

6. PARTICIPATION IN THE MAST PROGRAMME¹

M.E. Manso (Head), A. Silva

6.1. INTRODUCTION

The participation of the Association EURATOM/IST on the MAST programme was focussed in 2002 on microwave reflectometry. The following main tasks were carried out:

- Finalization of the assembly, implementation and testing of the diagnostic;
- Improvements in the detection amplifiers in order to reduce noise;
- Assessment of the reflectometry diagnostic performance. All channels have been tested with a metallic mirror placed inside the machine;
- First plasma measurements were made. The experimental results showed clear fringes due to the MAST plasma in the Ka band channel but reveal the loss of reflected signal in the K band and part of the U band channels. This situation was identified as being most likely due to problems in the installation of the diagnostic in the machine, which can only be corrected in the next vacuum break.

¹ Work carried out in collaboration with the MAST Team, of the Association EURATOM/UKAEA (Contact Person: Geoffrey Cunningham).