

neutralizing devices into more modern mines incorporating sophisticated fuses with self destruct or self neutralizing devices and passive self deactivation devices. This consultant study contract was issued by DND to SNCIT on 1 October 1994 with completion of the study and submission of final report on or before 15 December 1994.

SNC Industrial Technologies Inc. is the only manufacturer of military ammunition and landmines in Canada for the Department of National Defence. SNCIT is designated as the preferred source of supply in Canada and to be the center in Canada for the maintenance and further development of industrial defence capabilities in the production facilities, as well as the necessary technical knowledge, research and development relating to ammunition products for DND. The company has research and development capabilities with expertise in aeromechanics, energetic materials and materials engineering technologies. The company has manufacturing capabilities on diversified ammunition products. Because of its participation in a number of NATO projects and studies and manufacture of various types of ammunition products for DND, the company has established a close working relationship with a number of European and United States companies involved in the development and manufacture of defence products. SNCIT works closely with Canadian Defence Research Establishments on technology development projects and with DND on product development, technology transfer for new munitions and manufacture of military ammunition for DND. The company has extensive experience in the manufacture and assembly of conventional landmines. This experience together with its special business relationship with DND and contacts with international companies are used in the conduct of this study.

1.2 Scope of the Study

The scope of the study involved analysing the existing landmines in the Canadian Forces inventory and the landmines on a worldwide basis and document the technological challenges associated with retrofitting these mines with fusing mechanisms incorporating self destruct or self neutralizing mechanisms. In addition, the technological challenges associated with incorporation of passive self deactivation device, as a fail safe backup to the self destruct or self neutralizing device, are also analyzed. A rough order of magnitude costs associated with retrofitting the existing landmines with self destruct or self neutralizing devices are also included.