Paper Industry Technical Association
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Manchester University Pilot Paper Machine Meeting

SUMMARY

14th July 2011 – Paper Science Building / Manchester

Attendees:-

- Prof. Paul Hogg (*University of Manchester*)
- Claire Newton (*BIM*)
- Kate Leach
- Peter Forsyth (*UPM-Kymmene (UK) Ltd*)
- Roy Fairhurst
- Nigel Jopson (*Pira International*)
- Barry Read (*PITA*)
- John Husband (*IMERYS Minerals*)
- Stephen I'Anson (*University of Manchester*)
- Mike Mason (*Albany International*)
- JD Smith (*Smithtech Engineering*)
- John Poole (*Poole Projects*)
- Paul Stoney (*Poole Projects*)
- Martin Sheridan (*Heimbach*)

Barry Read opened the meeting by welcoming all the attendees and inviting each person to briefly introduce themselves and their interest in the Pilot Paper Machine within the University. He went on to report that he had been contacted by several notable and key individuals from the Paper Industry who had expressed their support for any initiative that would retain the machine for use in the UK; these included Brian Attwood, Trevor Dean and Geof Nuttall. There had also been contact from several potential sites, which might be able to 'host' the machine, if it was decided that it was both appropriate and feasible to relocate it. Barry reported that, as recently as the start of the meeting, he had been contacted by James Cropper plc interested in offering a site for the machine. Many think this is a resource they could use and support.

During the introductions, Nigel Jopson noted that the paper machine is of sufficient width to produce papers suitable for the convertors and is therefore good for trials; a view reinforced by John Husband.

Paul Hogg then described the recent history of Paper Science within the University and the current situation within the Paper Science Building, now occupied by NorthWest Composites. The University has no current teaching programmes in Paper Science and has consolidated the laboratory facilities into a much smaller footprint. The Paper Machine and associated equipment occupy an enormous amount of space and required the employment of a full time experimental officer (Bob Wilde), although he was also utilised on other projects. Over recent years, the machine has brought in a small amount of income (typically less than £100,000) that has not covered the costs. The University cannot continue to support the machine going into the future and they must either find a solution that has the machine running at a profit or dispose of the machine and make better use of the space. Decisions were 'precipitated' by Bob Wilde taking the early retirement package the University offered. Paul was completely open to ideas and, if the machine can be made financially viable, he is happy for it

to stay in the university. With current University overheads and costs, to justify the use of the space requires an income of £200,000 to £250,000 a year as a minimum.

The University is committed to retaining a Paper Research activity, but needs to be cost conscious.

Paul agreed that it was essential to keep the Paper Industry 'in the loop', especially those who had taken the time to attend, or had shown an interest in, today's meeting.

Steve I'anson echoed Paul's sentiments that to justify the machine's footprint and manpower needed a significant income from it. The machine is great for training and research tool and he is developing a project that would utilise some time on the machine. However, the University can't subsidise this machine.

Nigel Jopson commented that there will be a lot more work to be done in other areas and he believes that the machine would be a good resource for that. John Husband commented on the huge interest in composites produced from renewables and felt that the machine had a role to play in that area. Comments from around the table confirmed that there was considerable potential in areas such as long fibres, glass fibres and non-wovens.

Training was discussed and Roy Fairhurst commented that the machine had grown overly complicated for use as a training machine, although it was questioned if the enhancements could be 'switched off' for training purposes, leaving a basic 'hands on' machine similar to the former Bury College machine.

Peter Forsyth commented that Shotton currently have 37 apprentices on their programme and would like to see the resurrection of paper science in this country. Currently UPM are obliged to send their apprentices to Germany for technical training. More apprentices coming through now but there is no course to put them on.

The Government funding for training has been, and continues to be, reduced, and mills will have to pay a greater contribution towards the cost of training and they therefore want training which is 'fit for purpose' and delivered with high quality supporting notes. Currently there is no coherent structure for paper training in the UK and it is questionable that the UK could sustain a dedicated, comprehensive training programme alone, suggesting that we would need to cast a net further afield.

Barry suggested that, in future, the machine is going to have to be able to do everything and has a role to play in research, product development, training and production. Production could be further broken down into 'toll manufacture' and 'own brand products'. It was suggested that one of the factors influencing the research / product development projects utilising the machine was a lack of marketing effort by the University. Steve reported that there were some options from the 'conservation area' and that Bob Wilde had contacts that could be approached (Stuart Walsh?)

Claire Newton suggested that some converters could be interested in the use of the Paper Machine for the development of specialist products.

Paul commented that he had heard some very interesting ideas from around the table, but in order to retain the machine within the Paper Science Building he would need some firmer plans to justify the space charges for the area now occupied by the machine.

