Presented by

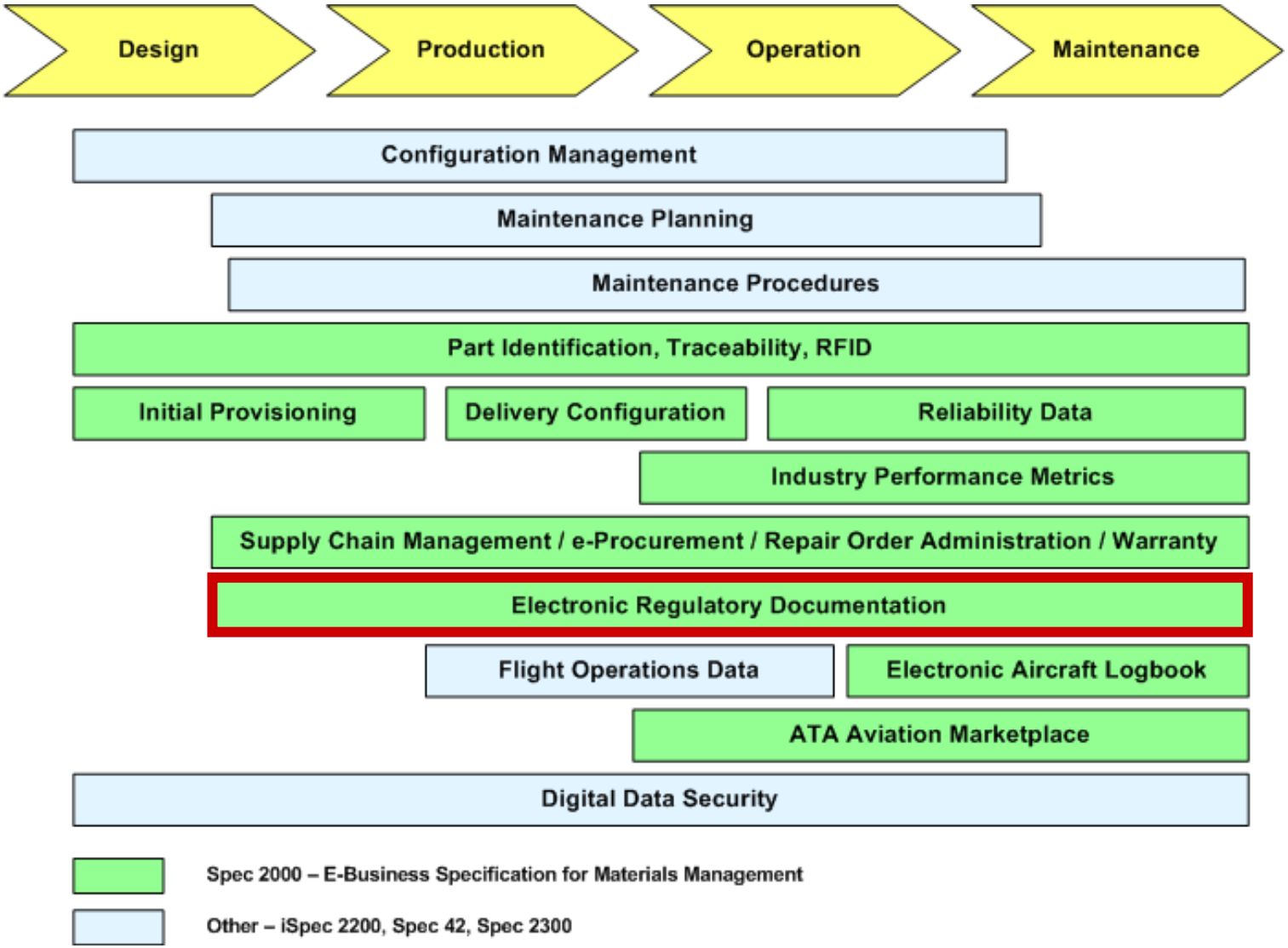
Klaus Malone

Head of e-Business Development

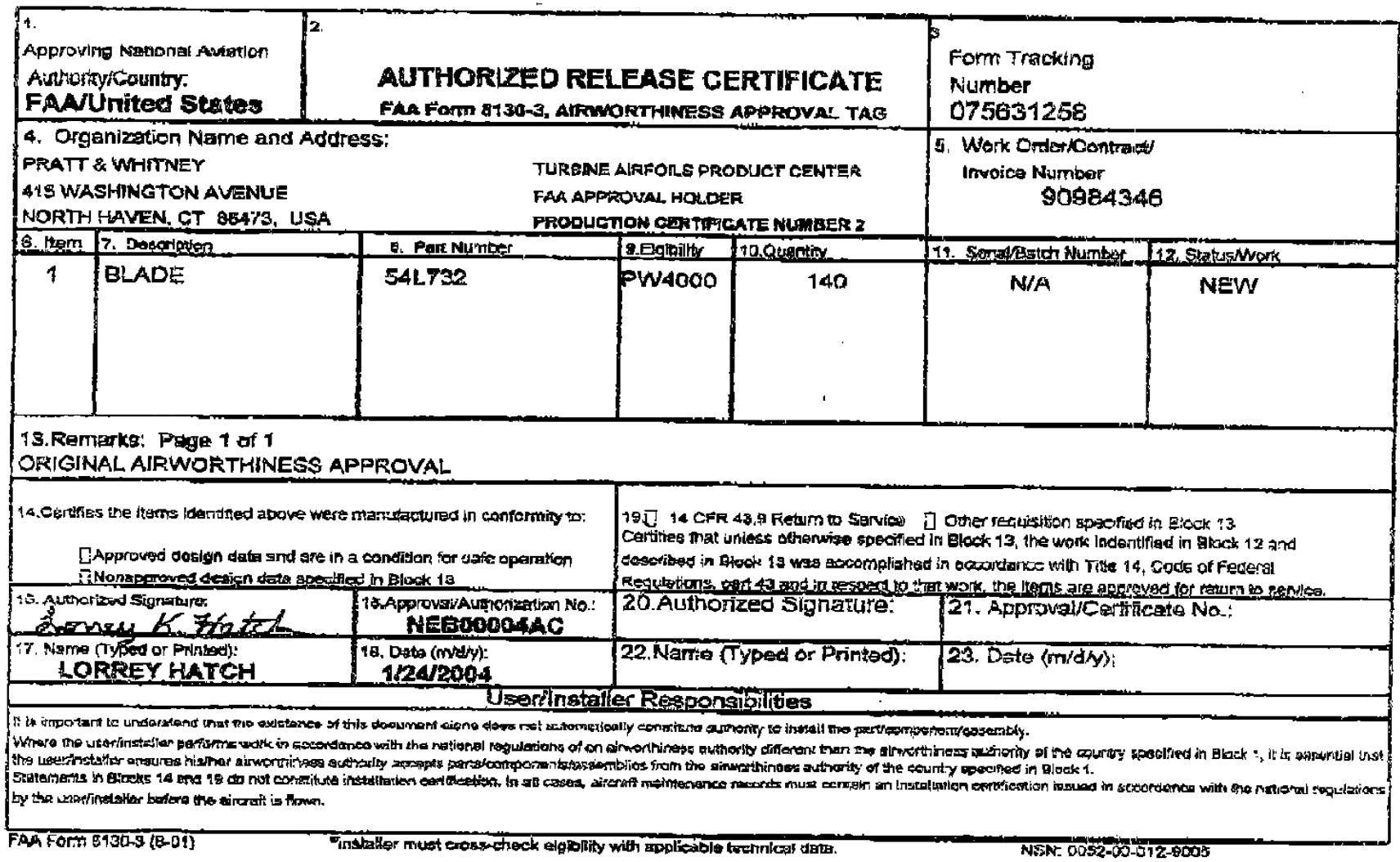
Business Development and Projects

Regulatory documentation

Functional Scope



Today's Reality



1. Approving National Aviation Authority/Country: **FAA/United States**

2. **AUTHORIZED RELEASE CERTIFICATE**
FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

3. Form Tracking Number: 075631258

4. Organization Name and Address:
PRATT & WHITNEY
415 WASHINGTON AVENUE
NORTH HAVEN, CT 06473, USA
TURBINE AIRFOILS PRODUCT CENTER
FAA APPROVAL HOLDER
PRODUCTION CERTIFICATE NUMBER 2

5. Work Order/Contract/ Invoice Number: 90984346

6. Item	7. Description	8. Part Number	9. Eligibility	10. Quantity	11. Serial/Batch Number	12. Status/Work
1	BLADE	54L732	PW4000	140	N/A	NEW

13. Remarks: Page 1 of 1
ORIGINAL AIRWORTHINESS APPROVAL

14. Certifies the items identified above were manufactured in conformity to:
☐ Approved design data and are in a condition for safe operation
☐ Nonapproved design data specified in Block 13

15. Authorized Signature: Lorrey K. Hatch

16. Approval/Authorization No.: NE800004AC

17. Name (Typed or Printed): LORREY HATCH

18. Date (m/d/y): 1/24/2004

19. ☐ 14 CFR 43.9 Return to Service ☐ Other regulation specified in Block 13
Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

20. Authorized Signature:

21. Approval/Certificate No.:

22. Name (Typed or Printed):

23. Date (m/d/y):

User/Installer Responsibilities

It is important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly.
Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1.
Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft is flown.

