Breakthrough innovation of NATO Codification System

The NATO Codification System (NCS) is a uniform and common system for identification, classification and stock numbering of materiel used by armed forces, so called Items of Supply. It is designed to achieve maximum effectiveness in logistics support and to facilitate materiel data management. The system is used by more than 60 NATO and non-NATO countries worldwide. One of the outputs of NCS is the largest database of codified materiel items in the world called the NATO Master Catalogue of References for Logistics (NMCRL) containing over 17 million NATO Stock Numbers (NSNs) and info about 2.9 million manufacturers and vendors.

International data exchange – way from punch cards format to XML

To keep information in the system up--to-date, it is necessary to exchange data between countries. International data exchange within the NCS in its current form was developed in the 1960's using the extant technology of the day: 80-column punch cards. Although the punch cards are not involved nowadays, the format based on them called NADEX is still used for international communication. Restrictions of this technology and processes do not allow transfer of

more enriched data sets to ensure the right item is provided to the right place at the right time – the basic paradigm of logistics. That was the reason for starting the NATO Data Exchange Redesign (NDER), the NATO Allied Committee 135 (AC/135) project to deliver a modern data exchange communications functionality to the NCS using Extensible Markup Language (XML), including a modernisation and rationalisation of NCS business rules. The NDER project introduces XML as a format for data exchange between countries. At the same time, it completely changes the process of international

communication (business rules). This is a large project that will affect all 60+ countries involved in the NCS.

AURA's contribution to NCS modernization and initiation of NDER

AURA, as a leading supplier of NCS software, participated in the modernization of the NCS from 2009. In June 2010, AURA introduced at the NCS Modernization Working Group meeting in Prague the concept "NCS Modernisation Redesign Data format + Process Redesign" which later resulted in the NDER project. As the concept of NDER represents a huge

change of NCS formats and processes, it was necessary to discuss it at many regular meetings of NCS Modernization Working Group and later Transformation Steering Working Group. AURA's experts have participated in tens of consultations with the NDER working team during development, implementation and testing. It was no surprise that the very first NCS tool that implemented the first revision of NDER specification has been MC CATALOGUE, the leading AURA's software used by 20 countries world-wide.

First testing of NDER ever

Historically the first testing of NDER communication was performed between MC CATALOGUE and the NATO Support and Procurement Agency (NSPA) in 2019. This enabled the launch of official tests of individual customers. Australia, one of the largest National Codification Bureaus (NCB) using MC CATALOGUE, became the world's first country to test NDER in August 2020. The tests were scheduled for 3 months. A group of six other countries using MC CATALOGUE will follow in November 2020. The goal is to have all twenty countries, AURA customers, tested by June 2021. The official worldwide

launch of NDER to an operational environment is scheduled for January 2022.

Impact of NDER to NCS tool changes

The changes in the NCS software related to NDER are not just about the redesign of the module for international data exchange. As each country has its own internal standards and guidelines for codification, most MC CATALOGUE users have specific customizations. All customized modules related to international data exchange (e.g. SAP interface, ERP connectors, Workflow module, ...) have to be adjusted for supporting NDER so that the system as a whole is tuned up. In addition to modifying MC CATALOGUE, AURA must also provide support to its customers for the actual transition to NDER and other related activities. Individual countries need to be trained several times, not only on the innovations that appear in the application, but also on the very principles and processes in the new XML format and new processes of international data exchange.

Support during demanding NDER tests

Due to major changes, the NCS community decided that each country involved in the NCS must test their codification tool and, indirectly, the personnel against NSPA. This will ensure the smooth launch of the new data exchange format and processes, which is scheduled for January 2022. AURA is ready to assist its customers in consultations and training personnel in using NDER related changes in the codification process and specifically in MC CATALOGUE and thus AURA's customers do not need to be worried about the transition to the NDER standard.

Proactive and customer-oriented approach matters

Through its involvement in the NDER project, AURA demonstrates a proactive, customer-oriented approach, a high level of professionalism and also that it takes its commitments seriously. Thanks to these values, MC CATALOGUE has been the world's number one codification software. By an active involvement in the NDER challenge, AURA again showed the real meaning of the statement "We don't make contracts, we build partnerships".
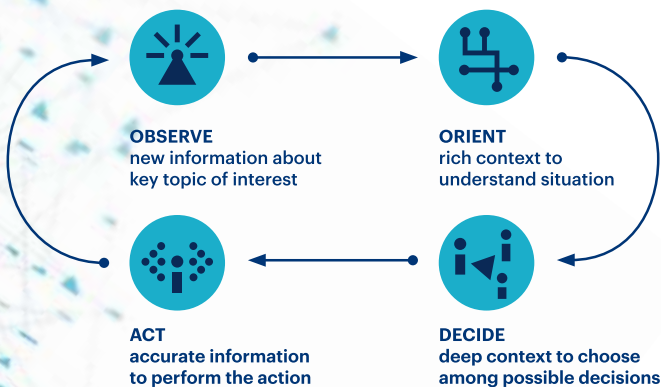
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