



# Host (on behalf of ASD):

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# Name of presenter:Manuel ÁLVAREZRank/title of presenter:Manuel ÁLVAREZRank/title of presenter:A400M TID Operability ManagerCompany/organization:Airbus Defence and Space / TASST



# Spanish Association for Defence, Security and Space Technology Companies (TEDAE)



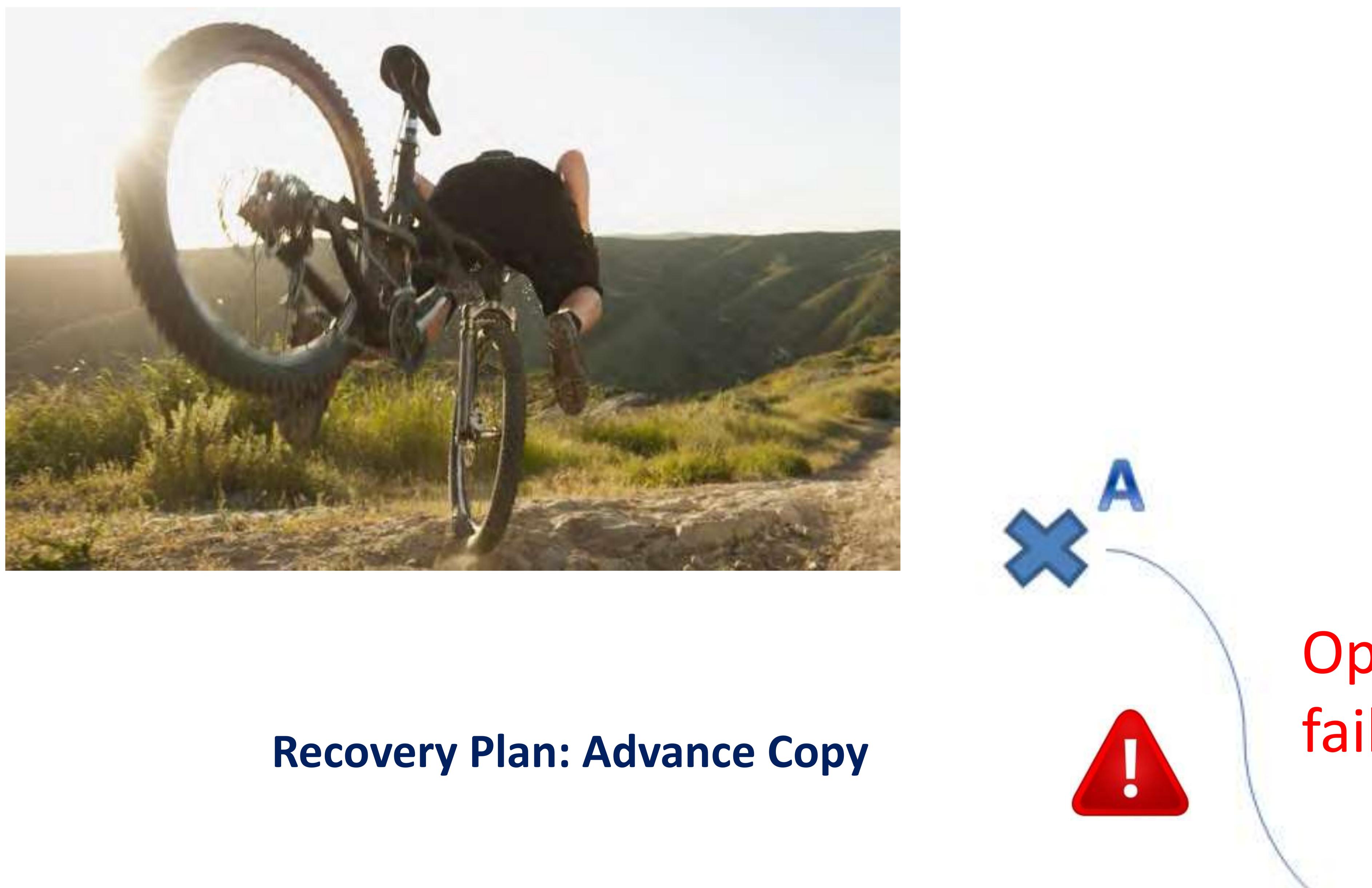












2017-06-12/14

# A400M TID – Advance Copy & S1000D

A400M TID - Advance Copy & S1000D





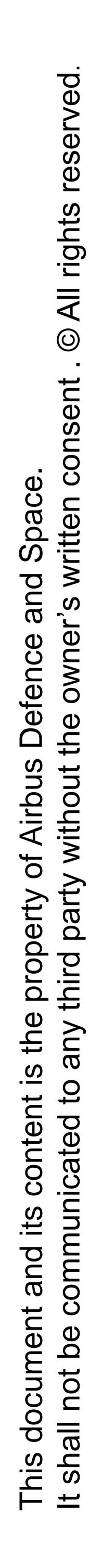


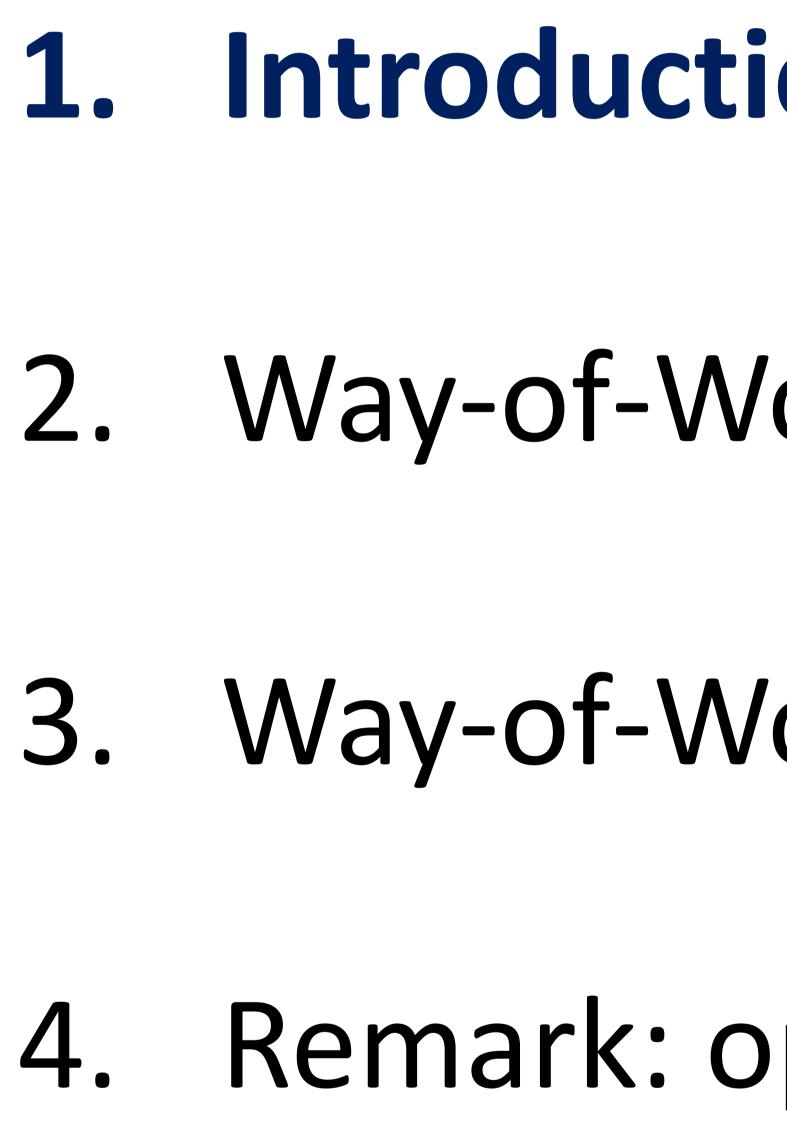
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# A400M TID – Advance Copy & S1000D

# **1. Introduction: Why Advance Copy?**

# 2. Way-of-Working – AS IS: authoring

# Way-of-Working – AS IS: traceability

# 4. Remark: operators / customers needs











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In Service Support

2017-06-12/14

# A400M TID – Why Advance Copy?

# **Engineering documentation (CSWP)** FOT, AOT, OIT, SB, etc.

# Instructions or Repair Form (IRF)

# **Safety issues with impact on Technical Publications** Advance Copy

Common Source DataBase (CSDB) concept in S1000D spec. considers, among others, the following objectives:

Support the controlled authoring 

A400M TID - Advance Copy & S1000D





Support the technical publication process







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# Topics affecting Safety Topics affecting A/C Operability



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Inclusion of alignment tests in critical systems of the aircraft. Inclusion of complex new tasks of alignment - test/operational/functional. Updates of warnings and cautions that could impact in an important way. DMs which prevent the maintenance of the aircraft or component, due to a missing procedure. Missing procedure for fault isolation of a critical failure. Inclusion of new ADL (Allowable Damage Limit). New data of intervals from the Structural Repair Inspection topics. Inclusion of a new Programmed Maintenance Task that has intervals shorter than the scheduled revision cycle of the TP.