FAA Form 8130-3 (8-01) *Installer must cross-check eligibility with applicable technical data. NSN: 0052-00-012-9005

Today's Reality: Is something wrong with this ARC?

North Haven Facility closed in 2003

This number would include the date contained in Block #18

Number would have been same as Commercial Transfer Ticket

Description not consistent with other 8130-3 tags for this part number

Did not start using page indicators for single page 8130-3 tags until 5-17-04.

Mr. Hatch retired on 3-31-99

ARCs issued when Mr. Hatch was an ODAR stated last name and then first name

Date format inconsistent with P&W

Obsolete ODAR number not used since 7-31-98

1. Approving National Aviation Authority/Country: FAA/United States

2. AUTHORIZED RELEASE CERTIFICATE
FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG

Form Tracking Number 07563125B

4. Organization Name and Address:
PRATT & WHITNEY
415 WASHINGTON AVENUE
NORTH HAVEN, CT 06473, USA
TURBINE AIRFOIL PRODUCT CENTER
FAA APPROVAL HOLDER
PRODUCTION CERTIFICATE NUMBER 2

5. Work Order/Contract/Invoice Number 90984346

6. Item	7. Description	8. Part Number	9. Eligibility	10. Quantity	11. Serial/Batch Number	12. Status/Work
1	BLADE	54L732	PW4000	140	N/A	NEW

13. Remarks: Page 1 of 1
ORIGINAL AIRWORTHINESS APPROVAL

14. Certifies the items identified above were manufactured in conformity to:
☐ Approved design data and are in a condition for safe operation
☐ Nonapproved design data specified in Block 13

19. ☐ 14 CFR 43.9 Return to Service ☐ Other requisition specified in Block 13
Certifies that unless otherwise specified in Block 13, the work identified in Block 12 and described in Block 13 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.

