Real-time container monitoring - a valid alternative to 100% Scanning

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Comprehensive Security

- World wide, 24/7 availability
- Coverage of the complete supply chain with real time capability
- Independent from ground based infrastructure
- Transparency from loading point to de-loading point
- Utilisation of e-certificates allows highest authenticity of data and pursues the concept of responsibility
- Data quality supports usage of data in logistic- and traffic management application
Your container in view - worldwide
Service Portfolio

• 100% access control to the container
• Definition of persons being authorised to close and open the container
• Real-time indication of any unauthorised openings
• Tracing/Tracking and Container identification
• Temperature monitoring with real time alarming function
• Graphical display in digi-maps
• Complete transport documentation
• API Interface definition for data support to other logistic and traffic management applications
World-Wide Transparency

USA

China

South Africa

South America (Chile)
Security Concept – Trusted Area

- Indicative System with real-time capability
- Container is sealed in a known and trusted area
- Container remains a trusted area during its transport
- E-Certificates allow the identification of persons who are empowered to open/close a container
- Deviations from the original status are indicated in real-time (e.g., unauthorised access, deviations from a defined temperature range)
- Supports multi-layer approach in risk-assessment of container trades
SeCureSystem: e-sealed with ACSD using e-certificate

Loading
Proofed area (AEO)

Logistic data, e-documents

Inspection Reports

Container Integrity Status

BREACH

Container remains a proofed area

e.g. unauthorized opening

Real time alert about breach

Container to be inspected

Inspection and integrity data

Container Integrity Data

U.S. TERMINAL

Deloading

SHIPMENT

Container Integrity Data

CONTAINER – proofed area

Inspection before shipment

Authorized relock
Performance – Tech. Features

- Real time alerts < 2 minutes
- World-wide coverage without ground infrastructure
- Battery pack lasts for >1500 messages which equals to at least three trades between Bremen and Shanghai (Basis: Regular Message every two hours)
- No additional Software installation at customer site required
- API as basis for interface to other SW applications is available
- Access to systemcenter from any Internet point possible and on the basis of user accounts and user hierarchies
- Unique electronic certificates for single trades and single opening/closing events
Tech. Features con’t

- Solution for ISO container: Fully mountable in less than 10sec.
- Solution for Reefer container: Full integration into cooling device including power supply
- Standard solution:
  - 3 temperature sensors, can be distributed in the container interior
  - Humidity sensor
  - Electro-optical sensors for intrusion detection
  - Mechanical sensors for door opening and mount status
Commercial Performance

• Start of commercial operation at the beginning of 2010
• More than 300 commercial trades conducted until end of 3rd quarter 2010
• Service to customers in all market segments:
  • Shipper
  • Forwarder
  • Carrier
  • Military
• Product Segments
  • Reefer
  • ISO Container
  • Trinking Water Container
User Application – Example

Integrity
Parameter Range
Event History
Pictogramms
Track&Trace
• Please visit us – on our web-site:

www.securesystem.net
• Powered by ASTRIUM

In cooperation with EUROGATE, hellmann Worldwide Logistics, CHS SPEZIAL CONTAINER, CHS CONTAINER, WEW