> There is a need to publish/distribute technical publications between scheduled revisions and to cover this gap, Technical Information and Data (TID) community needs a method (how?) and an industry standard deliverable (what?).









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# A400M TID – Why Advance Copy?

# To sum up... for topics affecting safety or A/C operability...

out of the Scheduled Revisions. scheduled delivery of the DM. when the AdvCo is sent.

> **Instructions for Continuous Airworthiness** This mechanism also allows a continuous ICAs traceability even working with a database which is released on a fixed-basis.



- An Advance Copy (AdvCo) is the delivery of a Data Module (DM)
- This deliverable is provided in advance to the customers before a
- The updated information is included simultaneously in the TID Production Process, to be delivered in the next Scheduled Revision N or (N+1) depending on the authoring cut-off date of revision N









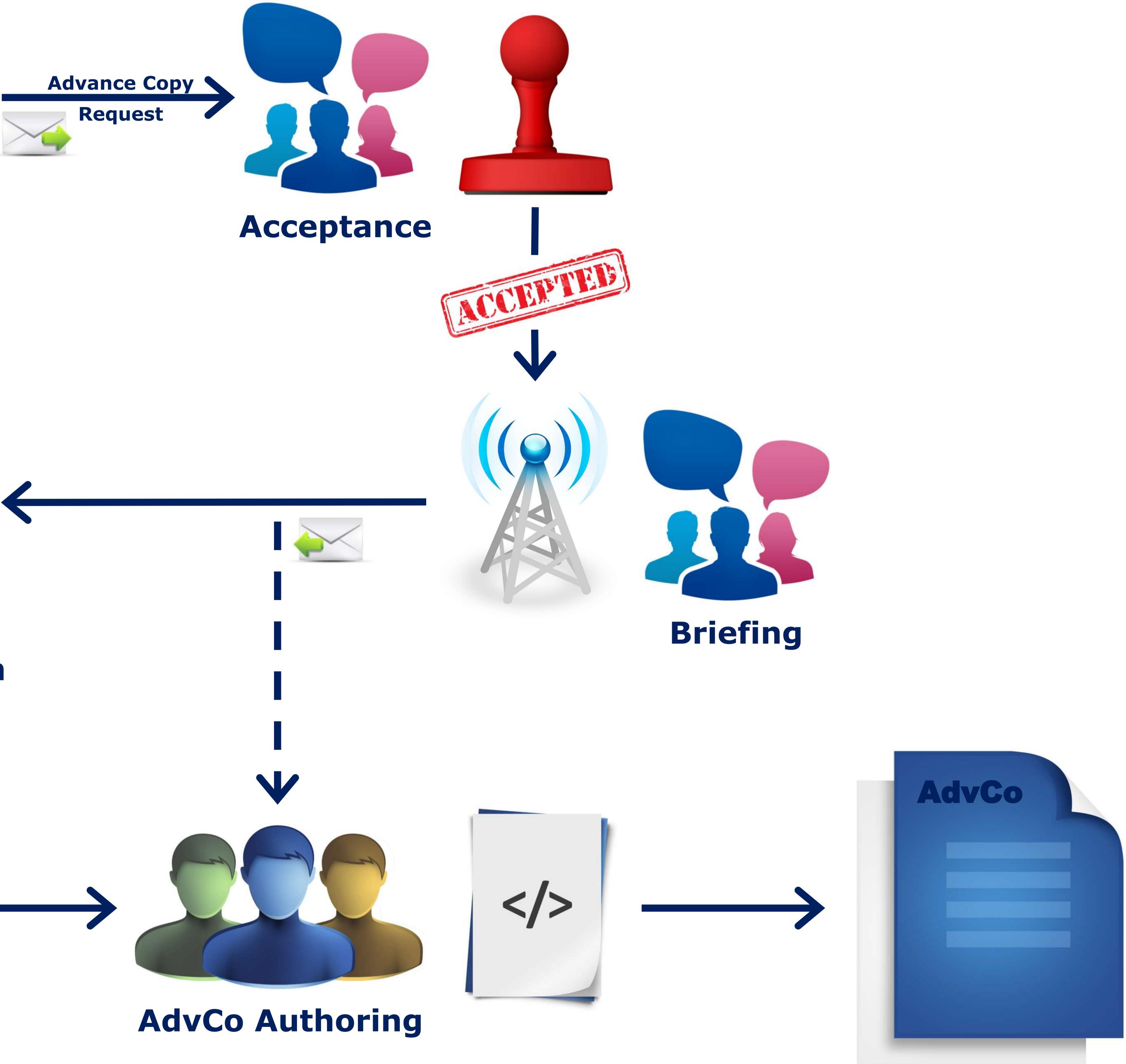




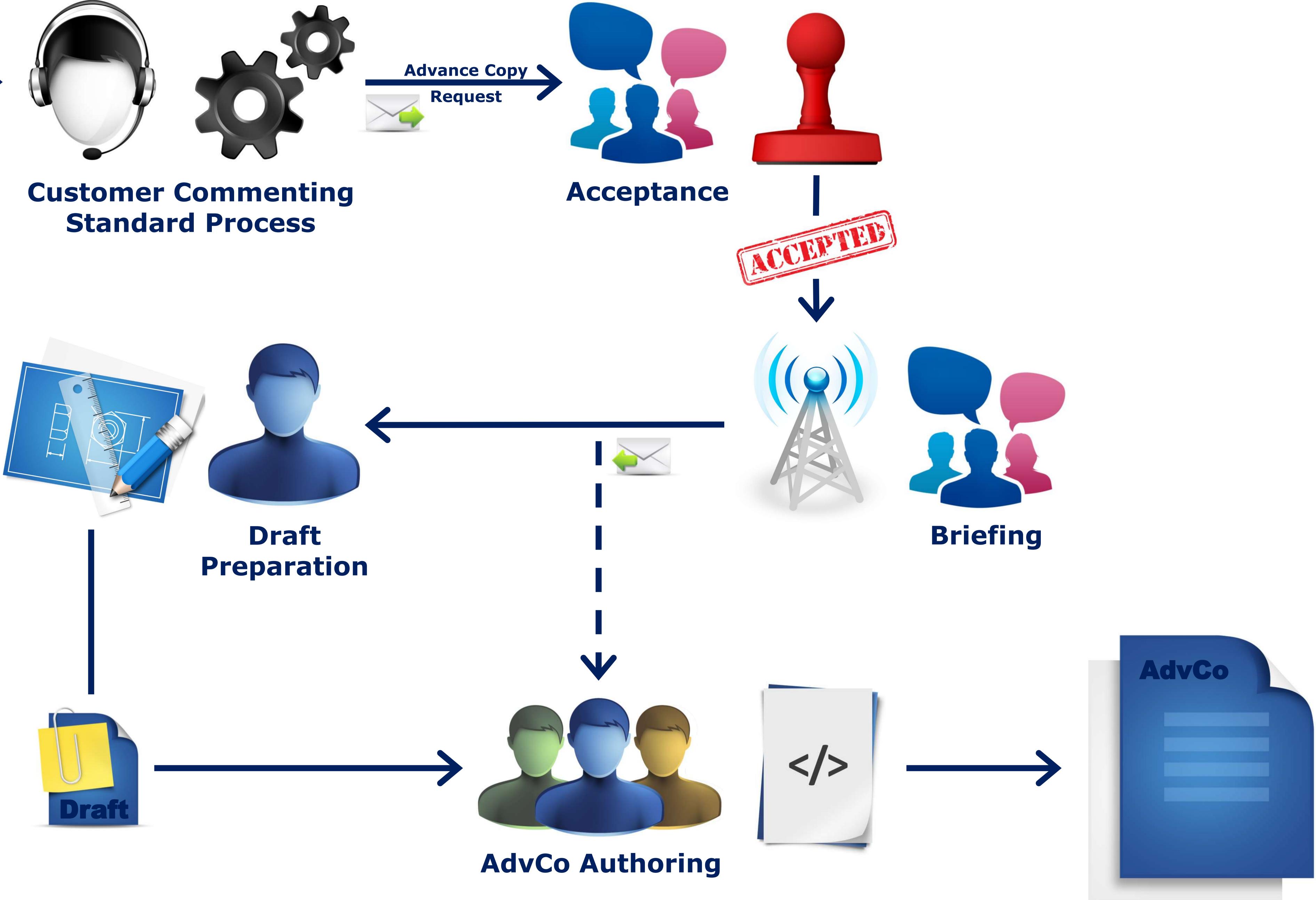
# A400M TID – Why Advance Copy?