15. Authorized Signature: Beverly K. Hatch
16. Approval/Authorization No.: NE5000[illegible]AC
17. Name (Typed or Printed): LOBREY HATCH
18. Date (dd/mm/yy): 1/24/2004

20. Authorized Signature:
21. Approval/Certificate No.:
22. Name (Typed or Printed):
23. Date (m/d/y):

User/Installer Responsibilities

[illegible] important to understand that the existence of this document alone does not automatically constitute authority to install the part/component/assembly. The user/installer performing work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures his/her airworthiness authority accepts parts/components/assemblies from the airworthiness authority of the country specified in Block 1. Statements in Blocks 14 and 19 do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft is flown.

FAA Form 8130-3 (9-04) [illegible] check eligibility with applicable [illegible]

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Regulatory documentation

An ATA industry project

- Launched July 2003
- Mission
  To develop an industry specification to enable the electronic exchange of regulatory documentation for aircraft products and parts.

The project team

Airlines	Authorities	Industry Groups
ABX Air **Air Canada** Alitalia Airlines **American Airlines** **ATA Airlines** Atlas Air **Continental Airlines** Delta Air Lines **FedEx** Japan Airlines JetBlue Airways Lufthansa Technik Midwest Airlines Northwest Airlines **Qantas Airways** Southwest Airlines United Airlines **UPS** US Airways	**FAA**	**ATA** AIA ARSA **ASA**
	Manufacturers	**Suppliers/Distributors**
	Airbus **Boeing** **Dassault Falconjet** GE Aircraft Engines **Goodrich** **Honeywell** International Aero Engines Korry Electronics Co Parker Hannifin **Pratt & Whitney** Rolls-Royce	AirLiance Materials A.J. Levin **M & M Aerospace Hardware** Tracer Corp Valtec Aircraft Supply
		Solution Providers
		Avexus IBM **ILS** **SITA** Technology Solutions

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Regulatory documentation

- What is it?
  - A new way to meet existing regulatory requirements
  - A replacement of paper forms with computer files
  - A common electronic data format
    - Content, structure and syntax
    - Parsable
  - A “data-centric” approach
  - A comprehensive baseline of data security capabilities
  - A shared process for exchanging data
  - A set of agreed implementation rules
  - An international, open, broad-based industry standard

    ATA Spec 2000 Chapter 16

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Regulatory documentation

- What is it NOT
  - A software application
  - Electronic paper
  - Dependent on proprietary software/hardware/services
  - Mandatory
  - All or nothing

Regulatory documentation

- A common electronic data format for:
  - CASA Form 917
  - EASA Form 1
  - FAA Form 8130-3
  - TCCA Form 24-0078

  - Certificate of Conformance
  - Transfer Documents

Regulatory documentation

- Guiding Principles
  - Standard pertains to exchange of data, not internal company processes
  - Meet intent and objectives of governing regulations
  - Data-centric approach
  - Leverage regulatory guidance regarding electronic signature
  - Meet legal and liability requirements
  - Leverage existing technologies, standards, and best practices where applicable

Regulatory documentation

- What are the Benefits?
  - Facilitates improved reliability, consistency and timeliness of the data
  - Difficult to forge undetected; originals verifiable directly to source
  - Reduced lost, or misdirected originals
  - No more damaged/mutilated originals
  - Reduced errors
  - Reduced costs for record retention
  - Easier access to historical data
  - Easier to integrate with other systems and data

ATA Specification

- Business Guidelines
  - A new e-Form will be issued for each transfer/RTS
  - A separate e-Form will be issued for each part number for non-serialized parts
  - A separate e-Form will be issued for each serial number for serialized parts
  - Each e-Form should reference and attach any applicable, immediately prior e-Form
  - All transmissions of an unaltered, digitally signed e-Form are considered originals
  - Any paper forms printed from the e-Form are considered copies.

