

# EVALUATION (TEST) CERTIFICATE

**No. DK0199-Alibi-07.03 revision 1**

**Object name**      **CSC5 Alibi system**

**Object type**      Alibi Storage Device

**Issued by**      **DELTA Danish Electronics, Light & Acoustics**  
EU - Notified Body No. 0199

**In accordance with** The applicable requirements of the Measurement Instruments Directive 2004/22/EC, and WELMEC Guide 7.2:2008

**Issued to**      **FKI Logistex A/S**  
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**Manufacturer**      FKI Logistex A/S

**Characteristics**      An external Alibi Storage Device suitable for use with both automatic weighing instruments and multi-dimensional measuring instruments.

**Description and documentation**      The alibi storage device is described and documented in the annex to this certificate.

**Remarks**      Summary of tests involved: see annex.  
This test certificate cannot be quoted in an EU type approval certificate without permission of the holder of the certificate mentioned above.

**The annex comprises 4 pages.**

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## 1. General

CSC5 is the software used to control FKI Logistex's parcel sorters. In CSC5 is implemented software separation and the legally relevant part of CSC5 is called Alibi System. This part handles the collection and long term storage of the legal measuring data for the parcels from the connected automatic catchweighers and multi-dimensional measuring instruments of the parcel sorter system.

## 2. Description

The CSC5 software realises long term data storage for weight and dimensions of parcels.

CSC5 receives measuring results packed in records with CRC checksum from the connected measuring instruments. CSC5 collects weight, dimensions and barcodes for the parcel, as it is transported through the parcel sorter controlled by the CSC5. The collected parcel information is stored in an alibi record protected with CRC checksum.

The 16-bit CRC checksum is calculated using a private secret key.

The CSC5 has an "Alibi lookup" facility. Entering a barcode will search the entire data base for occurrences of the barcode and display the found record(s) together with indication of whether CRC check is ok or not.

Stored records can be transferred to a host computer for invoicing of the parcel service. The transferred data is protected with a CRC-16 checksum, which have a CRC3 key that is known to the owner of the system, so that the integrity of the data can be checked. The legality of the use outside the CSC5 of the transferred data is not covered by this test certificate.

CSC5 has a system test function, where a series of test parcels with known weight, dimensions, and parcel ID barcode are sent through the parcel sorter to ensure that all legal information is collected correct, as collected information is compared with the parcel information a priori stored in CSC5. The result of the test shall be printed and kept in a log book. The test shall be performed at least every 6 months and after service on the PC hosting CSC5, on the transmission network, or when connecting new legal measuring instruments. The purpose of the system test is to ensure correct transmission and storage of the legal measuring data, not to test the accuracy of the measuring instruments.

## 3. Technical data

CSC5 runs on the main PC controlling the parcel sorter, as well as on client PCs allowing additional operators to use the system.

Alibi records are kept on the hard disk of the system for up to 1 month. Each month the alibi records are transferred - on operator command - to the backup data storage area on the hard disk. If not transferred, the parcel sorting stops when the database is full.

The content of the backup data storage can be moved to an external media (CD or DVD). Likewise the backup data of an external media can be read back into the backup data storage area for looking up old alibi records.

#### **4. Measuring instruments to be connected**

CSC5 is intended for use with automatic catchweighers and multi-dimensional measuring instruments placed at the inductions and on the parcel sorter.

#### **5. Functions and facilities**

- Receiving secured alibi records for connected measuring instruments.
- Secure storing of alibi records in database on disk.
- Backup of stored alibi records to removable media.
- Restoring of alibi records from back-up media.
- Alibi lookup of stored records in primary database or backup database, both based on ID barcode number of parcel.
- Possibility of protecting the transferred data between the CSC5 and the host computer for invoicing with a CRC3 key.

#### **6. Interfaces and peripheral devices**

The interfaces of the legally relevant software part of CSC5 are declared protective by the manufacturer.

#### **7. Impositions and conditions**

The CSC5 meets the requirements only when it is correctly loaded, and its identifications - checksums of legally relevant modules - displayed are in accordance to the table in Section 8.

A tare function of the catchweighers is not to be used when connected to CSC5.

Only but then CSC5 may be used for purposes subject to legal control.

## 8. Inscriptions and sealing

The version and the checksums of the legally relevant program modules shall be the following both for server and client, when displayed or printed by the CSC5.

For software version of alibi system: **1.0.5**

Checksums:

| File name          | Checksum                         |
|--------------------|----------------------------------|
| doc\relnotes.txt   | 32E0327B3E1DDE1E449479B461A33E43 |
| devenv.cfg         | 832AC44B2A0DE8B77B146EF4C7522033 |
| bin\libalibi.dll   | 91BB1C8742D8F5C9360696B7C273AD72 |
| bin\alibi-tst.jar  | BF1BBFF6CE1E8B05712782B5D9749AC4 |
| include\libalibi.h | 925145FABCCE07FCD66C40F5CFDB2EC4 |
| bin\alibi.jar      | 6FE26780EE3F8BC63385ECE71F0CE24B |
| etc\MANIFEST.MF    | E2420670C68F08E317A78C85967C0AD9 |
| lib\libalibi.lib   | FB5373BDD0C9FB663D0A0EAA51F013C8 |

For software version of alibi system: **1.1.0**

Checksums:

| File name          | Checksum                         |
|--------------------|----------------------------------|
| doc\relnotes.txt   | 2A8724E4FFA18CDAB022D1379818DDC5 |
| devenv.cfg         | 832AC44B2A0DE8B77B146EF4C7522033 |
| bin\libalibi.dll   | E815F9A8E4FB588DB37CD0E151EEC5BC |
| bin\alibi-tst.jar  | 4440C0BBA05422E8555BAAADF6A298AA |
| include\libalibi.h | 8FC091E65CEFB7DED579CE2F331A189D |
| bin\alibi.jar      | A8F834291257F60B9E3E7706834F168C |
| etc\MANIFEST.MF    | FC1EA61CDD5FB79A25864851F5D50B40 |
| lib\libalibi.lib   | 5B42C86CA6E6B6A8245D6C7659B9E392 |

No sealing of CSC5 software is to be performed, as CSC5 contains no type parameters (TP) or device parameters (DP), and other legally relevant data is stored in encrypted files.

## 9. Additional information for the EC verification

A copy of this test certificate has to be supplied at verification of a connected measuring instrument.

## 10. Documentation

The submitted documentation is filed at DELTA in file no. A530294 and A530552.

## 11. Examinations performed

The following examinations were accomplished at a PC:

- Examination of the submitted documentation.
- Examination of the software in accordance with WELMEC Guide 7.2 (2008), and Directive 2004/22/EC, Annex I, section 8.1 - 8.4 and 10.3.
- Examination of functional and operational behaviour.

In accordance to WELMEC Guide 2.5 (2000), section 5.1 and 3.3 no additionally tests of the PC are necessary as it carries a CE mark.

The examination is reported in the following test reports:

- DANAK-199859, dated 15 August 2007, 169 pages.
- DANAK-1910222, dated 11 July 2008, 21 pages.