To try and crystallise the thoughts, Barry suggested that there were three options:

- **Option One** - develop a business plan to keep the machine at the University of Manchester. Machine stays within the University and a Group is formed to promote/generate income for the machine. This option became less viable following the departure of Bob Wilde, as there is now no Experimental Officer dedicated to the running and maintenance of the machine. Bob Wilde could be available to run the machine; but the approach would have to come from a third party as conditions of his early retirement are that the University cannot re-employ him.

- **Option Two** – Look at some way that the machine can be relocated but still be available for research at the University and for more industrial use. Relocation might also provide an opportunity to update the specification of the machine and Bob Wilde should be consulted with regards to any areas of potential improvement that could be addressed as the machine is relocated. This option might also lend itself to a 'Working Museum', but would be quite a long term project. There would be considerable advantage in locating the machine on an operational mill site.

- **Option Three** – some companies will perceive that the machine has a value and will try and purchase the machine from the University. There have already been some offers which have not progressed to conclusion.

It was not difficult to see that 'Option One' might provide an interim solution whilst 'Option Two' was developed and funding sourced to progress this option. Paul reported that there had been a long term aspiration for the University to vacate central Manchester and consolidate the University on a single site.

At this stage, it was essential to devise a 'plan' and cost the various options, as a prelude to seeking any potential funding (especially from Government sources, which now appears to support investment in manufacturing). John Poole would be central to costing the relocation of the machine.

During the course of this discussion, the matter of 'ownership' of the machine was raised and the opinions around the table were:

- Title to the machine lies with the University.

- The machine was 'gifted' to the University in the 1960s to replace an older machine, which was subsequently transferred to Bury College by the then 'Federation'.

The question of what was encompassed by the term 'Paper Machine' was raised by Steve; he felt that there was useful work that could be carried by retaining the stock preparation facilities within the University whereas some of the industrial attendees felt that the stock preparation was an integral part of the machine. If the existing stock preparation equipment was not included with the machine, this would be an additional cost that would need to be covered when relocating the machine.

Paul indicated that the University don't want this to drag on for too long; they are keen to get hands on any funds and space as soon as possible. The group should come up with some ideas as soon as possible. In the

interim, it may be possible to utilise the machine, although Bob Wilde would need to be employed via some form of 'Agency Arrangement'.

Paul Hogg then left the meeting to allow the group to consider future options before reverting back to the University. At Barry's request Paul gave an undertaking that the University would not do anything precipitous in the immediate future (two or three months) whilst the group gathered some initial thoughts and acknowledged that the mill would be open to an interim solution (Option Two) whilst the longer term alternative (Option One) was progressed.

Barry undertook to revert to Paul as soon as possible after the Summer Break.

With Paul's departure, Barry summarised the prior discussions and sought to prioritise future actions.

- The future of the Paper Machine probably lies away from central Manchester, although the University sees definite benefits in retaining access to the machine.

- The future plans are quite clear, with 'Option One' providing an interim solution (possibly twelve to eighteen months) whilst a more permanent solution (in the form of 'Option Two') is developed. A site either on or adjacent to a mill site would be preferred for purely practical reasons.

- On the assumption that the University would accept the interim solution, the interval would be used to both develop the strategy for moving the machine and put in place a solid marketing campaign to attract potential customers.

To develop the longer term strategy, the group needed:

1. The cost to remove and reinstall the machine as is, including the civil works needed to support the machine.

2. The nature and cost of any enhancements / repairs that could / should be undertaken as the machine is moved.

3. A description of the minimum level of stock preparation equipment needed to support the machine.

4. A review of the potential sites that could house the machine.

5. The 'Training' option needs to be developed and potential income assessed.

6. An estimate of the potential for developing income from the machine, which should include estimates from regular users and an 'allowance' for new users.

7. An initial response from sources of Government funding as to what sources might be approached with a view to supporting the project.

ACTIONS:

- **JOHN POOLE** to produce a 'first pass estimate' of the cost of relocating the Paper Machine to an alternate, as yet unidentified, location.

- **ALL** to come forward with names / contacts for other parties who might be interested in the project.

- **ALL** to raise awareness of the situation and encourage interested parties to come forwards.

- **BOB WILDE** is requested to produce a short summary of any current areas of concern with the machine or areas where improvements / upgrades could be implemented.

- **BARRY READ** to discuss potential sites with Shotton Paper, James Cropper plc and some of the other sites that have emerged.

- **BOB WILDE** to be asked to explore contacts in the conservation sector.

- **JOHN HUSBAND** to pass on details of 'Millennium Chemicals' to Barry

- **BARRY READ** to explore options with BIS

- **ALL** to identify Chemical Suppliers with an interest in Wet End Chemistry and chemical interactions.

- **ALL** – Date of next meeting: Thursday, 15th September @ The PITA Office (Bury) – 9:30 hrs