**Standard Process** 

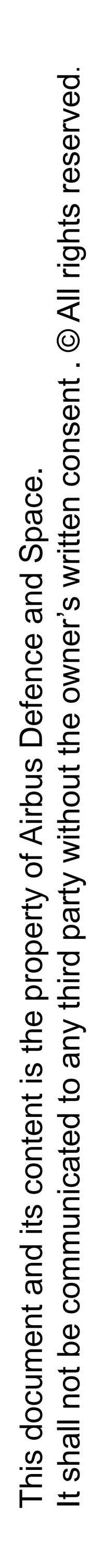


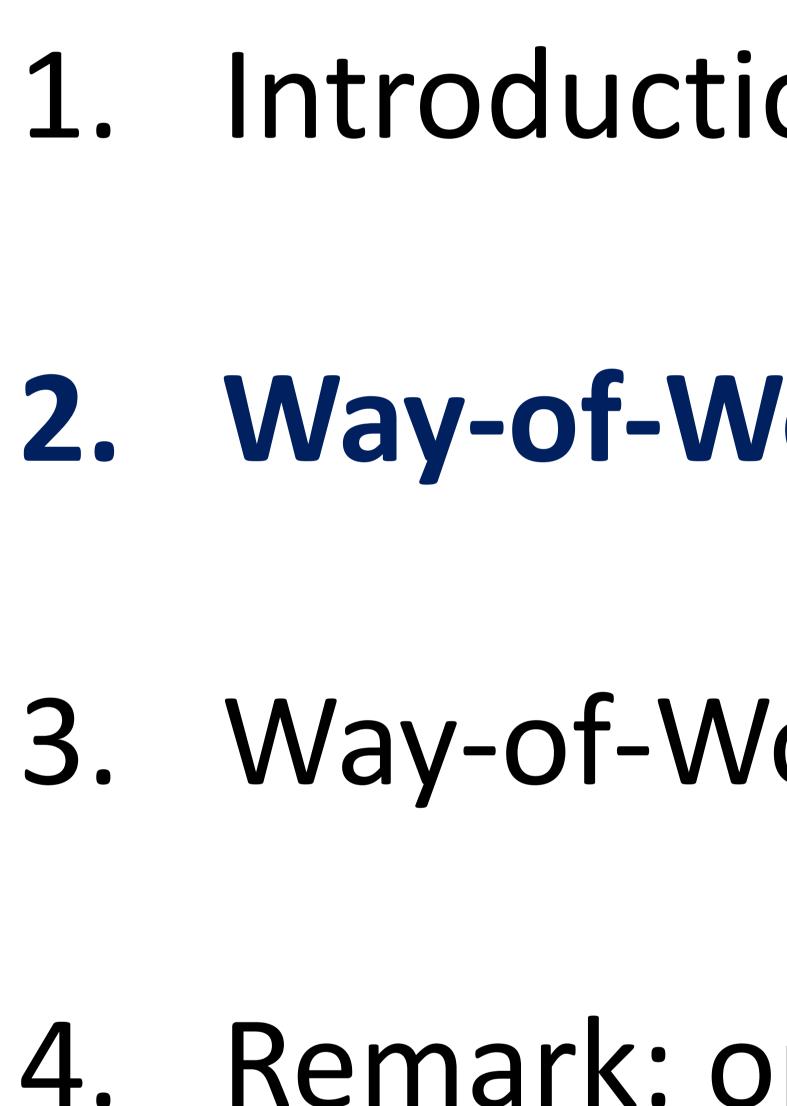












# A400M TID – Advance Copy Authoring

# 1. Introduction: Why Advance Copy? 2. Way-of-Working – AS IS: authoring Way-of-Working – AS IS: traceability 4. Remark: operators / customers needs













# Advance Copy – Coding

# S1000D 2.3.1 – Chap. 3.9.5.1 Inwork number (O)

# **ADV-DMC-INWORK**

ADV-DMC-01 -02 -03

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# A400M TID – Advance Copy Authoring

The attribute inwork gives the "inwork" number of the unreleased data module. It can be used for monitoring and control of intermediate drafts within a project. The initial inwork number shall be set to the value "01", and shall be incremented with every change to the unreleased data module. When work first starts on a data module, the issue number is set to the value "000", using the attribute issno, the attribute type is set to the value "new" and attribute inwork is set to the value "01". Then, when the data module is released, the attribute inwork is reset to the value "00", and the issue number incremented to indicate approved release of that instance of the data module. [...]

# **ADV-AJ-A-49-61-34-00AAA-520A-A-01**

The @inwork evolves if: The previous Advance Copy was cancelled  $\rightarrow$  The previous Advance Copy was incorporated.

This evolution never means an AdvCo content updating, which is in fact not allowed by the process.





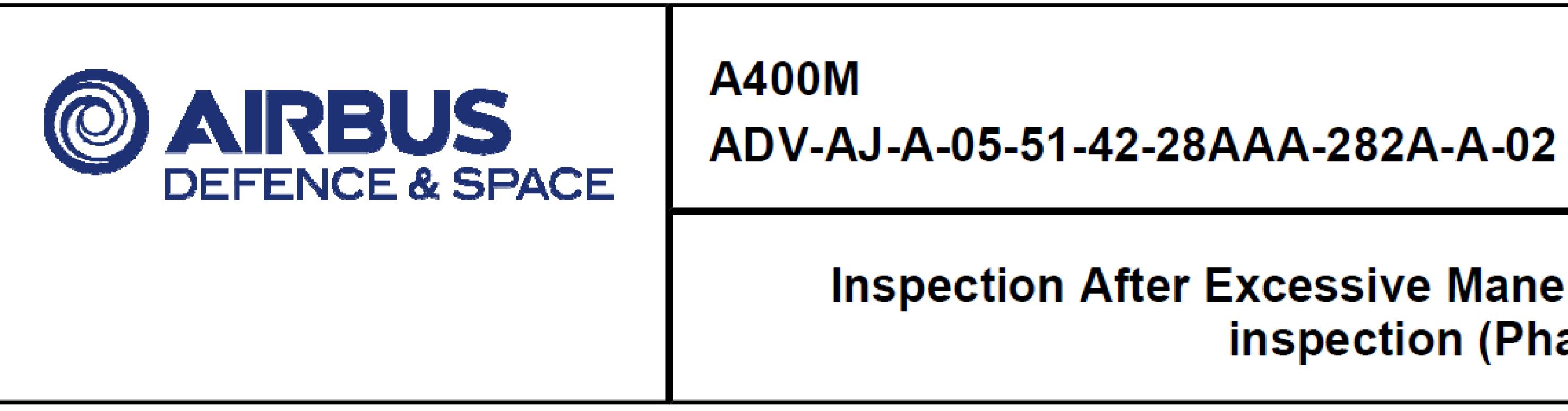








# Advance Copy – Header



# Envelope deliverable V XML authoring Including highlights

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# A400M TID – Advance Copy Authoring



Customized AdvCo stylesheet (.xsl) Complete (AM) or partial updated content (CSNs)