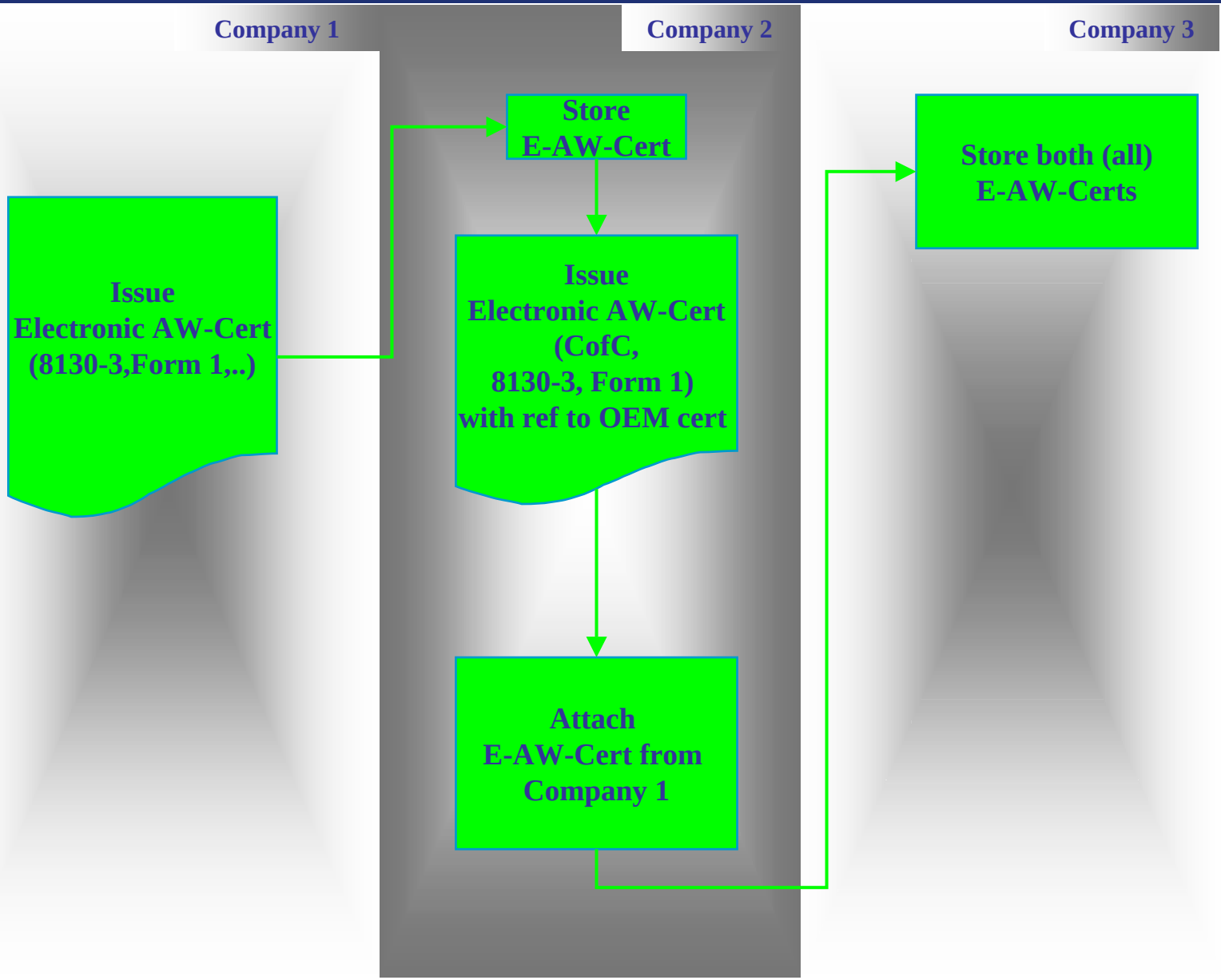
XML Schema

- e-Form Schema
  - The data elements that are provided
  - Which are mandatory/optional, repeatable
  - The sequence in which they're provided
  - The application of digital signatures to the data
  - References to previous e-Forms

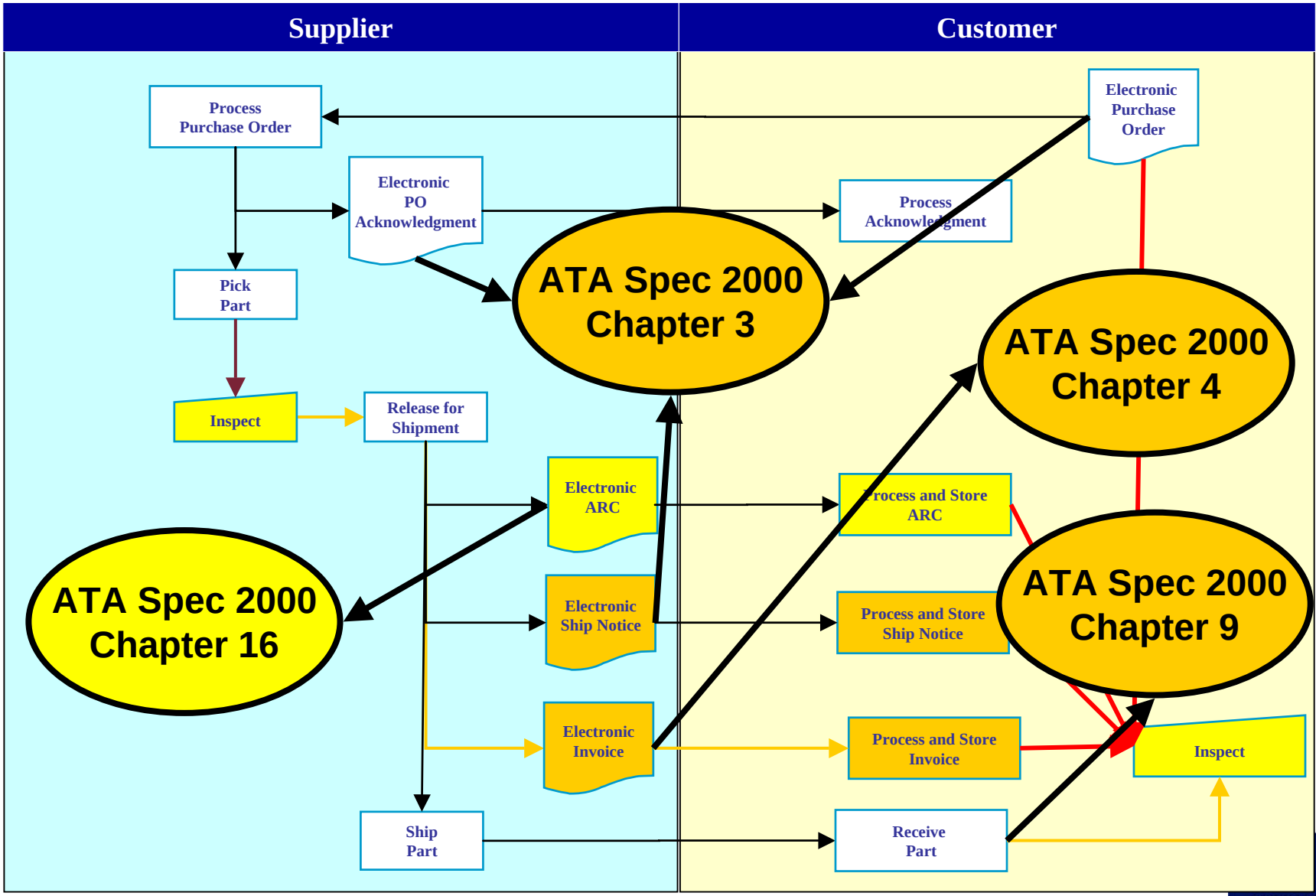
Digital Security

- Objectives
  - Signer authentication
  - Data integrity
  - Non-repudiation
- Solution
  - W3C XML Signature
    - X.509 Digital Certificates
    - Digital Signatures
    - Public Key Infrastructure (PKI)

