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Software solution for codification based on NCS, eOTD and ISO 8000

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Czech Republic at a Glance

- Leading country of Central Europe, formerly the part of Czechoslovakia
- The capital: Prague – the historical heart of Europe
- Membership in international organizations:
  - EBRD, IBRD, ILO, IMF, OECD, UN, WHO, WTO
  - NATO since 1999
  - European Union since 2004
  - Presidency of EU since January 2009
- Long industrial tradition – „Golden Czech hands“:
  - TATRA truck, the winner of rally Paris–Dakar
  - NanoteToolchnology, electron microscopes
  - State–of–the–art biochemistry (the most effective drug to date in the treatment of AIDS prepared by Antonin Holy)
  - Food industry, worldwide known – Pilsner Beer, Budweiser
The Czech Republic is worldwide known for its successes in

**Sport**
- Ice-hockey, Jágr’s Team, Olympic champions from Nagano, the last Olympic winter games in the 20th century
- Tennis, Miloš Mečíř, Olympic champion from Seoul 1988
- Football, Petr Čech, the best world goalkeeper

**Science**
- Chemistry, Otto Wichterle, the inventor of contact lens
- Nanotechnology, production of nanofibres

**Politics & Society**
- Velvet revolution in 1989, destruction of communism in Central Europe
- A group of Moravians founded the city of Bethlehem, Pennsylvania, on Christmas Eve in 1741

**Arts**
- Classical music (composers A. Dvořák, L. Janáček, opera divas G. Beňačková, M. Kožená)
- Drama, Václav Havel, ex-president of the Czech Republic
AURA Company Profile

- Company established in 1989, this year celebrates 20th anniversary of its foundation
- Long-time expertise in the area of large and sophisticated IS
- IS for military logistics specialization
- Crucial project for the military:
  - Information System for Logistics (ISL)
- NBC systems
- ISO 9001:2001 and AQAP 2110 certification
- Security clearance
Main Activities

- Information systems for military logistics:
  - **ISL** for the Czech Armed Forces and MoD – it covers acquisition management, supply management and logistics management

- Automated tools for cataloguing and codification:
  - **MC CATALOGUE** for NCBs, codification agencies and defence industry – a comprehensive tool for an easy and user-friendly materiel codification according to the standards of NCS
  - **MCC eOTD** for manufacturers, suppliers, agencies – Internet application for ISO 8000/22745 compliant codification

- Codification Agency (certified in the Czech Republic and Slovakia)
  - **Codification Services** for NCBs, manufacturers, suppliers – includes screening, the draft item identification, consultations

- Document management system:
  - **IS STAN** for the Czech Defence Standardisation, Codification and Government Quality Assurance Authority

- Application software development
Mission of AURA

*Our mission in codification area is:*  
⇒ to provide leading and comprehensive solutions for NATO Codification  
⇒ to provide top support for general adoption of Data Quality Management based on eOTD  
  ⇒ to reflect needs and requirements of our customers  
  ⇒ to improve continually functionality of our SW  
  ⇒ to support our customers during the whole life cycle of our SW – training, consultations etc.  
⇒ to provide full codification services
MC CATALOGUE
The tool for codification based on NCS
MC CATALOGUE - Introduction

**MC CATALOGUE (Materiel Codification CATALOGUE) is:**

- a cutting-edge Military Off-The-Shelf (MOTS) information system;
- fully compatible with the NATO Codification System;
- developed in the state-of-the-art Java EE technology.
**Reflecting Users’ Requirements**

**MC CATALOGUE:**

- meets national requirements;
- reduces time needed for codification;
- reduces costs of NCBs;
- reacts to reorganization and cutting down numbers of personnel in the Armed Forces and NCBs;
- supports all common activities as defined by the NATO Codification System.
MC CATALOGUE – Users

- MC CATALOGUE users
- Other countries which adopted the NATO Codification System
MCC eOTD
The tool for codification based on eOTD and ISO 8000
Conventional codification process

Purchaser – Data requestor

Producer – Data provider

Do you have? (requested product properties)

Hmmm, yes, I’ll send something...

Incomplete data

Proprietary information

Technical documentation

Often low quality
Potential duplicity
Lost time and money
MCC eOTD is a set of state-of-the-art tools for eOTD compliant codification and Master Data Management for manufacturers, suppliers, codification agencies and NCBs that meets the requirements of ISO 8000 and ISO 22745. It can be delivered as a stand-alone application or as a part of MC CATALOGUE.