A400M TID - Advance Copy & S1000D



# **ADVANCED COPY**

### Inspection After Excessive Maneuver In Flight (Wing)-Unscheduled inspection (Phase 1 inspection)







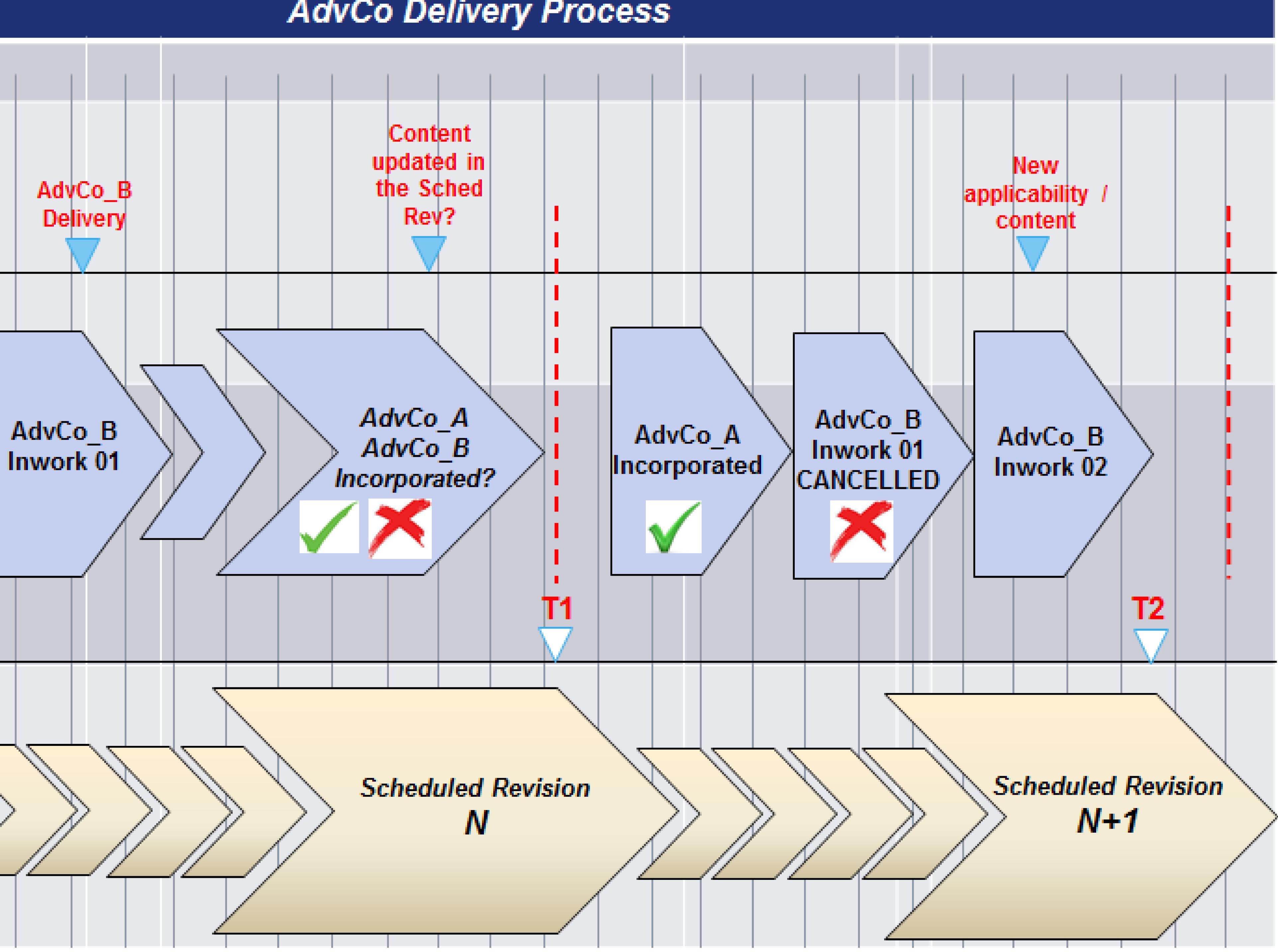




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# A400M TID – Advance Copy Authoring

### AdvCo Delivery Process









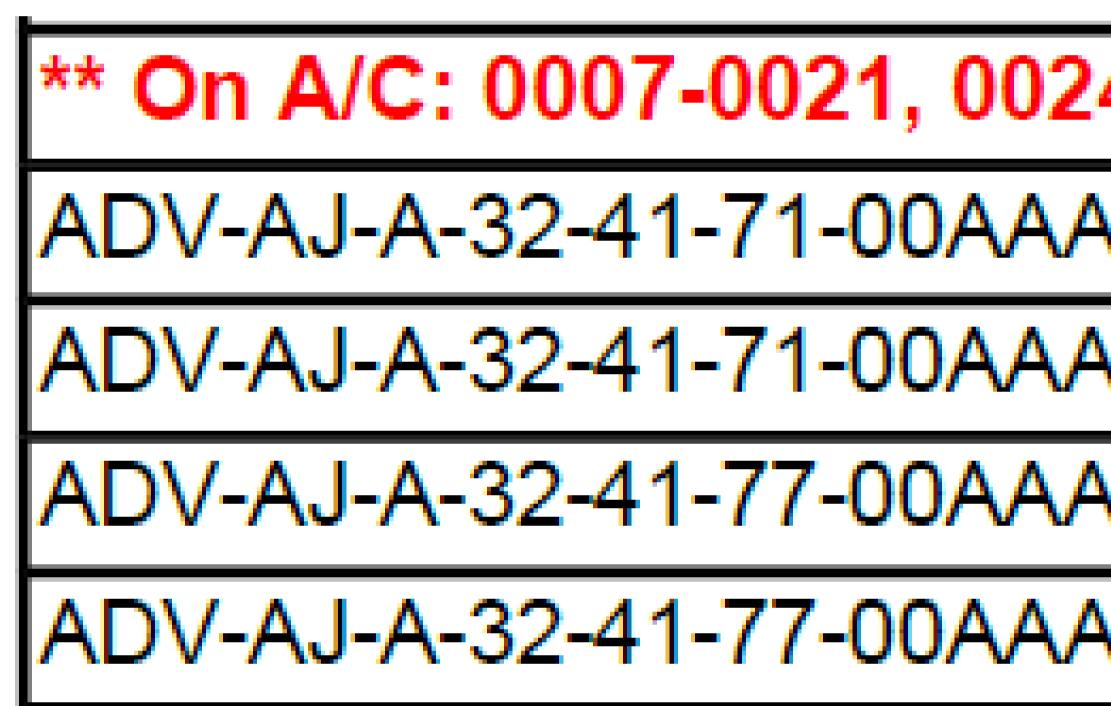




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# - Suppliers data – Advance Copy?



# - Industry deliverable 🖌 - Industry tracked 🗸 Process accepted by suppliers (on-demand)

# A400M TID – Advance Copy Authoring

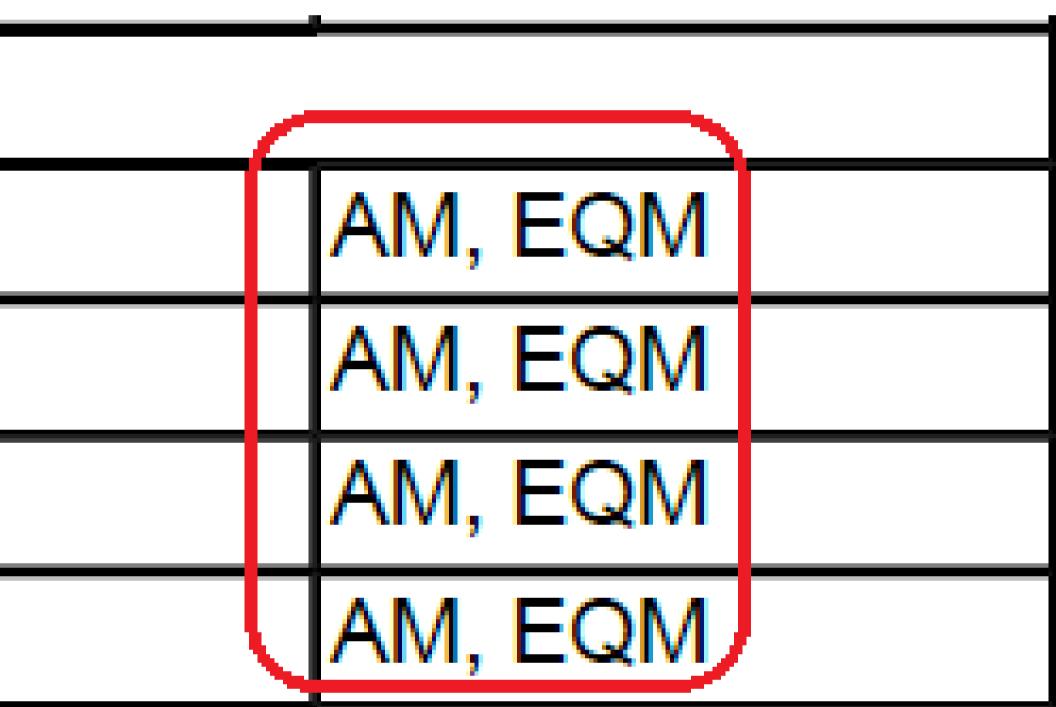
24-0031, 0033-0035 <b>,</b>	0037-0043, 0045-0	049, 0051-0057
A-310A-B-02	31/12/2016	
A-683A-B-01	31/12/2016	
A-310A-B-02	31/12/2016	
A-683A-B-01	31/12/2016	

















3. 4. Remark: operators / customers needs

# A400M TID – Advance Copy Traceability

# 1. Introduction: Why Advance Copy? 2. Way-of-Working – AS IS: authoring Way-of-Working – AS IS: traceability











# Change record – Coding

# of the publication.

AJ-A-00-40-00-NNAAA-00TA-D

NN = 35 (in accordance with <*pmnumber*>, infoset where the DM is allocated)



2017-06-12/14

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# A400M TID – Advance Copy Traceability

**S1000D Chap 3.9.4** (Front matter data modules)

# Technical Publication (List of applicable publications) - Change record (List of advance copies)

O AIRBUS DEFENCE & SPACE	A400M AJ-A-00-40-00-35AAA-00TA-D Issue: 011 - Inwork: 01 - Date: March 31, 2017	Applicability: * 0024-0031, 00 0051-0055, 00
Technical Publication (List of applicable put	plications)-Change record (List of advanced co	opies)

