The Voice
of the
S1000D User

Defense Working Group, Bundeswehr, Shipdex,
Civil Aviation, United States Air Force
Agenda

- Introduction
- Defense Working Group – Nicole Ndenge
- Tech Pubs Transition within the Bundeswehr – Nicole Ndenge
- Civil Aviation Usage of S1000D – Nick Iaccarino
- Shipdex™: The S1000D Business Rules for the Shipping Market – Marco Vatteroni
- USAF S1000D User – Jim Borkowski
- Q&A Session
- Conclusion
## Who is Nick Iaccarino

**Mr. Nick Iaccarino, Pratt & Whitney**

- Graduated in engineering and business
- System Specialist in S1000D Systems and Digital Data Exchange
- Member of several S1000D Task Teams
- Member of the Civil Aviation Working Group
- Member of the Electronic Publications Working Group
- Member of the S1000D Modularization Task Team

25 years veteran of the Aerospace industry, actually employed by the Maintenance Data Engineering of Pratt & Whitney.

The last 15 years he has worked in as a systems specialist focusing in the areas of electronic publishing systems, interactive technical manuals, and digital data exchange.

2009 he became involved in S1000D once Pratt & Whitney made the decision to produce their latest commercial and military publications in S1000D.

**TOPIC: “Civil Aviation Usage of S1000D”**

Nicole Ndenge

_The Voice of the S1000D User_
### Who is Marco Vatteroni

<table>
<thead>
<tr>
<th>Mr. Marco Vatteroni, SpecTec Group</th>
<th>A former Italian Navy officer who served for 7 years.</th>
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<tbody>
<tr>
<td>– SpecTec Integrated Logistic Support (ILS) Manager</td>
<td>Marco has many years of experience as IT and PM in the ILS Sector for some important IT companies (mostly in the Defense market) and for the Italian shipyard Fincantieri – Navy Department.</td>
</tr>
<tr>
<td>– Shipdex™ Author</td>
<td>He started working with S1000D at the beginning of 2001 with Fincantieri for the Italian navy.</td>
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<tr>
<td>– Shipdex™ Technical Manager</td>
<td>He is currently employed by the SpecTec Group and is a major driving force behind the shipdex protocol.</td>
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<td>– Shipdex™ representative at S1000D Steering Committee</td>
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**TOPIC:** “Shipdex™ Protocol: The S1000D Business Rules for the Shipping market”
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<th>Mr. Jim Borkowski, USAF Air Mobility Command A4PI</th>
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<tr>
<td>- Logistics Management Specialist</td>
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<tr>
<td>- Tech Data Integration lead for Air Mobility Command</td>
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<tr>
<td>- Bachelor’s degree in business management</td>
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A former United States Air Force Senior Master Sergeant who served 26 years in various aircraft maintenance, quality insurance and finance related positions before becoming a US Department of Defense civil servant.

Currently Jim is Tech Data Integration lead for the Air Mobility Command.

In 2009, he became involved in bringing S1000D into the USAF portfolio of IETM specs with the intention of making this international spec a key to standardization and interoperability.

**TOPIC:** “USAF S1000D User”
### Who is Nicole Ndenge

<table>
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<td>– Director of the Bundeswehr National Style Guide</td>
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<tr>
<td>– Defense Working Group Chair</td>
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<td>– Member of the S1000D Council and SC</td>
</tr>
<tr>
<td>In charge of directing the S1000D specification within the Bundeswehr by means of the Bundeswehr National Style Guide and the coordinating activities with other working groups at the international level as the German military representative.</td>
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### TOPICS:
2. “Tech Pubs Transition within the Bundeswehr”
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<td>Mrs. Nicole Ndenge</td>
<td>DWG, Bundeswehr</td>
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<td>2</td>
<td>Mr. Nick Iacarrino</td>
<td>Pratt &amp; Whitney</td>
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<td>3</td>
<td>Mr. Marco Vatteroni</td>
<td>SpecTec Group</td>
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<tr>
<td>4</td>
<td>Mr. Jim Borkowski</td>
<td>US Air Force</td>
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Let us listen to
The Voice of the S1000D User