Regulatory documentation



Regulatory documentation – New parts



1. Approving Competent Authority/Country	**AUTHORISED RELEASE CERTIFICATE** EASA FORM 1	3. Form Tracking Number
4. Approved Organisation Name and Address:		5. Work Order/Contract/Invoice

6. Item	7. Description	8. Part No	9. Eligibility (*)	10. Quantity	11. Serial/Batch No	12. Status/Work

13. Remarks

Part M Section A Subpart F organisation approval number: AAA RRR XXXX

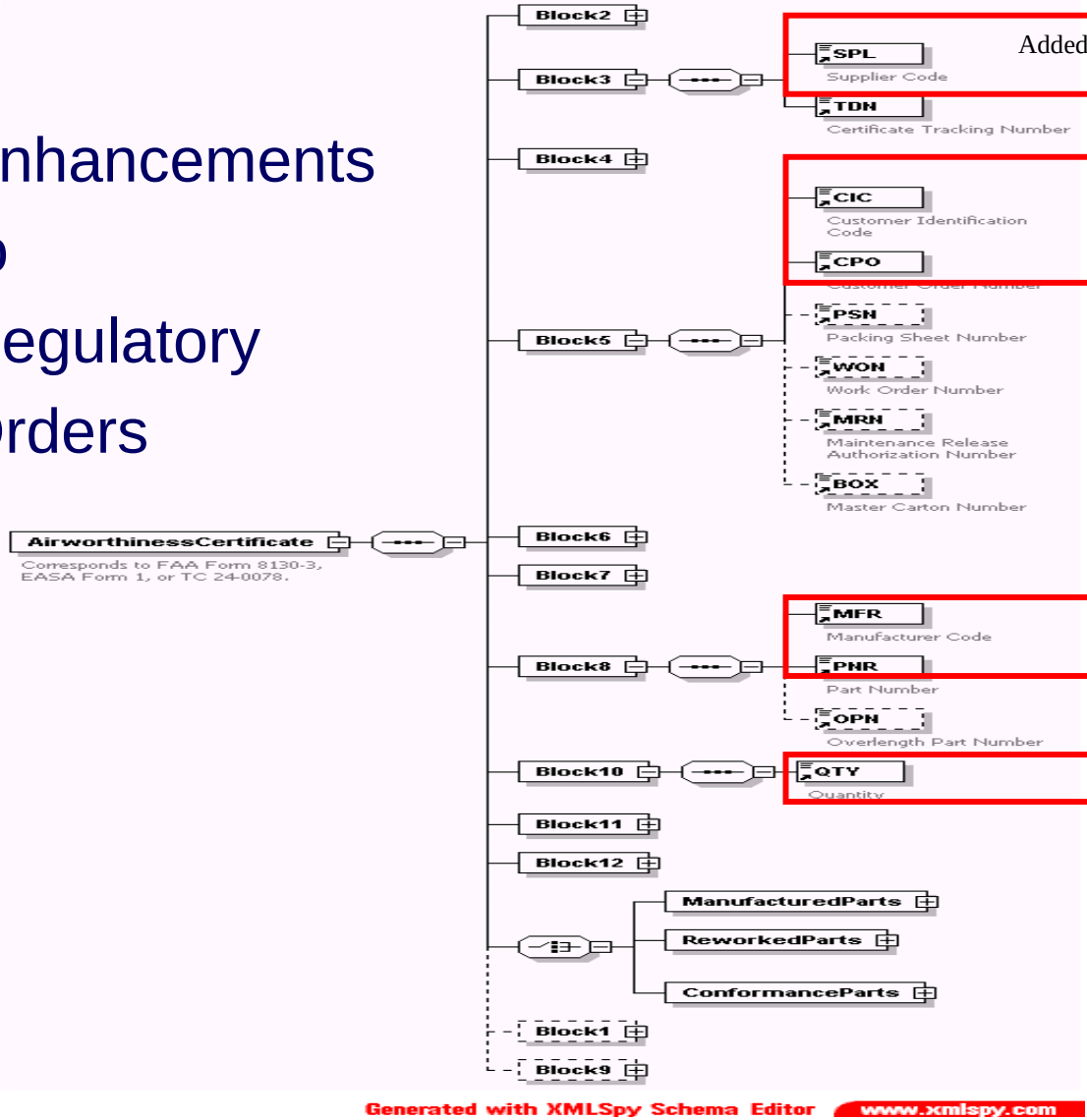
14. Certifies that the items identified above were manufactured in conformity to: ☐ approved design data and are in condition for safe operation ☐ non-approved design data specified in block 13	19. ☐ Part-145.A.50 Release to Service ☐ Other regulation specified in block 13 Certifies that unless otherwise specified in block 13, the work identified in block 12 and described in block 13, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.	
15. Authorised Signature	16. Approval/ Authorisation Number	20. Authorised Signature	21. Certificate/Approval Ref. No
17. Name	18. Date (d/m/y)	22. Name	23. Date (d/m/y)