A400M TID - Advance Copy & S1000D



## The Change Record (CR – 00T) is intended to provide a continuing record of the state of each individual copy



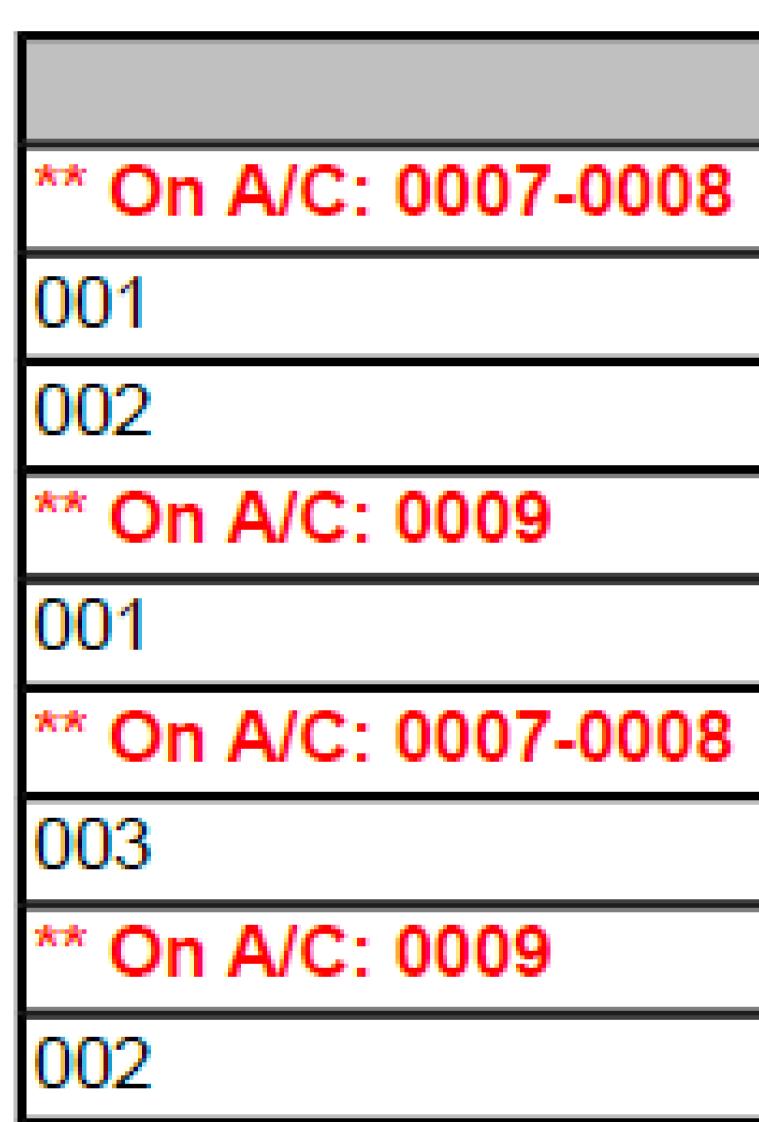
# \*\* On A/C: 0007-0021, 033-0035, 0037-0049, 057-0060



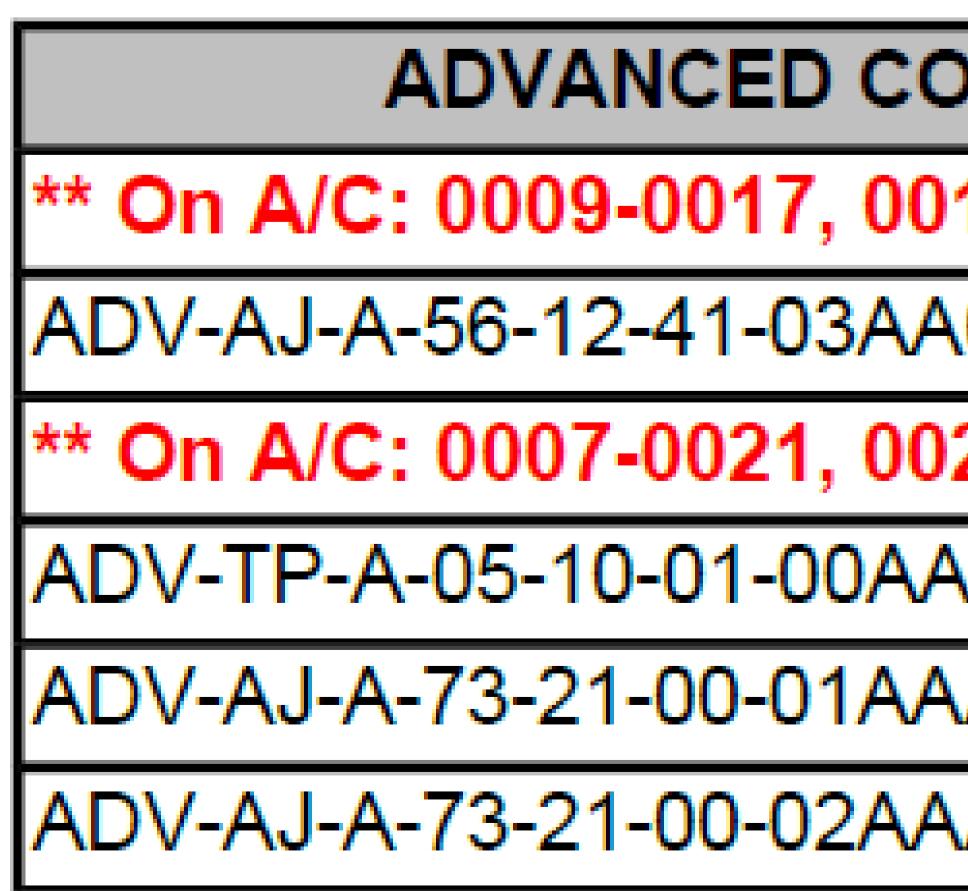




# **Change record – Layout**



## Table 2 – List of Advance Copies



2017-06-12/14

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# A400M TID – Advance Copy Traceability

Customized deliverable 🧹

## Table 1 – List of Scheduled Revisions (Summary of the TID Scheduled revisions by A/C MSN and Issue Date).

	ISSUE No.	
3		
		31/1
		31/0
		31/0
3		
		31/0
		31/0

OPY CODE	ISSUE Date	INCORPORATION Date	Applicable IS
019-0021, 0024-0028,	0031, 0033-0034,	0037-0038, 0043, 0045, 0047, 0051	
A0-941A-D-03	28/10/2016	CANCELLED	IPD
024-0031, 0033-0035,	0037-0043, 0045-0	049, 0051	
AA-030A-D-05	28/10/2016	31/12/2016	AM, EBM
AA-750A-A-02	24/10/2016	31/12/2016	AM
AA-750A-A-02	24/10/2016	31/12/2016	AM

A400M TID - Advance Copy & S1000D



ISSUE Date

12/2012

03/2013

03/2013

05/2013

05/2013



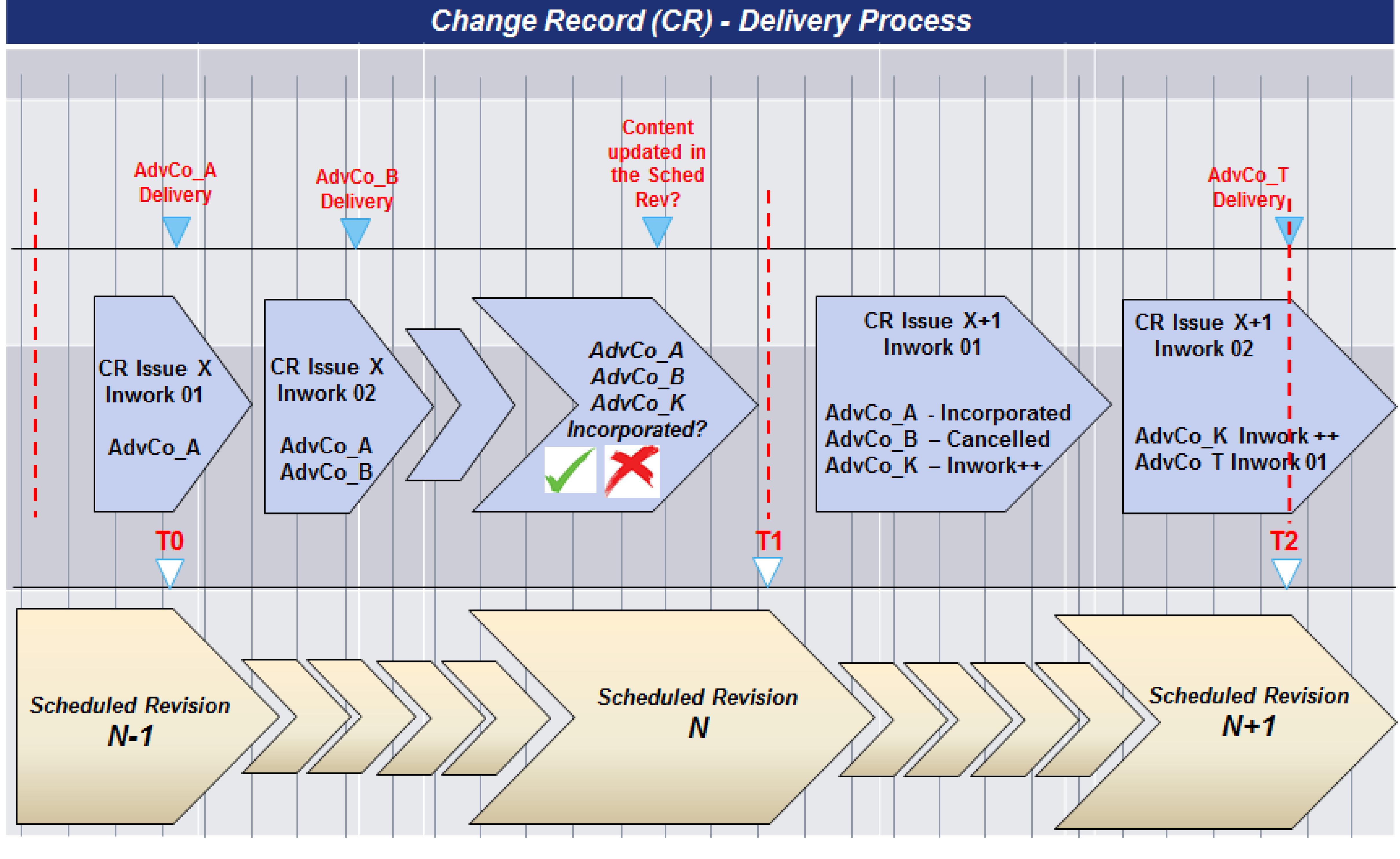








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# A400M TID – Advance Copy Traceability