Nicole Ndenge
The Voice of the S1000D User
The Voice of the S1000D User

Defense Working Group (DWG)

– S1000D awareness within the DWG: Defense Strives

Tech pubs Transition within the Bundeswehr

– From the present status to the future development

Civil aviation usage of the S1000D

– Some major challenges faced by Civil Aviation in adopting S1000D

The Shipdex™ Protocol: S1000D Business Rules for the Shipping market

– Why and What is Shipdex™
– Who is behind Shipdex™
– Shipdex™ success stories

USAF S1000D User

– Some major challenges faced by USAF in adopting S1000D (Program C-17)
– Actions taken to promote usage of S1000D in the USAF
Defense Working Group
dwg

Nicole Ndenge, Chair
Bundeswehr
Logistics Office, Data Management Logistics
Where the DWG fits in

The S1000D International Organization
About the DWG

• **Membership**
  – Defense customers (primary MOD/DOD rep.)
  – Industry approved by the primary MOD/DOD rep.

• **Activities**
  – To consider different **acquisition environments**
  – To participate at the **Working Area** and **Forum**
  – To collect **expectations** of group members
  – To define **common interests**
  – To consolidate **defense positions**
  – To **build a plan** for defense activities
  – To process **identified tasks**
Defense Strives

Policy documentation
- Contracting issues
  - Share experience
  - Harmonize requirements
- Integration with other standards
- Harmonization of business rules
- Military regulations

S1000D Future development
- Sympathy for new issues
  - Issue 4.1+
- Data dictionary
  - Benefit to the defense customer
- Modularization
  - Make the spec easier to learn and apply
  - Keep the spec maintainable
  - Achieve harmonization with other standards
  - Avoid the inflation of issues

Legacy (Life Cycle)
- Compatibility between issues

Methods
- S1000D tools
  - Lessons learned
- Samples
  - Extend “the bike”
  - Use a “real” data set

Nicole Ndenge
Defense Working Group
Sample Data

Defense ready to provide real data?

AUT 😐 DEU 😐

GBR 😁 SWE 😁

USA 😁

Nicole Ndenge
Defense Working Group
Sample Data

Defense ready to provide real data?

AUT

DEU

GBR

SWE

USA
Thanks for your attention!
The Voice of the S1000D User

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Tech Pubs Transition within the Bundeswehr

Nicole Ndenge

Bundeswehr Logistics Office, Data Management Logistics
Introduction

The theme of the User Forum 2012: "Transition from traditional tech pubs to Integrated Data Environment (IDE) service information solutions."

Transition within the Bundeswehr from traditional paper based tech pubs to IETP standard

„After the game is before the game...“
Transition

Bundeswehr Regulations for Assessment and Fullfillment of Demand and for Usage of Products

"Old World" > S1000D

S1000D Information Sets (IS)
1. Common IS
2. Air Specific IS
3. Land/Sea Specific IS

Standardization!

GAF T. O. A-0-1
GAF T. O. C-2-1

H011

M011
VWM 50
BV 0760

Nicole Ndenge
Tech Pubs Transition within the Bundeswehr
Transition

Bundeswehr Regulations for Assessment and Fulfillment of Demand and for Usage of Products

"Old World" > S1000D

The Bundeswehr National Style Guide

S1000D Information Sets (IS)

1. Common IS
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S1000D

Standardization!

Tech IT Information

M011
VWM 50
BV 0760

GAF T. O. A-0-1
GAF T. O. C-2-1

H011

Tech IT Information

Nicole Ndenge

Tech Pub Transition within the Bundeswehr
Identification Numbers

PNR: Product Number Reference

NATO Stock Number (NSN)

MFC: Manufacturer's Factory Code

Bw - Data Processing

S1000D

S2000M

Nicole Ndenge
Tech Pubs Transition within the Bundeswehr
Identification Numbers

S1000D

Automatic Identification Technology (AIT)

NATO Stock Number (NSN)

PNR

Serial-/Batch-Nr.

