A. ANNUAL REPORT

1. Achievement of Outcomes

(See the forms below)

2. Project Coordination

2.1. The used day to day management of the JEP proved to be efficient in the process of the JEP outcomes realization.

2.2. The management system has not been changed

2.3. There was a problem with the transfer of the contracted funds, especially with the second rate. However we managed to realize the plan regarding equipment in the prescribed time.

3. Functioning of the Network

3.1 We had contacts with Lund University (prof. S. Asmussen), TU Munich (prof. K. Buchner) and University of Angers (prof. P. Graczyk). The contacts were limited in general because we have shifted almost all mobilities to the next year.

4. Activities and Outcomes

4.1. No institutional changes were planned.

4.2. The specializations "Application of Mathematics to Economy and Actuaries" and "Mathematics and Computer Science" were launched in February 1999, the bachelor (licencjat) degree program "Application of Mathematics to Natural Sciences-Biostatistics" will be launched in February 2000. All needed syllabuses has been worked out. Some additional courses in order to broaden educational offer for these specializations will be prepared during the next year.

The first semester of "Information Technology" specialization was launched in October 1999 . The corresponding syllabuses are now worked out in detail.

4.3. The planned lecture notes has been written and, except for one of them, printed.

4.4. In 1999 we had one T3 visit East/West and one T4 visit East/West. For the first visit A.Dąbrowski was selected. He is the person in charge of specialization "Mathematics and Computer Science" as well as of the basic course in statistics based on statistical packeges. Teaching statistics in a modern way is of crutial importance for us and we don't have much tradition in that. That is why A.Dąbrowski who speaks French has been sent there to discuss methods of teaching statistics there. In the nearest future we want to train some more people in statistics sending one of them to Lund and two of them to Ulm. All they are graduate students and we train them because young people are much more efficient in assimilating new ideas and when they finish their study we plan to employ them at our Institute. Two young mathematicians who went to Aarhus in January 1999 were selected also along these lines.

4.5. No student mobility was planned in the Revised Budget 1997/98.

4.6 The equipment purchased consist of the following computers: two HP Vectra VEi8 128MB, one HP Vectra VLi8, two HP Vectra VEi8 64MB and four computers HP Brio BA 64MB (9 computers as indicated in outcome 8 used in a new laboratory for network administrators). Moreover the following software packages were purchased: Maple V.5, Mathematica 3.2 and BackOffice 4.5, which were installed in the two new laboratories.

5. Conclusions

5.1 The key success in the realization of the Revised Budget 1998/99 is the creation of a new laboratory used to train fututre network administrators.

Another succes is introducing a big number of new courses in applications of mathematics to banking, actuaries, biology etc. A general tendency at mathematical institutions in Poland is to reduce number of abstract courses in pure mathematics and replace them by more applied ones. The reason for that is less and less interests presented by graduates from high schools in learning abstract mathematics. They are more and more interested in studing tools applicable to various fields. There is quite a strong competition among mathematical institutions in attracting students. Thanks to the Tempus program, restructuring we have done and thanks to the quality of our teaching we are not scared of it. Just the opposite: we are quite succesfull in attracting students. Every year we admitt 300-350 freshmen and we have twice as much candidates. As soon as our human and accomodation resources will increase we will gradually admit more and more freshmen.

Finally, a big succes is a new organisation of teaching basic mathematical courses for students of semesters 1-3. Those courses usually comprise 100-150 students and they are taught according to new syllabi adjusted to the level of freshmen. We are very careful in selecting material in order not to make it too abstract. Usually students have two options for a given course: an elementary one and an advanced one. For the problem sessions students are organized in groups of 40-60 students. Something like 1/3 of teaching time of proble sessions is devoted to classworks. Every week students write a short classwork which is carefully graded later on.

All this has two important consequences. On one hand, students are forced to study systematically and they better understand the material, and on the other, we need less professors to guide problem sessions. In this system we are able to reduce number of problem sessions, enlarge students groups and at the same time to make our teaching much more efficient. Students really try to deal with mathematical problems, many of them come to talk to us during our office hours. This is a new phenomenon that to this extend has never taken place before.

5.2 Help from prof. Asmussen (Lund), prof. K. Buchner (Munich) and prof. P. Graczyk (Angers) has been found very gratifying.

6. Individual Grantholder Reports for 1997/98 mobility

(See next pages)