The current version contains the following modules:

- IG Manager (Identification Guide Manager)
- Master Data Manager
- Query Manager
- eOTD-NCS Connector
MCC eOTD architecture
Key Features of MCC eOTD

- User-friendly codification and Master Data Management
- Mature and rich graphical user interface which is intuitive and easy to learn
- Codification of items that describe individuals, organizations, locations, goods or services
- Data processing in formats compatible with ISO 22745
  - eOTD–r–XML for Master Data
  - eOTD–q–XML for Data Queries
  - eOTD–i–XML for Identification Guides
- Support of cataloging at source including Smart STEP Codification
- Interfaces for existing Master Data sources (e.g. ERP, PDM, CAD)
- Multilingual support for the user interface and data
- Sharing codification data created in different languages
- Independence from hardware platform and operating systems
Fully automatic codification process

- **Query** (eOTD-q-XML)
- **Response** (Standard full set of data)

- **Purchaser** – Data requestor
- **Manufacturer** – Data provider

**Sending technical documentation is not needed**
Semi-automatic codification process

Query (eOTD-q-XML)

Response (full set of data)

Query Manager

Manufacturer - Data provider

Subquery

Subcontractor

Ambiguous response or item produced by other company

Purchaser - Data requestor
Manual response process

Query
(eOTD-q-XML)

Response
(full set of data)

Purchaser – Data requestor

Manufacturer – Data provider

Query Manager
MD Manager

Master Data Catalog

Easy manual data preparation
Master Data Catalog (MCC eOTD)

Ways of MD Catalog creation:

1. Import from:
   - PDM
   - ERP
   - CAD

2. Response (eOTD-r-XML) from Subcontractors

3. Conversion from NCS TIR

4. Manually
IG Manager (MCC eOTD)

Ways of IG repository creation:

1. Import from:
   - ECCMA
   - DLIS
   - AURA

2. Generation from MC CATALOGUE

3. Manually
eOTD – NCS Connector (MCC eOTD)

Bridge between two worlds

- TIR (NCS)
- MC CATALOGUE
- MCC eOTD
- MD Catalog
- MD Manager
MCC eOTD - Software as a Service
On-site implementation of MCC eOTD
Public Presentations of ISO 8000/22745 and eOTD Solutions by AURA

- ECCMA Newsletter - October 2007
  - AURA published article “Implementing eOTD in MC CATALOGUE”
- 1st international “ISO 8000 Data Quality Conference”
  - took place in Battle Creek (Michigan, USA) - October 2008
  - AURA presented a prototype of a new module MCC eOTD
- AC/135 Seminar on ISO 8000 and ISO 22745
  - took place in Bristol (United Kingdom) in November 2008
  - AURA demonstrated the eOTD solution for NCBs and defence industry representatives
- ECCMA Newsletter - February 2009
  - AURA published an article “User-friendly software for the ISO 8000/ISO 22745 data maintenance”
- PACS 2009 – Pacific Area Codification Seminar
  - Seoul (South Korea) April 2009, AURA demonstrated the eOTD solution for NCBs and industry
Public Presentations of ISO 8000/22745 and eOTD Solutions by AURA

• IDET 2009 – International Defence Exhibition
  – AURA held presentation about usage of MCC eOTD for codification of services for defence representatives including logisticians

• CODISEM 2009 – International Codification Seminar
  – AURA presented advantages of eOTD, ISO 8000, ISO 22745 and demonstrated the MCC eOTD solution for NCBs and defence industry representatives

• SMART STEP CODIFICATION III meeting
  – took place in Newcastle (United Kingdom) in June 2009
  – AURA joined the SSC III project and demonstrated the MCC eOTD solution

• NCS Modernisation Working Group meeting
  – took place in Luxembourg in June 2009
  – AURA presented suggestions for improving NCS and demonstrated the MCC eOTD solution

• 10th Codification conference in the Russian Federation
  – Moscow (Russia) October 2009, AURA demonstrated the eOTD solutions for codification centers and industry
AURA & International Standards

Quality of data and processes

AURA has been certified by

- NATO AQAP 2110 – NATO Quality Assurance Requirements for Design, Development and Production

Our software supports all standard ISO–22745 formats:

- eOTD–i–XML
- eOTD–q–XML
- eOTD–r–XML
Advantages of eOTD for industry

- MCC eOTD allows customers to benefit from the following eOTD advantages:
  - Open and widely available codification system
  - Universal usage for all lines of business
  - Easy and user-friendly codification of any items
  - Efficient development according to practical needs
  - Standardization of data processes by ISO 8000
  - Multilingual support
  - Automation of codification processes
    - Codification at source
  - Codification of services
  - Standardized data exchange
  - Connectivity to NCS
Proposal for cooperation in eOTD area

- AURA has started pilot implementations of eOTD for selected government and commercial organizations

- The pilot projects are opened for organizations and companies that want to
  - enter the new eOTD world with minimal expenses
  - be ahead of their competitors
  - establish processes for administration and data exchange based on modern technologies, standards
  - create standardized Master Data Catalog
  - gain ISO 8000 certification

- You are welcomed to participate in the pilot projects

- For more detailed information
  - visit our Conference exhibition, booth #1
  - contact us on email address aura@aura.cz
Thank you for your attention