EASA Form 1- Issue 1

(*) Installer must cross-check eligibility with applicable technical data

Regulatory documentation

Enhancements to Regulatory Orders



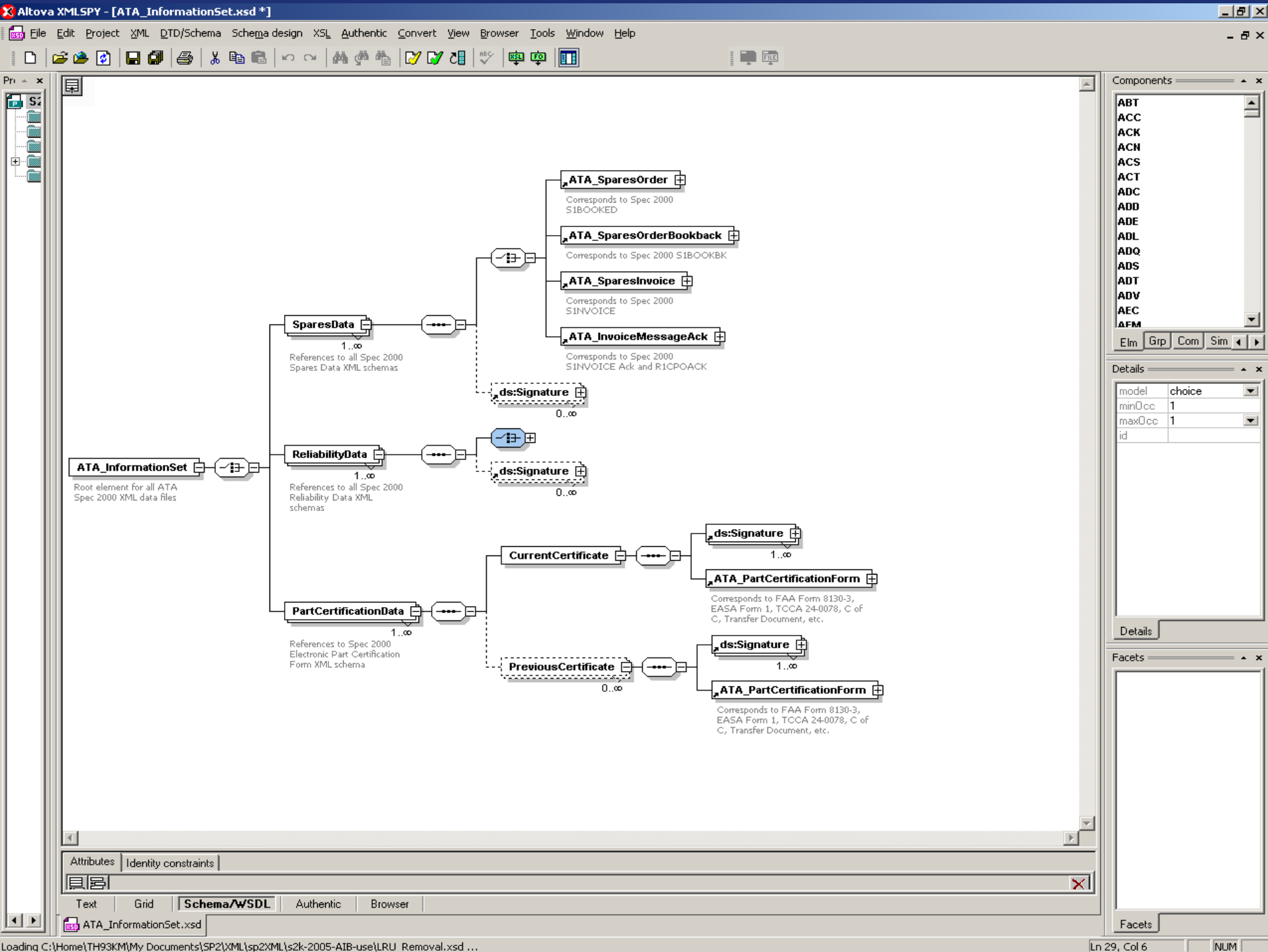
Added (N)CAGE code of issuing company to generate a worldwide unique key with the TDN

