# TOURIST INFORMATION VOICE SYSTEM USER MANUAL 2.0 Installation and Data Entry for Bus Tour Version

## Pramod Sharma, Devon Wilson and Stephen Kelly

#### Introduction

This report is the user manual for the Tourist Information Voice System (TIVS), which is a location aware and feature triggered commentary system for tour vehicles, boats, buses and pedestrians. TIVS uses Geographic Information System (GIS), Global Positioning System (GPS) and wireless technology in order to support the traveller in the on-tour phase of their activity. This application allows tourism organisations and Small and Medium Sized Tourist Enterprises (SMTEs) offering guided tours to improve their services through the delivery of location aware and feature triggered commentary to tourists on the move.

TIVS supports the delivery of audio commentary to tour groups and individuals in a local environment (e.g. Brisbane). Tourists receive audio commentary on Points of Interest (POIs) (e.g. Parliament House) based on their interests (e.g. history, architecture, sport), location, travel speed and direction. The POIs mentioned and the commentary on them will vary for each group/user, depending on their interests, route, travel speed and direction. Travellers can also receive real-time up-to-date information/commentary on POIs (e.g. 'the tiger exhibit at Dreamworld is closed today') via General Packet Radio Service (GPRS). When there are no POIs to be mentioned, TIVS either plays music or provides a general interest commentary on the region (e.g. the Gold Coast).

While travellers are on tour, they can also view their current location on a map, the location of POIs already mentioned, the location of the current POI featuring in the commentary and the location of the next POI to be mentioned in the commentary. They can also view commentary as text, view images on POIs (while they are being commented on) and view videos at any time.

This user manual guides tourism organisations and SMTEs through the installation and data entry process. When TIVS is purchased, such organisations receive a DVD containing the TIVS application, the data entry application and map data. The POI data, however, must be entered using the data entry application.

## **Significance**

TIVS is a unique application for the tourism industry as:

- It is a 'geography smart' tour guide for tour groups and individuals.
- It delivers audio, text and graphics via mobile devices.
- It is a multi-lingual tour guide (commentary can be delivered in any language, provided the information is recorded in the database in the appropriate language).
- It allows for the delivery of ad hoc commentary
- It allows for on-the-fly updates (synchronisation) via GPRS.
- The Look Ahead Algorithm for POI detection detects and arranges POIs and items in a queue according to tour type, location, bearing, speed and distance.

#### **Hardware**

The hardware required for TIVS is as follows:

- Computer/laptop for the bus/vehicle
- A GPS receiver (Bluetooth or USB)
- Computer for data entry
- Bus sound system
- LCD screen/TV in vehicle

### Other Requirements

.Net framework 2

- GPRS data plan (recommended but optional)
- Bluetooth required for Bluetooth GPS only

## **Software on DVD**

- TIVS
- Data entry application
- MapWinGIS