

ENTRY OPTIONS–DESK-TOP ASSESSMENT OF IN VEHICLE UNITS FOR TRANSPORT OPERATORS

1 INTRODUCTION

The Entry Options initiative allows transport operators to present their existing In-Vehicle Units (IVUs) for assessment by TCA, for use in the IAP.

TCA will assess IVUs used by transport operators against the national IAP Functional and Technical Specification.

NOTE: A Desk-top Assessment does not constitute the IVU being recognised for IAP Services.

2 BACKGROUND

This document provides an indicative list of requirements for TCA to conduct a Desk-top Assessment of an In-Vehicle Unit (IVU) presented by transport operators through the Entry Options initiative

TCA acknowledges that each transport operator is different. Therefore, this document should be treated as a general overview of the information required. Transport operators may also be requested by TCA to provide additional information relating to their specific environment.

Broadly, the Desk-top Assessment will consist of up to three steps:

- Step 1 – On-site visit or discussion by phone to discuss
 - a) the IVU and back office environment generally
 - b) to establish what documentation is available.
- Step 2 – Provision of IVU documentation by the transport operator to TCA to conduct the Desk-top Assessment.
- Step 3 – Once the Desk-top Assessment report has been issued to the transport operator, the transport operator will then be given the opportunity to provide any further information that may be of assistance where the assessment report indicated that there is insufficient information available or identified a deficiency in the IVU that could be addressed through more detailed information.

3 REQUIREMENTS FOR COMPLETION OF A DESK-TOP ASSESSMENT OF AN IVU

As the first step in the process of recognising an IVU for IAP Services, TCA will conduct a Desk-top Assessment of the IVU.

The Desk-top Assessment is not conclusive and will provide an indication as to the capabilities of the IVU only.

IVU Equipment Required

The following equipment is required where possible:

- one IVU and associated cabling, connectors and fittings (shall be returned to the transport operator at the completion of the assessment)
- a user interface device if used (ie. Driver console)
- installation guide, including all power and access information to correctly install and operate the IVU.

TCA acknowledges that documentation may not be in the format or structure outlined below. Please be aware that TCA is primarily concerned with the content rather than the structure of the information.

IVU Documentation for IVU Hardware, Interfaces and Cabling

- Identification of the IVU model number, operating system, firmware version and release notes on previous firmware versions if available/applicable
- Documentation regarding any testing and certification for environmental conditions, such as temperature, vibration, electromagnetic interference, electromagnetic emissions, water and dust ingress
- Internal diagram of the IVU which details the internal architecture and design
- Description of IVU cabling and wiring
- Description of the IVU interfaces including power, data interfaces (such as serial interfaces)
- Description of buttons and visual or audit indicators (such as LEDs)
- Description of any physical security mechanisms such as security ties or security screws
- Documentation on the operating system if applicable.

IVU Data Generation and Storage

- Documentation detailing the following data generated by the IVU:
 - The storage and transmission structure of data in the IVU (i.e. data formats for generation, storage and transmission)
 - Position information (i.e. position format, frequency and other related information)
 - Speed (i.e. method at collection, frequency and other related information)
 - Time (i.e. frequency and source) including GPS and if available, an independent time source (such as an internal clock in the IVU)
 - Independent Movement Sensor and its operation (if applicable)
 - Monitoring of ignition or other indicators on the vehicle.
- Documentation detailing storage capabilities of the IVU:
 - Battery backup capabilities
 - Memory available
 - Maximum storage capability.

Data Communications Capability

- Documentation regarding data communications capability such as a HSDPA or GSM/GPRS modem, Satellite modem or any other modem including:
 - relevant telecommunications approvals documentation
 - Modem specifications
 - Modem configuration capabilities
- Documentation on cellular antenna (if applicable)
- Documentation regarding configuration options for communications with back office environments (ie. can the IVU communicate with different back office environments).

GNSS (GPS) Receiver

- Documented specifications of the GPS Receiver (ie. Specification Sheet)
- The configuration settings for the GNSS Receiver
- Documentation on GPS antenna.

Electronic Tampering and Malfunction Monitoring

- Documentation on the monitoring of any tampering and/or malfunction of IVU and/or its associated data.

Installation

- Installation document for the IVU and all related components
- Training documentation if available.

Maintenance

- Any maintenance documentation such as scheduled maintenance and repair processes and procedures.

User Manuals and Administration Documentation

- Any user manuals and administration documents which may provide additional information.

4 INFORMATION ON THE BACK OFFICE ENVIRONMENT

The IVU should be capable of communicating to a back office environment. The following information will assist in the desk-top assessment of the IVU:

- the back office system which the IVU communicates with
- who operates the back office system (ie. is it in-house or externally hosted)
- back office data centre environment (ie. is it hosted in a secure hosting or data centre environment and are the data centre standards met)
- documentation regarding security, back-up, archive, and access control
- software development practices such as version control, source code management and any other controls
- any other information that may be relevant.