Added CIC to identify the receiving company

Made CPO a mandatory entry

Added MFR to establish MFR:PNR combination to unambiguously identify part

Added Unit of Measure to quantity


Altova XMLSPY - [ATA_InformationSet.xsd *]
File Edit Project XML DTD/Schema Schema design XSL Authentic Convert View Browser Tools Window Help
Components
ABT
ACC
ACK
ACN
ACS
ACT
ADC
ADD
ADE
ADL
ADQ
ADS
ADT
ADV
AEC
Elm Grp Com Sim
Details
model choice
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maxOcc 1
id
Facets
ATA_InformationSet
Root element for all ATA Spec 2000 XML data files
SparesData
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References to all Spec 2000 Spares Data XML schemas
ATA_SparesOrder
Corresponds to Spec 2000 S1BOOKED
ATA_SparesOrderBookback
Corresponds to Spec 2000 S1BOOKBK
ATA_SparesInvoice
Corresponds to Spec 2000 S1NVOICE
ATA_InvoiceMessageAck
Corresponds to Spec 2000 S1NVOICE Ack and R1CPOACK
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Corresponds to FAA Form 8130-3, EASA Form 1, TCCA 24-0078, C of C, Transfer Document, etc.
PreviousCertificate
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ds:Signature
1..∞
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Corresponds to FAA Form 8130-3, EASA Form 1, TCCA 24-0078, C of C, Transfer Document, etc.
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ATA_InformationSet.xsd
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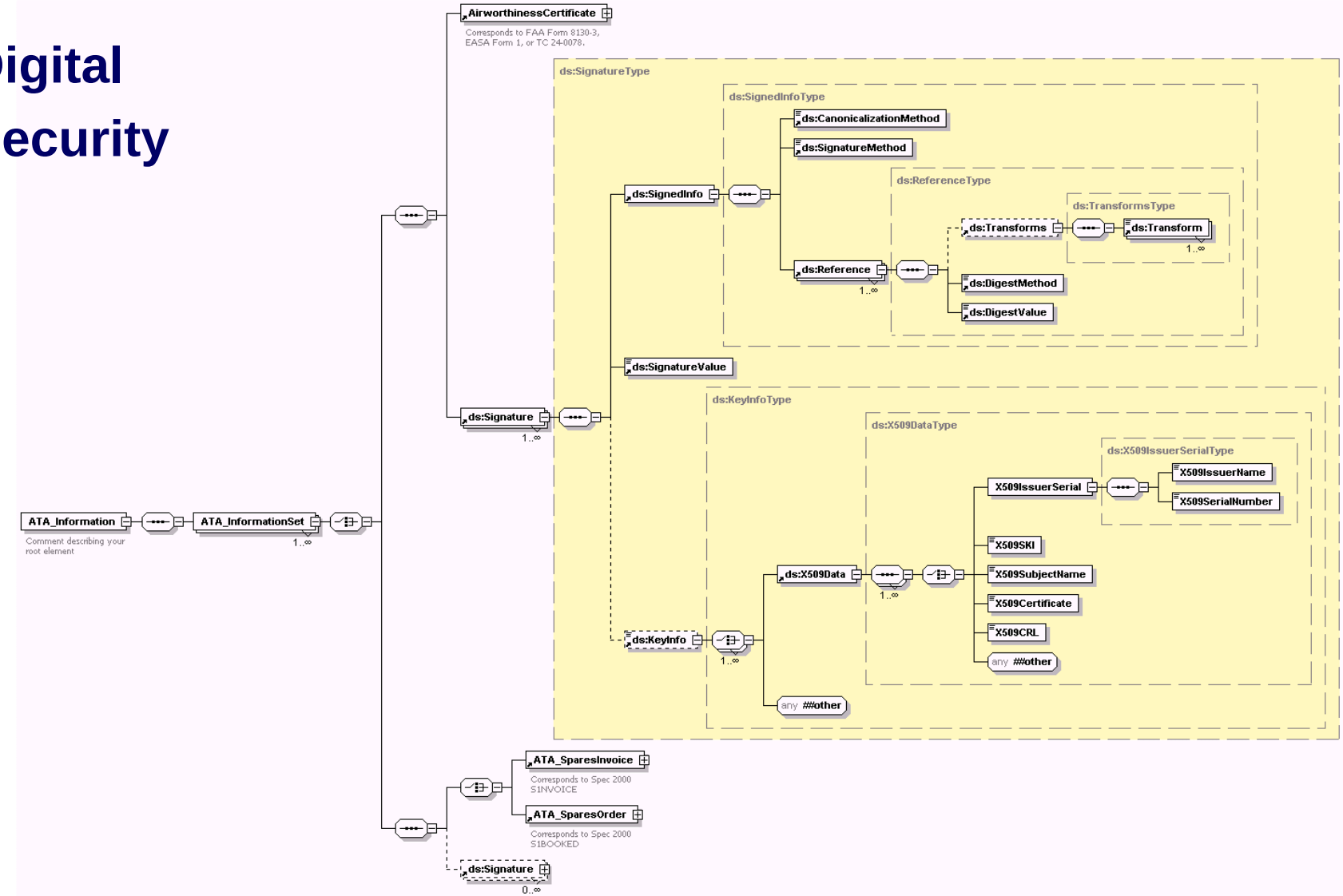
Ln 29, Col 6
NUM

Regulatory documentation

Digital Security



Generated with XMLSpy Schema Editor www.xmlspy.com

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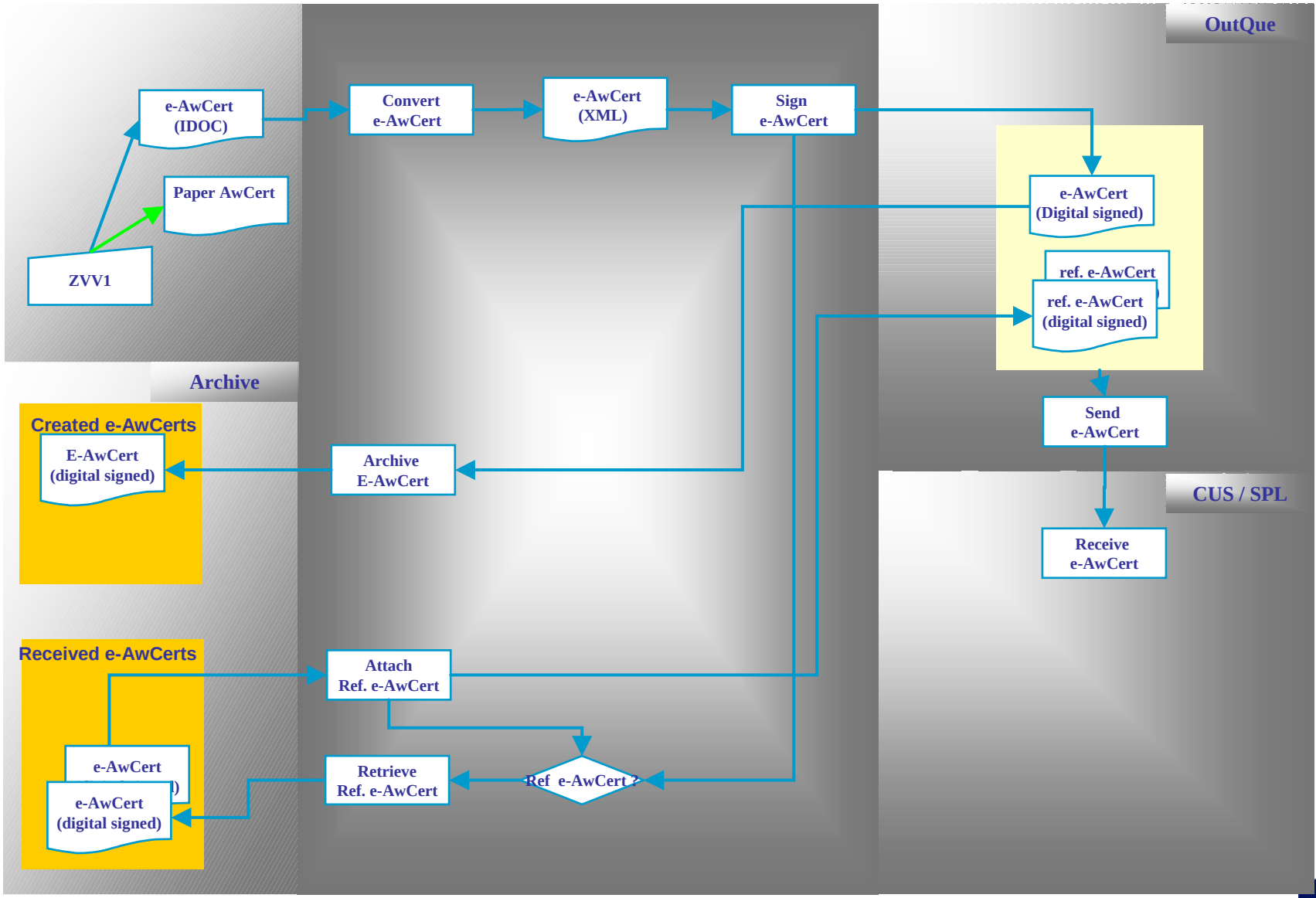
Regulatory documentation



