

DESIR collaboration Meeting

MINUTES

DATE:	03/12/2008	OBJECT:	Minutes of the DESIR collaboration committee meeting on 03/12/2008
N/REF:	SP2PP/DES/2008.1		
PREPARED		LOCATION:	University of Jussieu, Paris, France
BY:	P. Delahaye & JC. Thomas		

INSTITUTION:	GANIL	CNRS	Univ. Manchester	Univ. Leuven	CSIC Madrid	Univ. Caen
PRESENT:	P. Delahaye S. Grévy M. Lewitowicz JC. Thomas	B. Blank F. Le Blanc	P. Campbell	G. Neyens	J.L. Tain	
EXCUSED:						E. Lienard G. Ban
DIFFUSION:	To all participants					

TOPIC

Welcome by B. Blank

- Review of the objectives of the meeting: DESIR building layout (Bertram), finalization of the technical proposal (all), radio-safety issues (Jean Charles).
- A list of milestones was given:
 - DESIR Technical report to be submitted to the SPIRAL2 SAC by the 19th December 2008 (http://www.cenbg.in2p3.fr/desir/IMG/pdf/DESIR-Technical-Proposal-V090105.pdf)
 - DESIR building being included in the SPIRAL2 Phase 2 building program -> DESIR building specifications to be fixed by the 8th of January 2009 (SP2 Phase 2 external review)
 - Preliminary design study of DESIR beam lines (Interfaces + experimental hall): contacts with IPN Orsay; meeting the 9th of January 2009 at Orsay
 - DESIR safety report (exploitation rules, radiobiological risks and technical solutions): to be defined before the end of 2009 -> will certainly induce severe beam intensity limitations for the most critical beams (e.g. iodine)
- The building layout was presented. The design of the infrastructure excluding physics equipments and beam lines has to be defined before the end of the year, so that first offers can be asked to companies by mid-February. This building has to be a green zone (<25 mSv/h and <2mSv/y) which will probably impose a limit on the intensity that can be delivered there for a few beams. It is planned to use concrete blocks as movable shielding around the running experiments to allow for the others continuing working on their setup. A crane with 5 tons maximum load is foreseen for their manipulation. In case big magnets would have to be handled a 10 tons crane might be preferable. The total power needed for the installation was thoroughly estimated. A total budget of about 6M€ is expected. Beam line calculations and their cost estimate will be discussed with IPN Orsay.
- The technical proposal was thoroughly discussed. It should be submitted to the GANIL direction by the 19th of December (see list of milestones above). 2M€ are already available for the DESIR building from an accepted CPER. Funding for the high-intensity RFQ cooler SHIRAC as well as the high-resolution separator is included in the CPER. The final decision on DESIR as part of the SPIRAL2 project will be made by July 2010 at the latest. A solution for the remaining funds will still need to be found.
- As part of the technical proposal and the SPIRAL2 time line, the following topics were presented:
 - The SPIRAL 2 project timelines (M. Lewitowicz)
 - The double penning trap system (B. Blank)
 - o The high intensity RFQ cooler SHIRAC (B. Blank for G. Ban / F. Duval)
 - The Total Absorption Spectrometer TAS (J. L. Tain)
 - o The MLL Penning trap set-up (B. Blank for Peter Thirolf)
 - The beam preparation RFQ (D. Lunney)

All these talks are available at <u>http://www.cenbg.in2p3.fr/desir</u> \rightarrow collaboration \rightarrow DESIR related talks

- The remaining work for achieving the technical report was distributed among the participants (see http://www.cenbg.in2p3.fr/desir/IMG/pdf/Document1.pdf).
- A review on the safety requirements at DESIR concerning radioprotection was then done by Jean Charles (<u>http://www.cenbg.in2p3.fr/desir</u> → collaboration → DESIR related talks). As DESIR will be a green zone (see definition above), the beam intensities will have to be limited for a number of isotopes lying close to stability, or not well enough separated against isobars close to stability. The test cases of pure as well as non-separated ¹³²⁻¹³⁷Sn beams were evocated. In practice, if non selective sources are to be used for SPIRAL 2, the monitoring station will play an essential role as it will be the only way to check for contamination and to define the intensity limitation with respect to the radio-safety restrictions.

Next meetings

During the SPIRAL 2 week to be held at Caen on the 26th to 29th January 2009 (<u>http://spiral2ws.ganil.fr/2009/week/</u>):

DESIR collaboration meeting: on Tuesday the 27th, 9:30 AM
Joint DESIR-S3 meeting: on Tuesday the 27th