MEMORANDUM FOR CABINET BY MINISTER OF EDUCATION ON ENGINEERING COURSES AT M.C.A.S.T.

Professor R.E.D. Bishop, Head of Department at Mechanical Engineering at University College, London and external examiner for the degree courses at MCAST, was invited by Government to come to Malta at the beginning of August to advise the Minister of Education on the future of the degree and diplors courses in Engineering at MCAST.

- 2. The first course which started in October 1963 has just ended and all nine students (6 degree and 3 diploma) completed the course satisfactorily. New courses started in October 1965 and there are 13 students (5 degree and 8 diploma) of whom 4 and 7 respectively passed the Part I Examination.
- There are clear signs that in 1965/66 all was not well at the Part I level. To make matters more difficult, the three UNESCO Heads of Departments left at the end of this session, and there are no immediate prospects of replacing t en by local counterparts. Apart from the Heads of Departments there are also a number of vacancies at lecturer level; calls for applications have been published and there have been a number of expatriate applicants but no appointments have yet been made, and not all posts can in fact be filled.
- 4. There will be difficulty in running the Part II courses next year, though it is hoped that the Department of Mechanical Engineering of University College, London and the Department of Civil Engineering of King's College, London will provide help as they did last year. The help required for Part III the following year, however, is likely to be very substantial and Professor Bishop and Professor Nash have both emphasized that they cannot guarantee the continuance of this help.
- Professor Bishop (and indeed by all three external examiners at various times during the past three years), it would appear that the cost of the degree courses as they are planned at present would be excessively high for the number of students we are likely to have in the next few years. Even if the number of students admitted reaches 30 each year, the courses will not be cheap; and the average number admitted in the past three years has been six per year! The number will no doubt rise as performance

- at G.C.E. 'A' level improves but it is not likely to become anything like 30 for a considerable time yet.
- the cost of the courses by reducing standards as this would immediately jeopardise any possibility of recognition of the degree by the Professional Institutions. As a good proportion of the graduates will no doubt seek employment abroad such a reduction in standard would be unacceptable and this solution should therefore be immediately discarded.
- 7. The possibility of closing down the courses has also been considered. Though immediately this may be the most economical solution, it would make it very much harder to start degree courses again at a later stage. It also disregards the fact that well-equipped (and expensive) laboratories now exist at MCAST which were intended not only for technician training but also for undergraduate teaching. All in all, this solution should not be adopted unless the financial position becomes desperate.
- 8. Thus assuming that the degree courses will continue, the problem is whether such courses should be left under the control of MCAST or be transferred to RUM. Whichever way this problem is solved there are two points that have to be kept in mind:
- (i) Common use will have to be made of the present laboratories for some time for both technicians and undergraduates so that if the course is transferred to RUM practical classes will in the main still go on at MCAST.
- (11) In either case the structure of the courses will have to be radically altered so that they could be run more economically, but the final form that the courses will take depend on whether they are run at MCAST or at RUM.
- 9. Independently of this decision, the training of techniciens and higher technicians at MCAST must continue. This is by far what is most needed at the present moment and nothing must be allowed to interfere with its continuation.
- 10. If the degree courses are to be a success a larger measure of autonomy for the Engineering departments is necessary whether the course is run by MCAST or by RUM. Heads of Departments will need far more authority than they

have been given at MCAST up to now, particularly in respect of money and administration of subordinate staff.

- 11. The final decision depends very much on the type of course that is wanted. Discussions were held, under the chairmanship of the Minister of Education, between Professor Bishop, the Director of Education, the Rector and Miss Mortiner; the views of Dr. Focken were also sought. The Minister, the Director of Education, Miss Mortiner and the Rector also net together without Professor Bishop further to discuss this question; they unaninously came to the conclusion that the courses should be transferred to RUM, though this would not be done immediately.
 - 12. Some of the reasons for this decision were:
 - (i) such a transfer is more likely to produce the desired increase in the number of students;
 - (ii) the Education Department though clearly the bestsuited to introduce the undergraduate courses in conjunction with the other courses run at MCAST is not necessarily the best for supporting them in perpetuity;
 - (iii) the University external examiners have consistently advised transferance on the basis of their professional judgement;
 - (Iv) RUM can attract assistance more easily from U.K. universities than MCAST would be likely to.
- 13. In the present circumstances, this last is probably the most important consideration. Immediate help is obviously needed; it is equally obviouslthat help would be needed over the next few years as at present there are no Maltese counterparts who can become Heads of Departments within a sufficiently short time.
- 14. It is very likely that Professor Bishop can be persuaded to take a very active interest in the future of the engineering courses if their running is transferred to RUM. A man of his calibre is necessary to remove the courses from their present difficulties, and such men are extremely difficult to get. We would be very fortunate if we could have the guidance of Professor Bishop whose reputation as an engineer is of the highest.

15. It must be also stated that if it is decided to leave the courses at MCAST, Professor Bishop would be prepared to enlist the help of someone from a polytechnic in Britain to assist MCAST through the next few years. It is quite understandable that he himself would not be in a position to help directly.

1st September, 1966.