INTRODUCTION

1.1 WHAT IS RED TACTON?

Human society is entering an era of ubiquitous computing, when networksare seamlessly interconnected and information is always accessible at our fingertips. Red-Warmth, T-Touch, Acton-Action stands for Red Tacton.Instead of relying on electromagneticwaves or light waves to carry data, Red Tacton uses weak electric fields on the surface of thebody as a transmission medium. Nippon Telegraph and Telephone Corporation (NTT) ispursuing research and development of an innovative Human Area Networking technology calledRed Tacton that safely turns the surface of the human body into a data transmission path atspeeds up to 10 Mbps between any two points on the body.

Using a novel electro-optic sensor, NTT has already developed a smallPCMCIA card-sized prototype Red Tacton transceiver. Red Tacton enables the first practicalHuman Area Network between body-centered electronic devices and PCs or other networkdevices embedded in the environment via a new generation of user interface based on totallynatural human actions such as touching, holding, sitting, walking, or stepping on a particular spot.

Red Tacton can be used for intuitive operation of computer-based systemsin daily life, temporary one-to-one private networks based on personal handshaking, devicepersonalization, security, and a host of other applications based on new behavior patternsenabled by Red Tacton. NTT is committed to moving Red Tacton out of the laboratory and intocommercial production as quickly as possible by organizing joint field trials with partnersoutside the company.