February.

- It was noted that already at a very early stage, immediately after definition of the different topics to be addressed, a first interaction with the management (department heads) is needed to assure a coherent view.
- Roland reported from an informal discussion he had with S. Myers. For Steve, the development of new IR magnets (more aperture) is clearly an important issue, as is further consolidation (outside the presently financed consolidation project) of the accelerator complex. The priorities in terms of new machines are Linac4, PS replacement (no phase 2 PS magnet consolidation) and SPS renewal.
- Walter underlined once more the fact that a close interaction with the management is needed using the case of the IR magnets as example. There are several different scenarios not only with significant differences in performance but also with strong political impact on organisation of R&D, etc.

#### 4) Miscellaneous

- Roland will arrange the next meeting with R. Aymer for end February/begin March.
- Regular (Monday) PAF meetings will normally take place in 866-1-D15 at 16:00h. The next meetings are scheduled for:
  - Monday 6<sup>th</sup> February, 16h00
  - Monday 20<sup>th</sup> February, 16:00
  - Monday 27<sup>th</sup> February, 16:00

Minutes by M. Benedikt  
27.01.2006