# - AdvCo(s) delivery - Highlights

# ADVANCED CO ADV-AJ-A-54-15-72-21AA( ADV-AJ-A-54-15-72-22AA ADV-AJ-A-54-15-72-23AA0 \*\* On A/C: 0007-0021, 002 ADV-AJ-A-52-71-17-01AA \*\* On A/C: 0027, 0029-003 ADV-AJ-A-52-71-17-01AA/ \*\* On A/C: 0007-0021, 0024 ADV-AJ-A-54-10-00-00AAA \*\* On A/C: 0007-0020 ADV-AJ-A-52-13-73-01AA0 \*\* On A/C: 0007-0021, 0024 ADV-AJ-A-27-34-00-03AA/ ADV-AJ-A-27-34-00-02AAA

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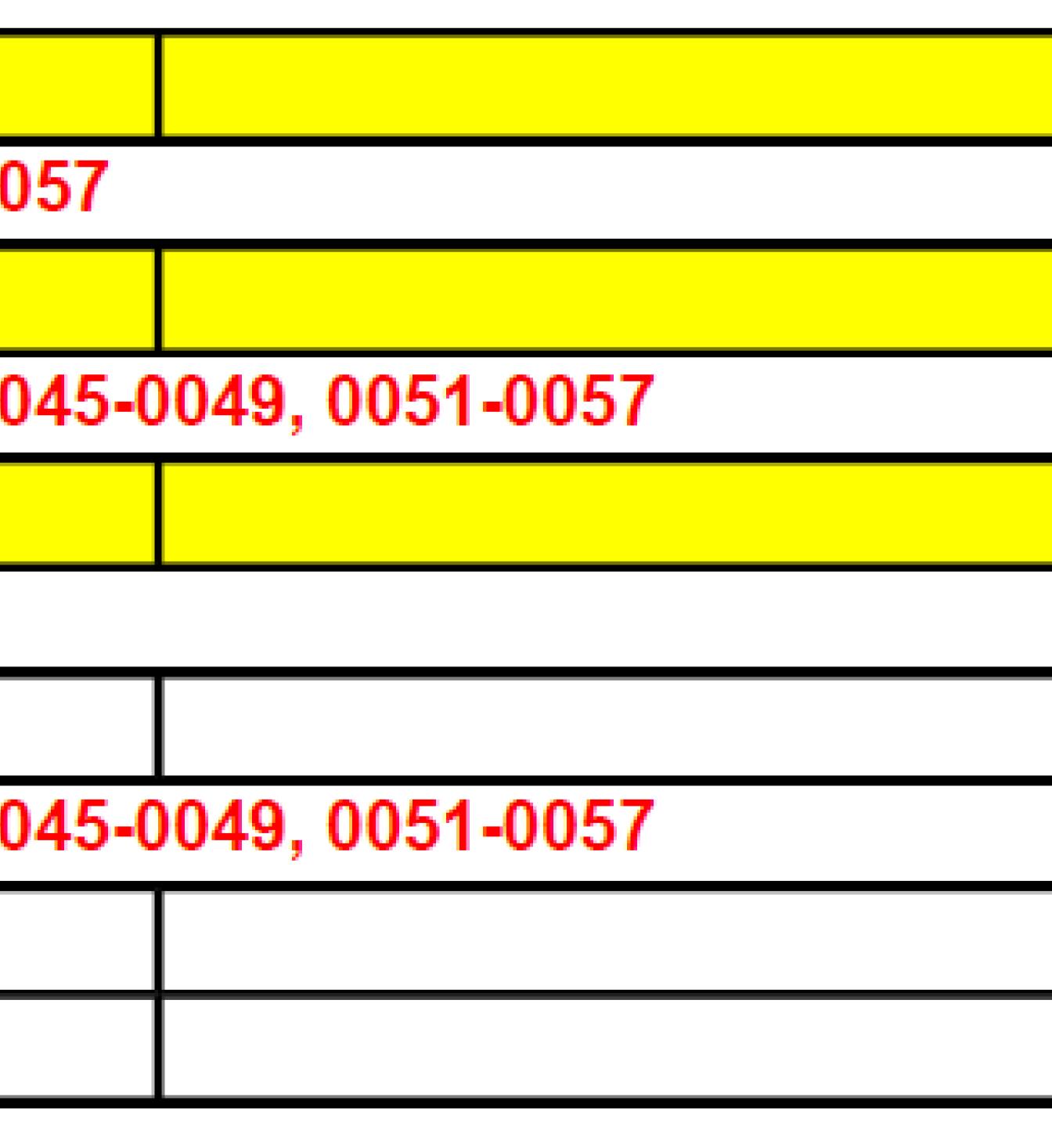
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# A400M TID – Advance Copy Traceability

DPY CODE	ISSUE Date	INCORPORATION Date	Applicable IS
\0-941A-D-01	16/03/2017		IPD
\0-941A-D-01	16/03/2017		IPD
\0-941A-D-01	16/03/2017		IPD
24-0026, 0028			
\0-941A-D-01	16/03/2017		IPD
31, 0033-0035, 0037-	-0049, 0051-0057		
A-941A-D-01	16/03/2017		IPD
24-0031, 0033-0035,	0037-0043, 0045-0	049, 0051-0057	
A-664A-A-02	16/03/2017		ASR
\0-941A-D-05	07/03/2017		IPD
24-0031, 0033-0035,	0037-0043, 0045-0	049, 0051-0057	
A-271A-A-01	03/03/2017		AM
A-271A-A-03	24/02/2017		AM















# Change record – Layout

# LOAP Infoset

The List of Advance Copies includes:

- The effective Advance Copies - The superseded Advance Copies with the corresponding Scheduled Revisions which cancel them.

The List of Advance Copies is issued and updated every time a new Advance Copy is delivered. It is also issued with the corresponding Scheduled Revision to indicate which Advance Copies have been implemented in that Scheduled Revision.

If a maintenance procedure (trigger of an Advance Copy) is supported by any not updated Data Module which is not part of the AM Publication Module, its corresponding IS will also be stated within the "Applicable IS" column following "AM" (for example: for the ADV-TP-A-72-11-00-01AAA-720B-B-04, the "Applicable IS" will be shown as "AM, EBM").

The Data Module Code will be indicated below the "INCORPORATION Date" if the content of the Advance Copy has been incorporated under a Data Module different from that which is stated within the Advance Copy Code.

The value "CANCELLED" in the "INCORPORATION Date" column shows an Advance Copy which is superseded(\*) by another Advance Copy, and the result in the List of Advance Copies is one of the following: - A new Advance Copy with the same content but new applicability - A new Advance Copy with its technical content updated. In both cases, the inwork within the Advance Copy Code will be increased, so the coding will be different in the new Advance Copy.

(\*) If the content of the Advance Copy is no longer applicable or the DM issue delivered is previous to the Advance Copy issue date, the Advance Copy will also be set as "CANCELLED", but it will not be superseded by any other Advance Copy.

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# A400M TID – Advance Copy Traceabilit

The List of Applicable Publications (LOAP) lists the required publications for a customer project.