Product

Producer

NATO

GS1-128

S2000M

Nicole Ndenge
Tech Pubs Transition within the Bundeswehr
Identification Numbers

- Serial Shipping Container Code (SSCC) GS1 AI: (00)
- Global Trade Item Number (GTIN) GS1 AI: (01)
- Batch Number GS1 AI: (10)
- Serial Number GS1 AI: (21)
Thanks for your attention!

nicolendenge@bundeswehr.org
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Challenges in using S1000D in Civil Aviation

Nick Iaccarino

Pratt & Whitney
Maintenance Data Engineering, Customer Support
Why S1000D???

Because it fits what our industry wants to do………

And solves all our problems……….
The Initial Concerns......

• The IPC does not contain all the necessary elements
• How to create a commercial Service Bulletin
• Limited Reusability
• Compatibility with existing publications
• And the DMs do not look right......
So which users voice shall we listen to today.....
What is S1000D......

Spec Definition:

“An International specification for technical publications utilizing a common source database. “

User Definition:

“Another new IT initiative that we have to learn now that we have finally figured out how to do (ATA 2200) SGML”
So what does it look like......

So where is the task number?

So where is my task title?

So what do you want it to look like?
What about the procedure......
I can’t do an IPC......

• Where do I put the keyword?
• Where do I put the dimensional data?
• What is an SMR Code?
• What is S2000M?
• And what the heck is a categoryOneContainerLocation??
Thank you GIPD Task Team!

Part TIR

Nick Iaccarino

Challenges in using S1000D in Civil Aviation
In Summary......

• We all use S1000D – in different ways

• The S1000D specification needs to be flexible for different industries

• If you are starting to use the specification - ask lots of questions

• If you are in Civil Aviation – join the CAWG (Civil Aviation Working Group)

• And finally….we need to listen to the voice of the S1000D user (That’s why we are here)

Thank You!
## The Voice of the S1000D User

**Defense Working Group (DWG)**
- S1000D awareness within the DWG: Defense Strives

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**Civil aviation usage of the S1000D**
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**The Shipdex™ Protocol: S1000D Business Rules for the Shipping market**
- Why and What is Shipdex™
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- Shipdex™ success stories

**USAF S1000D User**
- Some major challenges faced by USAF in adopting S1000D (Program C-17)
- Actions taken to promote usage of S1000D in the USAF
The Shipdex protocol
(www.shipdex.com)

Marco Vatteroni
SpecTec Group ILS manager
Shipdex technical manager
Why Shipdex?

- BORING
- TIME CONSUMING
- EXPENSIVE
- ERROR PRONE

Shipyard/Ship-owner office

Marco Vatteroni
The Shipdex Protocol
Why Shipdex?

- BORING
- TIME CONSUMING
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- ERROR PRONE

Shipyard/Ship-owner office

Marco Vatteroni
The Shipdex Protocol
Why Shipdex?

- FAST
- AUTOMATIC
- CHEAP
- COHERENT

That’s Shipdex

Shipyard/Ship-owner office
In 2007 SpecTec and a group of ship-owners and equipment makers formed the non-profit Shipdex organization

With the scope to develop a protocol open to ALL for production and exchange of standardized electronic data among all the shipping actors

S1000D 2.3 business rules for the shipping market
Shipdex organization

Steering Committee

SPSC – SPMG members (founder members)
- ALFA LAVAL
- GRIMALDI Group (Shipdex chairman)
- INTERSHIP Navigation
- MacGREGOR (a part of Cargotec Group)
- MAN Diesel & Turbo

Maintenance Group

- Mastermind ShipManagement
- SPECTEC Group (Shipdex technical manager)
- YANMAR Company

SPMG joint members
- Rolls-Royce Marine
- Kongsberg Maritime
The Shipdex registered members