XML document

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- <CIY>Blagnac Cedex</CIY> <ZIP>31707</ZIP> <CNT>FR</CNT> </IssuerDetail> <RemoteIssuerDetail> <SPL>D4296</SPL>
- <WHO>Airbus Spares Support and Services</WHO> <ADL>Weg beim Jaeger 150</ADL> <CIY>Hamburg </CIY> <ZIP>22335</ZIP>
- <CNT>DE</CNT> </RemoteIssuerDetail> </Block4> <Block5> <CIC>SIA</CIC> <CPO>QQQQQ12345</CPO> <BOX>8098288700</BOX> </Block5>
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- <NAA>Luftfahrt-Bundesamt</NAA> <CNT>DE</CNT> </Block1> <Block9> <MOL>A330</MOL> </Block9> </ATA_PartCertificationForm>

AIRBUS

XML document

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                                    <ADL>1 Rond Point</ADL> <ADL>Maurice Bellonte</ADL>
                                    <CIY>Blagnac Cedex</CIY> <ZIP>31707</ZIP>  <CNT>FR</CNT>                    </IssuerDetail>
                <RemoteIssuerDetail> <SPL>D4296</SPL>
                                    <WHO>Airbus Spares Support and Services</WHO>
                                    <ADL>Weg beim Jaeger 150</ADL> <CIY>Hamburg </CIY>
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    <Block6>    <LIN>1</LIN>
    </Block6>
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    <Block8>    <MFR>FAPE3</MFR> <PNR>F5453082320200</PNR>                                                                                              </Block8>
    <Block10>   <QTY UNT="EA">4</QTY>                                                                                                                   </Block10>
    <Block11>   <LOT>L056060300</LOT>                                                                                                                   </Block11>
    <Block12>   <PSC>Inspected</PSC>                                                                                                                    </Block12>
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                <Block15M>          <SOF>true</SOF>
    </Block15M>
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                                                        <TDN>AS80335364/01001</TDN>
                                                        <CET>EASA Form 1</CET>                                      </PreviousCertificate>
                                    <REM>Inspected as per P 10-01-00   Next PC 2008-12-11</REM>                                                     </Block13M>
    </ManufacturedParts>
    <Block1>                        <NAA>Luftfahrt-Bundesamt</NAA>          <CNT>DE</CNT>
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AUTHORISED RELEASE CERTIFICATE
EASA FORM 1

1. Approving Competent Authority/Country	3. Form Tracking Number
Luftfahrt-Bundesamt/GERMANY	D4296 - AS80349934-01001

4. Organisation Name and Address

FAPE3
Malone head quqrter
1 Rond Point
Maurice Bellonte
Blagnac Cedex, 31707
FRANCE

D4296
AIRBUS Spares Support and Services
Weg beim Jaeger 150
Hamburg , 22335
GERMANY

5. Work Order / Contract / Invoice

Customer: SIA
Order: QQQQQ12345
Ship Advise: 9998288799
BOX: 8098288700

6. Item	7. Description	8. Part No.	9. Quantity	10. Serial/Batch No.	11. Status/Work
1	SEAL	F5453082320200	4EA		Inspected

12. Remarks

Inspected as per P 10-01-00 Next PC 2008-12-11

MFR: FAPE3

DMF: 2005-01-01
EXP: 2013-01-01

13a. Certifies that the items identified above were manufactured in conformity to:

- [X] approved design data and are in a condition for safe operation.
- [ ] non-approved design data specified in block 12.

14a. [ ] Part-145.A.50 Release to Service [ ] Other regulation specified in block 12.

Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.

13b. Authorised Signature	13c. Approval /Authorisation Number	14b. Authorised Signature	14c. Certificate/Approval Ref. No.
Digital Signature on File	DE.21G.0009		
13d. Name	**13e. Date (dd/mmm/yyyy)**	**14d. Name**	**14e. Date (dd/mmm/yyyy)**
Klaus Malone	11/OCT/2006		

User/Installer Responsibilities

This certificate does not automatically constitute authority to install.

Where working in accordance with the national regulations of an Airworthiness Authority different than the Airworthiness Authority of the country specified in block 1, the user/installer shall ensure that their Airworthiness Authority accepts items from the Airworthiness Authority of the country specified in block 1.

Statements in block(s) 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.

EASA Form 1 (ISSUE xx2)

Today and tomorrow

- FAA Order 8130.21F recently approved
- ATA Spec 2000 Chapter 16 to be approved shortly
- New further harmonized FAA Order 8130.21G and EASA Form 1 expected to be approved be approved 1st or 2nd Q 2009
- New version of SPEC 2000 Chapter 16 to be published shortly after