АM	S1006		User F		7
ty					
	<ol> <li>LIST OF ADVANCED COPIES</li> <li>The List of Advanced Copies Includes:         <ul> <li>The effective Advanced Copies</li> <li>The superseded Advanced Copies with the</li> <li>The List of Advanced Copies is issued and upd corresponding Scheduled Revision to indicate via the maintenance procedure (trigger of an Advar Publication Module, its corresponding IS will als TP-A-72-11-00-01AAA-720B-B-04, the "Applica</li> <li>The Data Module Code will be indicated below under a Data Module different from that which I The value "CANCELLED" in the "INCORPORA Advanced Copy, and the result in the List of Advanced Copy with its technical core in both cases, the inwork within the Advanced Copy is no ior the Advanced Copy will also be set as "CANCE</li> </ul> </li> </ol>	lated every time a n which Advanced Co nced Copy) is supp so be stated within t able IS" will be show the "INCORPORAT is stated within the A TION Date" column vanced Copies is o ent but new applicat ntent updated. Copy Code will be i noer applicable or t	ew Advanced Copy is delivered. It is a ples have been implemented in that S orted by any not updated Data Module the "Applicable IS" column following "A vn as "AM, EBM"). "ION Date" if the content of the Advant Advanced Copy Code. I shows an Advanced Copy which is so ne of the following: oility horeased, so the coding will be different the DM issue delivered is earlier than th	cheduled Revision. which is not part of M" (for example: for ced Copy has been uperseded(") by and nt in the new Advanc	the AM r the ADV- Incorporated other
	ADVANCED COPY CODE ADV-AJ-A-54-15-72-21AAD-941A-D-01 ADV-AJ-A-54-15-72-22AAD-941A-D-01 ADV-AJ-A-54-15-72-23AAD-941A-D-01 ** On A/C: 0007-0021, 0024-0026, 0028 ADV-AJ-A-52-71-17-01AAD-941A-D-01 ** On A/C: 0027, 0029-0031, 0033-0035, 0037	ISSUE Date 16/03/2017 16/03/2017 16/03/2017 16/03/2017	INCORPORATION Date	Applicable IS IPD IPD IPD	
	ADV-AJ-A-52-71-17-01AAA-941A-D-01 ** On A/C: 0007-0021, 0024-0031, 0033-0035, ADV-AJ-A-54-10-00-00AAA-664A-A-02 ** On A/C: 0007-0020 ADV-AJ-A-52-13-73-01AA0-941A-D-05 ** On A/C: 0007-0021, 0024-0031, 0033-0035,	16/03/2017 0037-0043, 0045- 16/03/2017 07/03/2017 0037-0043, 0045-		IPD ASR IPD	
	ADV-AJ-A-27-34-00-03AAA-271A-A-01 ADV-AJ-A-27-34-00-02AAA-271A-A-03 ** On A/C: 0007-0020 ADV-AJ-A-52-13-73-01AA0-941A-D-04 ** On A/C: 0007-0021, 0024-0031, 0033-0035, ADV-AJ-A-27-34-00-02AAA-271A-A-02	03/03/2017 24/02/2017 22/02/2017 ,0037-0043,0045- 15/02/2017	CANCELLED 0049, 0051-0057 CANCELLED	AM AM IPD AM	





### AIRBUS DEFENCE AND SPACE A400M MAINTE Dear Customer, 19034\_Associated Data\_AdvCo\_Dec'16\_Rev\_12.zip 19034\_Maintenance\_AdvCo\_Dec'16\_Rev\_12.zip I9034\_Repair\_AdvCo\_Dec'16\_Rev\_01.zip ADV-AJ-A-54-15-72-21AA0-941A-D-01 ADV-AJ-A-54-15-72-22AA0-941A-D-01 ADV-AJ-A-54-15-72-23AA0-941A-D-01 ADV-AJ-A-52-71-17-01AA0-941A-D-01 ADV-AJ-A-52-71-17-01AAA-941A-D-01 ADV-AJ-A-54-10-00-00AAA-664A-A-02 DME-844BB-19034-AJ-A-00-40-00-35AAA-00TA-D\_010-13.PDF

IMPORTANT NOTE:

Questions about the technical content of these Advanced Copies are to be addressed through the TID Customer Commenting functionality of the A400M Customer Services Web Portal (A400M CSWP), by referring to the affected DM.

Yours sincerely

A400M Technical Information and Data Team



# A400M TID – Advance Copy Traceability

ENANCE	PUBLICAT	IONS AD	VANCED	COPY NO	DTIFICAT

Since we have been informed you are not still able to access to your dedicated sFTP area (sftp.ronda.casa.eads.net), please find attached the following Airn@v Service anchoring files for A400M.

Please remember that these zip files, which can be used to easily update your Airn@v services, contain inside the data folder the relevant Advanced Copies pdfs:

A400M TID - Advance Copy & S1000D



### TION











Sitio local:	M:\01_ADVANCED COPY\14_201612_Rev'Dec\12_16-03-2017\
	🛓 📲 13_201609-Rev'Sep
	🚊 🚺 14_201612_Rev'Dec
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	i 12_16-03-2017
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EAJ24	Maintenance_AdvCo_Dec'16_Rev_12.zip
EAJ24	Repair_AdvCo_Dec'16_Rev_01.zip
<b>19034_</b>	Associated Data_AdvCo_Dec'16_Rev_12.zip
E 19034_N	Maintenance_AdvCo_Dec'16_Rev_12.zip
E 19034_F	Repair_AdvCo_Dec'16_Rev_01.zip
E KCUD5	_Associated Data_AdvCo_Dec'16_Rev_12.zip
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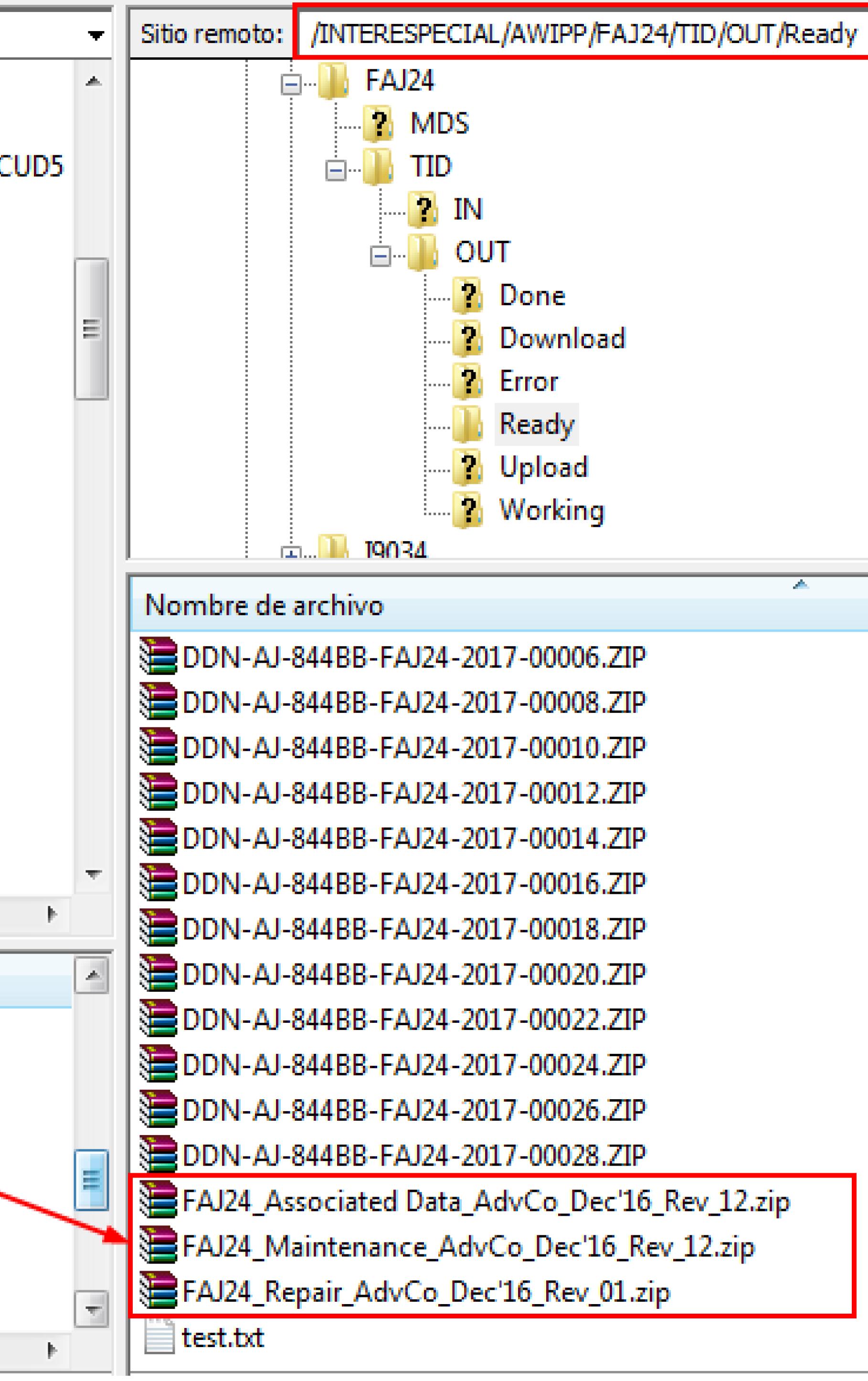
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# A400M TID – Advance Copy Traceability



