



SEVENTH FRAMEWORK PROGRAMME THEME 7 Transport including Aeronautics



Reference manual for container security devices

Project acronym: **SMART-CM**
Project full title: **SMART Container Chain Management**

Deliverable No. (use the number indicated on technical annex)		D2.3.2	
Workpackage No.	WP2	Workpackage Title	Neutral layer development and deployment of existing technologies
Task No.	T2.3	Task Title	CSD provisioning
Date of preparation of this version:		24/11/09	
Authors:		Sequoyah NV	
Status (F: final; D: draft; RD: revised draft):		RD	
File Name:		SMARTCM-D2 3 2-v3 0 0_CSD reference manual.doc	
Version:		3	
Task start date and duration		M1-M30	

Revision History

Version No.	Date	Details
0.0.1	17/10/08	First input by ICSO
0.0.2	31/10/08	Second input by ICSO
1.0.0	2/03/09	First draft after internal review by Sequoyah
1.0.1	9/03/09	Revised first draft after inclusion into Word document template
2.0.0	25/04/09	Revised second draft (working version)
3.0.0	24/11/09	Revised third draft after inclusion of CIMC and removal of CommerceGuard

List of abbreviations

- CSD Container security device

Table of Contents

1	EXECUTIVE SUMMARY	6
2	INTRODUCTION	6
2.1	Methodology	6
3	REFERENCE MANUAL	7

List of Figures

Figure 1: Analysis matrix	6
Figure 2: Terminology.....	6

1 Executive summary

This document describes the results of an assessment of a number of commercially available container security devices (CSD's).

2 Introduction

2.1 Methodology

This document makes use of an MS Excel spreadsheet to document the assessment of each individual CSD according to the snapshot presented below. The horizontal axis shows the alternative devices. The vertical axis shows the individual characteristics:



	Arviem / Impeva Labs 
Commercially available CSD's	v2
	Global Sentinel
Need of Landinfrastructure	No
Mounting Options	On an open container only
Mounting Time	< 5 sec
Communications:	
Satellite	Iridium
GSM (SMS/GPRS)	Quad (SMS & GPRS)
WLAN	Large scaled field test going on
Mesh-Networking	No
Zigbee (250m)	No
RfID (Range / Events log)	No

Figure 1: Analysis matrix

The individual characteristics are documented in the sheet 'Terminology':

Communications:	
Satellite	How does the CSD communicates with its data centre, by what satellite system?
GSM (SMS/GPRS)	How does the CSD communicates with its data centre, by what mobile phone protocol?
WLAN	How does the CSD communicates with its data centre, by WLAN?
Mesh-Networking	How does the CSD communicates with its data centre, by mesh-networking?
Zigbee (250m)	How does the CSD communicates with its data centre, by ZigBee?
RfID (Range / Events log)	How does the CSD communicates with its data centre, by what RfID frequency?

Figure 2: Terminology

3 Reference manual

See appendix 1-4.