Bundeswehr Logistics Command

S-Series ILS Specification Day 2018, September 13
New Orleans, USA

Implementation and experiences in usage of S2000M in international and national projects
Major Andreas Erich Muehlberg

- Joined German Armed Forces (Airforce): 1st April 1990
- Studies of business administrator/ economist (FH)
- Since March 2016: Logistics Staff Officer
- LogKdoBw Abt Plg Grp DatMgmt Log
- Subject field manager of S2000M
- Current member: S2000M SC (mil. Co-Chair), PWG, MSWG and IOTWG (proposed)
- January to May 2009: ISAF (Logistics Officer)
Topics

- From the past to the future
  - Experience for use of S2000M compared with old specifications
  - The used issues/versions for what kind and type of project
  - Consumed time to change the existing ADP-System

- Future challenges
  - Challenges encountered in a common data module of S1000D, S2000M and the “upcoming” generation of ILS-specifications S3000L; S4000P; S5000F; S6000T and Sx000i
  - Values derived from the interoperability of these specifications

- Recommendation for use of S2000M:
  Single specification or the whole suite of specifications
1981: Foundation of the AECMA Supply Working Group (now ASD)

1992: S2000M Issue 2.1 – First issue which supports also international programs; still in use (eg. Eurofighter, NH90, Tiger, Boxer etc.)
→ GAF uses S2000M Issue 2.1 for land- and air-based projects


2005: S2000M Issue 4.0 – Update is usable for land- and naval-based defense programs; implementation of RESTIP-messages; implementation of Chapter 6 ("S2000M Light"); in use for A400M (MS) and NATO AGS
→ GAF uses S2000M Issue (3.0/) 4.0 for naval-based projects

2012: S2000M Issue 5.0 – This version is not recommended to be used (it was only the conceptual draft for the S2000M Issue 6.0) and have been withdrawn with the publication of S2000M Issue 6.1

2015: S2000M Issue 6.0 – Released in December 2015: Implementation of XML-data-exchange-messaging to integrate all other ILS-specialties in a "Common Data Model"; this version is not recommended to be used (it was only the conceptual draft for the S2000M Issue 6.1) and have been withdrawn with the publication of S2000M Issue 6.1

2017: S2000M Issue 6.1 – Released in March 2017: This version includes several improvements (especially for data exchange segments) and minor developments compared with S2000M Issue 6.0. The document was released in accordance to a common layout ("S1000D DM") to the other ILS-specifications; it is the latest issue of S2000M

For more information see the official S2000M-website: www.S2000M.org
Logistics from the perspective of procurement and life cycle management of the project departments

The logistic system of the Bundeswehr (LogSysBw) – designing and developing business processes (e.g. TLM / Maintenance etc.)

Logistics as a project element / project-logistics support plan (PLK)

Translation & Implementation / Responsibility for „The Doing“
Frame Conditions
Mission of the Joint Support and Enabling Service (JSES)

Provides key support to the Bundeswehr in joint core areas for operations

Reduces the strain on the other military organizational areas

Centralizes resources of the Bundeswehr

Joint Support and Enabling Service (JSES)

Army
Air Force
Navy
Medical Service
# German Defense Projects

## ARMY

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Leopard Main Battle Tank</td>
<td>2.1</td>
</tr>
<tr>
<td>Armoured Infantry Fighting Vehicle PUMA</td>
<td>2.1</td>
</tr>
<tr>
<td>Light 4-wheel armoured vehicle FENNEK</td>
<td>2.1</td>
</tr>
<tr>
<td>Armoured Vehicle BOXER</td>
<td>2.1</td>
</tr>
<tr>
<td>Protected Transport Vehicle 5t ZETROS</td>
<td>2.1</td>
</tr>
</tbody>
</table>

## AIR FORCE

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eurofighter Aircraft GE Version</td>
<td>2.1</td>
</tr>
<tr>
<td>A400M Tactical and Logistic Aircraft</td>
<td>3.0 / 4.0</td>
</tr>
<tr>
<td>GERFAUT (HAP) Helicopter Tiger</td>
<td>2.1</td>
</tr>
<tr>
<td>Tactical Transport Helicopter (TTH)/</td>
<td>2.1</td>
</tr>
<tr>
<td>NATO Frigate Helicopter (NFH)</td>
<td></td>
</tr>
<tr>
<td>CH-53 G/GS/GA Helicopter</td>
<td>2.1 / 3.0</td>
</tr>
</tbody>
</table>

## NAVY

<table>
<thead>
<tr>
<th>Equipment</th>
<th>Issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>K130 Corvette</td>
<td>4.0</td>
</tr>
<tr>
<td>Frigate class 122</td>
<td>4.0</td>
</tr>
<tr>
<td>Frigate 124</td>
<td>4.0</td>
</tr>
<tr>
<td>Frigate Class 125</td>
<td>4.0</td>
</tr>
<tr>
<td>Submarine Class 212A</td>
<td>4.0</td>
</tr>
</tbody>
</table>
Model Identifier (MOI) in use

Model Identifier in use (GAF)

Issue 2.1: 621
Issue 3.0 / 4.0: 327
Data Exchange NH90

1 Weapon System - 4 Design Countries – more than 11 Data exchange partners

Airbus Helicopters

Leonardo

NH Industries

Fokker
A weekend edition of the newspaper "Kölner Stadtanzeiger" contains more information than a person in the 17th century could process in his or her entire lifetime.

In 1986, an employee had approximately 80% of his or her knowledge in his or her head. Today, experts have only 20% in their heads, the remainder they get from the net or from data bases.

Those who will be most effective in selecting relevant data from the flood of knowledge will triumph in the future.

The exchange of information requires a common set of symbols.

Erwin Staudt
CEO IBM Deutschland
1998 - 2003
Special challenges to data processing logistics are posed by the complexity of the weapon systems, the multinationality of the projects, and the diversity of IT systems used.
The international NATO-Codification and Cataloging will be change in 2022 worldwide to XML-Standard
The experience we made in the past we paid attention to supports logistic based processes gives a strategic direction get national and multinational projects harmonized makes us more efficient reduces the diversity of IT systems in use let us act economically
Integration in the ILS-Suite

SX000i & SX001G & SX002D & SX003X & SX004G & SX005I

S5000F

S3000L
S2000M
S1000D
S6000T

Design of Support Systems and Equipment
LSA Data
LSA Task Data
Design Data

In-service Data Feedback
LSA Data

Material and Data
IPL
GS1
IETP

WaSys
SASP
SinN

Service Use

comments
Training Info
comments

STREITKRÄFTE BASIS
thank you!

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Major Andreas Muehlberg
Specifications & Standards
POC S2000M