

Chapter 1 – INTRODUCTION

The context of IST-035/RTG-015 work is centered on a broad categorization of technologies and military application areas, as shown in the following table:

Table 1-1: Context of IST-035/RTG-015 Work

WirelessLAN (10m - 1km) • 802.11 a,b,h,e,i • 802.16	Ad-hoc NETwork	Command Post & vehicles	Military Relevance + Interoperability + Urban issues
WirelessPAN (<10m) • 802.15 •Bluetooth •UWB		Soldier Network	

The present document presents for each technology architecture, security, QoS, performance and frequency aspects. As a reference document it not only discusses technology, but also positions it in the context of the relevant operational deployment. For that reason, the document will be able to take as a starting point the classification of the operational use of COTS systems, made by the SCI-107 WG.

This document is structured around 9 chapters. Chapter 1 is the introduction that presents the layout of this document. Chapter 2 refers to ad-hoc networks focusing on MANET. Chapter 3 is an overview of WLAN technologies, while in Chapter 4 broadband wireless access technologies and protocols are presented. Chapter 5 is a general approach of a Personal Area Network. Command post and urban operation are presented in Chapter 6, while in the next chapter the soldier network is described. Security, ECM and ESM issues are handled in Chapter 8 and finally we sum up with the conclusions in Chapter 9, in the form of comments on how to cover specific NATO requirements. In addition there are annexes at the end of the document that give more technical information about the topics resented in this document.