- Kongsberg Maritime AS
- Rolls-Royce Marine
- Tecnimpianti S.p.A.
- Navalimpianti S.p.A.
- Cooper GTS
- Corena
- ABS Nautical System
- Sorman
- KJ Radio
- Vector Marine Software
- Semcon Informatic
- CITEC
- Daedalus Aerospace
- Technotrans
- Tedopres
- Elomatic
- WebX Systems Ltd.
- DAEWOO - DSME
- Germanischer Lloyd
- RINA
- Korea Maritime University
- Electronics and Telecomm Research Institute of Korea
- TKMS Blohm - Voss Nordseewerke GmbH
- Mastermind ShipManagement
- Malta Motorways of the sea
- Atlantic Container Line
- FINNLINES
- Minoan Lines
- United Arab Shipping Company
- Princess Cruises
- Mercy Ships

The whole list is available on www.shipdex.com
Some important manufacturers are already supplying Shipdex data:

- MAN Diesel & Turbo
- MacGregor (a part of Cargotec Group)
- Alfa Laval
- Yanmar
- Rolls-Royce Marine
- Kongsberg maritime

Some ship-owners have already started their first Shipdex projects:

- Grimaldi Group
- Intership Navigation
- Mercy Ships
- United Arab Shipping Company
- Mastermind Shipmanagement
- Atlantic Container Line
- Grieg Shipping
- Norwegian Cruise Line

Some more shipping actors are starting their own Shipdex pilot projects.

Two Korean projects are already in progress.
Many thanks
For your kind attention

marco.vatteroni@spectec.net
# The Voice of the S1000D User

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OVERVIEW

- WHY S1000D
- C-17 IETM PROGRAM
- CHALLENGES
WHY S1000D

• Objective: Single Data Format for Mobility Air Forces (MAF) Tech Data

• Guiding principle: *Air Mobility Command (AMC)/A4 to Air Force Materiel Command (AFMC)/A4, Feb 06 “…interactive technical data specification that provides a standard repeatable process as the foundation to ensure weapon systems’ digital technical data interoperability…”

• AMC/A4 / VOLPE (US Dept of Transportation) study validated S1000D Issue 4.0 as preferred specification; business rules (BR) are Key

• AFMC/A4UE developing S1000D USAF business rules
  – BR have morphed from project level to USAF level focus; aids interoperability among AF programs; publishing date for MIL spec – Dec 2012
C-17 IETM PROGRAM

• C-17 Aircraft Selected as the “Pathfinder” for USAF Legacy Conversion to S1000D with USAF BR
• Program proceeding on schedule
  – S1000D Issue 4.0.1
  – Utilizing USAF Business Rules, Version 3.0
• Data conversion validation 100% complete for entire organizational level manual set
  – Next step: validate logical flow -- hyperlinks, hot-spots, applicability filtering
• FOCUS group -- face-to-face meetings and telecons
  – Forum for user feedback on viewer functionality (look and feel)
  – Boeing/SDL responsive to user suggestions
    • User community satisfied with viewer enhancements
C-17 IETM PROGRAM

• Viewer has been refined for ease of navigation/viewing
  – Cleaner table of contents
  – Multiple Windows capability
  – Decreased header/button size
  – Adjustable font size

• Training plan development
  – Team effort with SDL, Boeing, Program Office and AMC
  – Training activities (change management) will improve transition
C-17 IETM PROGRAM

• What’s on horizon...
  – Finalize viewer enhancements
  – Layout plan/requirements for IETM deployment in 2013
  – Continue working any infrastructure issues
  – Task assessments
    • Users validate task performance using IETM
  – Resolve any/all IETM issues by Oct 2012
    • Incorporate lessons learned from assessment
  – IETM delivery late Nov/Dec 2012
  – Deploy IETM to field in 2013
CHALLENGES

• Publish finalized USAF business rules to improve program success

• USAF common viewer vs C-17 enterprise viewer
  – Tracking with ERP for higher level requirements
    • Standardization / Interoperability
    • Users of same viewer
      – MAF: C-17, C-5, KC-46
      – Others: E-3

• Ability to print from data base

• Distribution of updated data
  – Common infrastructure for IETM programs
QUESTIONS??
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|                                                                     | - Actions taken to promote usage of S1000D in the USAF                  |
Thanks for your active participation!

Representing „The Voice of the S1000D User“

Bundeswehr

Civil Aviation

US Air Force

Shipdex

DWG