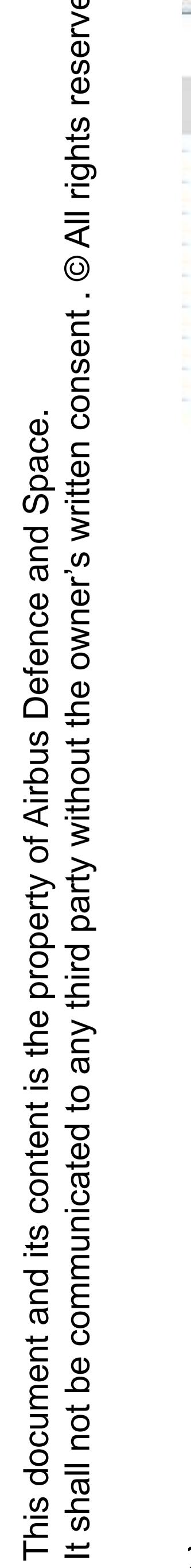




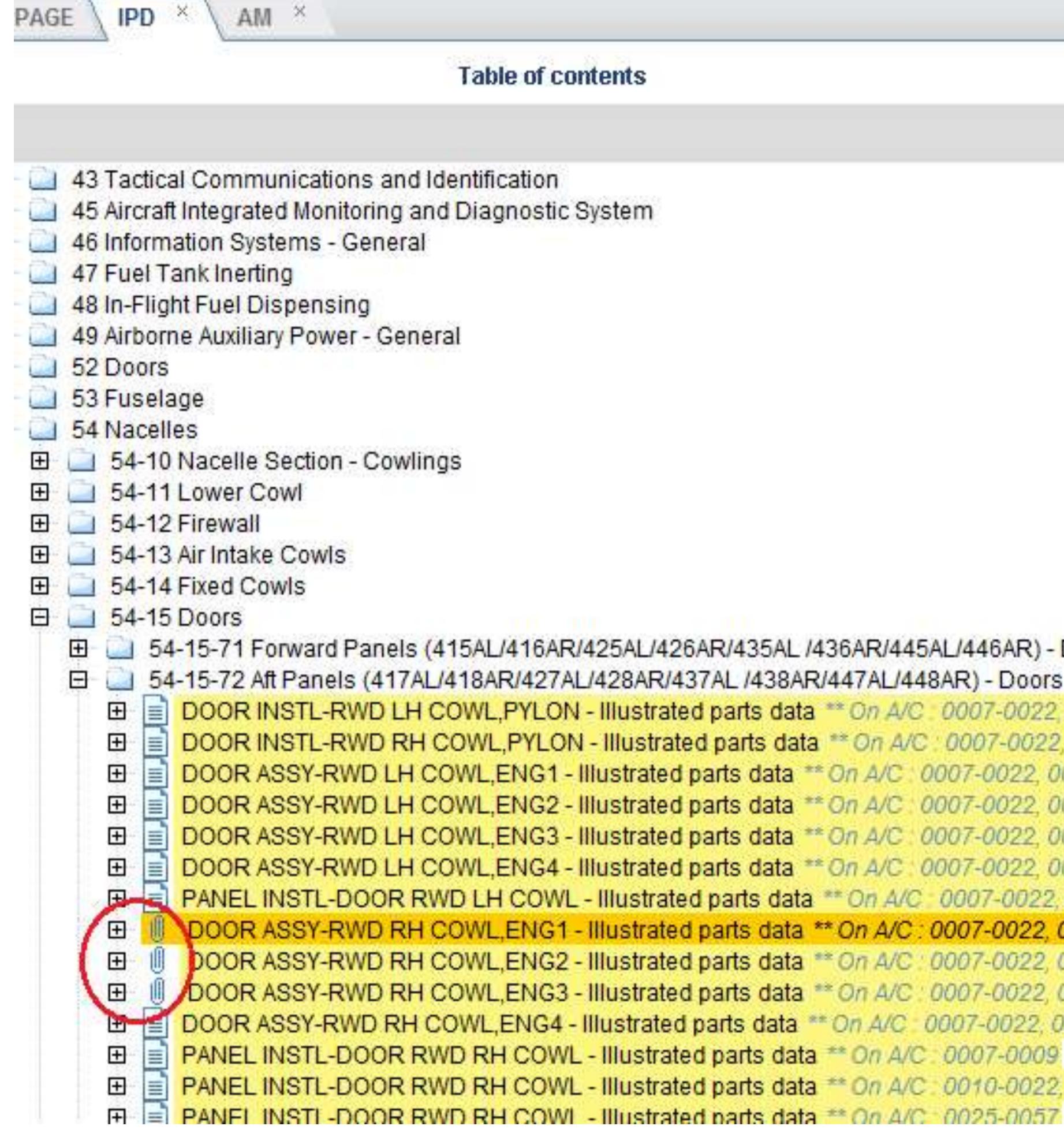








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# A400M TID – Advance Copy Traceability

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	ADV-AJ-A-54-15-72-21AA0-94	1A-D-01.PDF
		Page 1 of 3
	A400M ADV-AJ-A-54-15-72-21AA0-941A-D-01	Page 1 of 3 ADVANCED COPY
		ADVANCED COPY
	ADV-AJ-A-54-15-72-21AA0-941A-D-01	ADVANCED COPY
	ADV-AJ-A-54-15-72-21AA0-941A-D-01	ADVANCED COPY ENG1 – Illustrated parts data
The second secon	ADV-AJ-A-54-15-72-21AA0-941A-D-01 DOOR ASSY-RWD RH COWL 007-0022, 0024-0057	ADVANCED COPY ENG1 – Illustrated parts data









2. Way-of-Working – AS IS: authoring 3.

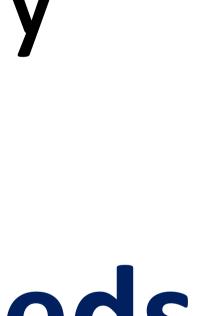
# A400M TID – Advance Copy Remarks

# 1. Introduction: Why Advance Copy?

# Way-of-Working – AS IS: traceability

# 4. Remark: operators / customers needs













The A400M programme has already put in place a TID procedure to be able to answer and deliver data to operators out of the TID scheduled revisions (3-month-basis). But what happens if industry has to deliver a data module in advance (AOG/Safety/Operability issues)? Do we have a standard & controlled process?

Not all operators / customers have a CSDB or resources to integrate S1000D DMs and they are not able to modify / update their TID deliverables on-demand.

Interchangeability (*spares - <csn>*), IPD AdvCo(s).

Operators need their updated technical publications to perform maintenance activities even though they receive other in-service engineering documentation; AOT, OIT,...

Official TID deliverable to support maintenance activities & operations.

Support process between Sched. Revisions  $\rightarrow$  Operators find FULL Support & back-office for the product although it requires also an effort by customers' side (traceability, attachment management...).

2017-06-12/14

# A400M TID – Advance Copy Remarks











### De-briefing...

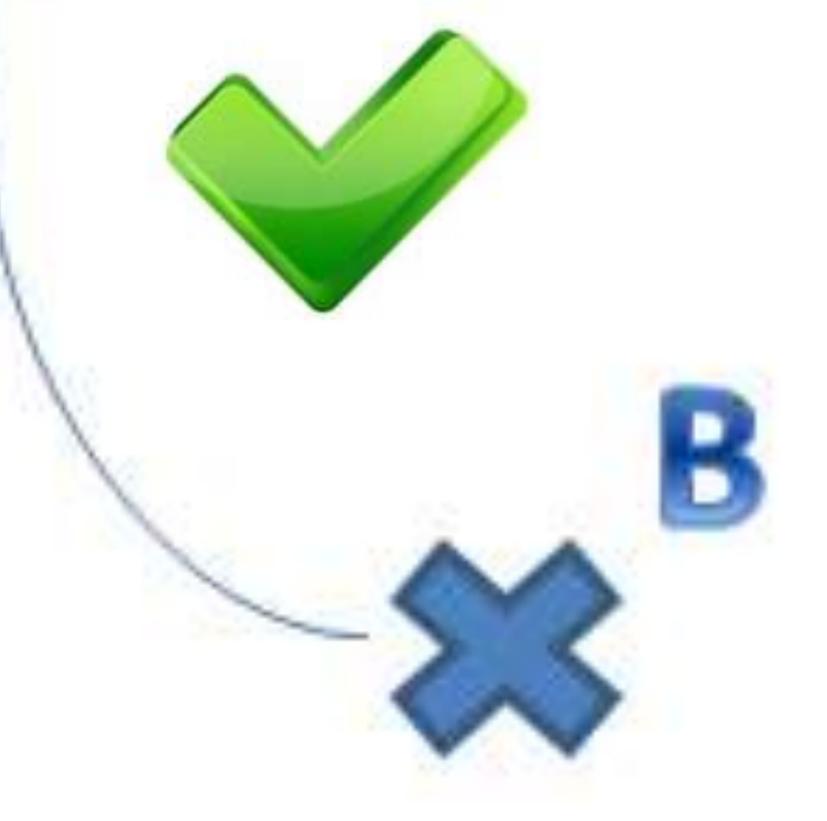
# $\rightarrow$ Operators need our SUPPORT & industry has to develop a mechanism to cover this need. $\rightarrow$ TID Team is convinced that this is a way forward in order to achieve an operational **PRODUCT**.

# Operation succeed!

2017-06-12/14

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# A400M TID – Advance Copy & S1000D













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# Thank you for your attention! Questions?

# Manuel Álvarez Morales

A400M TID Operability Manager (TASST1) Engineering Services - Transport Services

+ 34 954 597 639 M + 34 656 984 419 E Manuel.Alvarez@airbus.com

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