

FETS Meeting RAL R2 CR6 / R71 Boardroom – 13th March 2013

Present: J. Pozimski, A. Letchford, M. Dudman, P. Savage, M. Dudman, D. Faircloth, S. Lawrie, M. Clarke-Gayther, S. Alsari, M. Aslaninejad, C. Gabor, C. Plostinar, S. Gibson,
S. Boogert, A. Kurup, P. Posocco, R. D'Arcy, S. Jago.

Apologies: S. Jolly, J. Back, G. Boorman, A. Bosco

Circulation: All

Important: The next meeting date has been changed from the 10th April to 17th April

Administration

1. Spend is on budget for this year. Spend for the next year has been decided and will be available from April 2013 using the same project code as last year.
2. The web page is not currently operational. It had been suggested that three calendar's be used but it was thought this would cause confusion so only one will now be used. The log book on the website should always be used to note changes in configuration of FETS.
3. M. Dudman will take minutes of future meetings with P. Savage acting as deputy.
4. C. Gabor mentioned that ESS would like to have access to FETS. It was agreed that they should be allowed a fixed time around the 13th to 17th May 2013. It should be confirmed what it is they would like to achieve.
5. Everyone is required to have a radiation badge whilst working in R8. This can be obtained from the control room and must be changed monthly. Details can be obtained from M. Dudman.
6. Some deliveries to R8 have been left in corridor. Please ensure that your deliveries are labelled correctly and if valuable delivered to a secure location.
7. There was a discussion on the intellectual rights of uploaded documents. It was recognised that these belonged to STFC for permanent employees but it was not clear for employees of other organisations.

Ion Source / LEBT

1. Effort is being used to make sure the ion source is more reliable and repeatable.
2. C. Gabor is looking at the alignment of the LEBT and its performance. This is to be revised in July 2013.

MEBT

1. A comparison will be made of the various options and a decision made by the next FETS meeting, (17/04/13) so the design and manufacture processes can begin.

RFQ

1. Machining is commencing on section one. Issues with inspection have caused delay. Section one will be delivered to RAL inspection in approximately three to four weeks. (12/04/13)

2. The RFQ power coupler design was raised. It is currently being designed in Spain and an update on its progress should be sought.

RF

1. Initial tests performed on circulator. Antennae design being improved / modified at Imperial College before commencing tests on the 18/03/13.
2. RF components ordered from MEGA, USA and will be delivered by the end of the FY.
3. It should be confirmed if the RF 'T' piece is 50 or 100 ohms on each leg.
4. The configuration of the elbows could possibly be changed to save space. A 135 degree fitting would possibly enable this.

Beam Diagnostic

Toroid

1. Two toroid's made, two in manufacture taped not potted.

Laser

1. Laser has been repaired and will be at Royal Holloway where C. Gabor and A. Bosco will test it and report the results at the next meeting.
2. S. Warner has requested that the laser room been cleaned.

BPM

1. At present there are three design options for the mechanical design:

CERN'S design – Issue with length. (75mm)

Commercial (NTG) – Cost implications.

A. Letchford – Cheaper design using standard parts, less width (45mm) but requires design effort.

2. At present there are three options for the front end electronics design:

Commercial (Bergoz) – Cost implications.

Design using standard commercial RF modules, cheaper than full commercial solution but requires some design effort.

Breadboard – Cheaper design using standard parts, less width (45mm) but requires larger design effort.

A total of ~ k£20000 is expected for the BPM front end electronics.

AOB

1. There was a discussion about the lack of progress on the Quadropole design. It was thought that this should be addressed within the next two months. (08/05/13)

Actions:

1. M. Dudman to take minutes of meeting and circulate to members of the FETS team.
2. C. Gabor to contact the E.S.S. to confirm details and dates of experiment they would like to perform. A decision should be made by the next FETS meeting, 17th April 2013.
3. C. Gabor to look alignment and performance of LEBT.
4. C. Gabor and A. Bosco to complete laser tests by 17th April 2013.
5. C. Gabor to organise the cleaning of the laser room.
6. M. Aslaninejad and C. Plostinar to make MEBT simulations to compare the original and latest lattice using a 2D re-bunching cavity fieldmap and report on the results by 17/04/13.
7. P. Savage to liaise with D. Wilsher at RAL regarding the delivery and inspection of section one.
8. P. Savage to enquire about the progress on the RFQ power couplers.
9. S. Alsari to commence circulator test on the 18/03/13 and confirm specification of mega t piece by the next FETS meeting.
10. S. Alsari to investigate availability of components that may be available from MEGA to give other option for RF layout.