Configuration data exchange

Configuration Management Working Group scope and challenges

Patricia FRANCOIS-AUGUY

ATA e-Business forum - June 12-14 2017

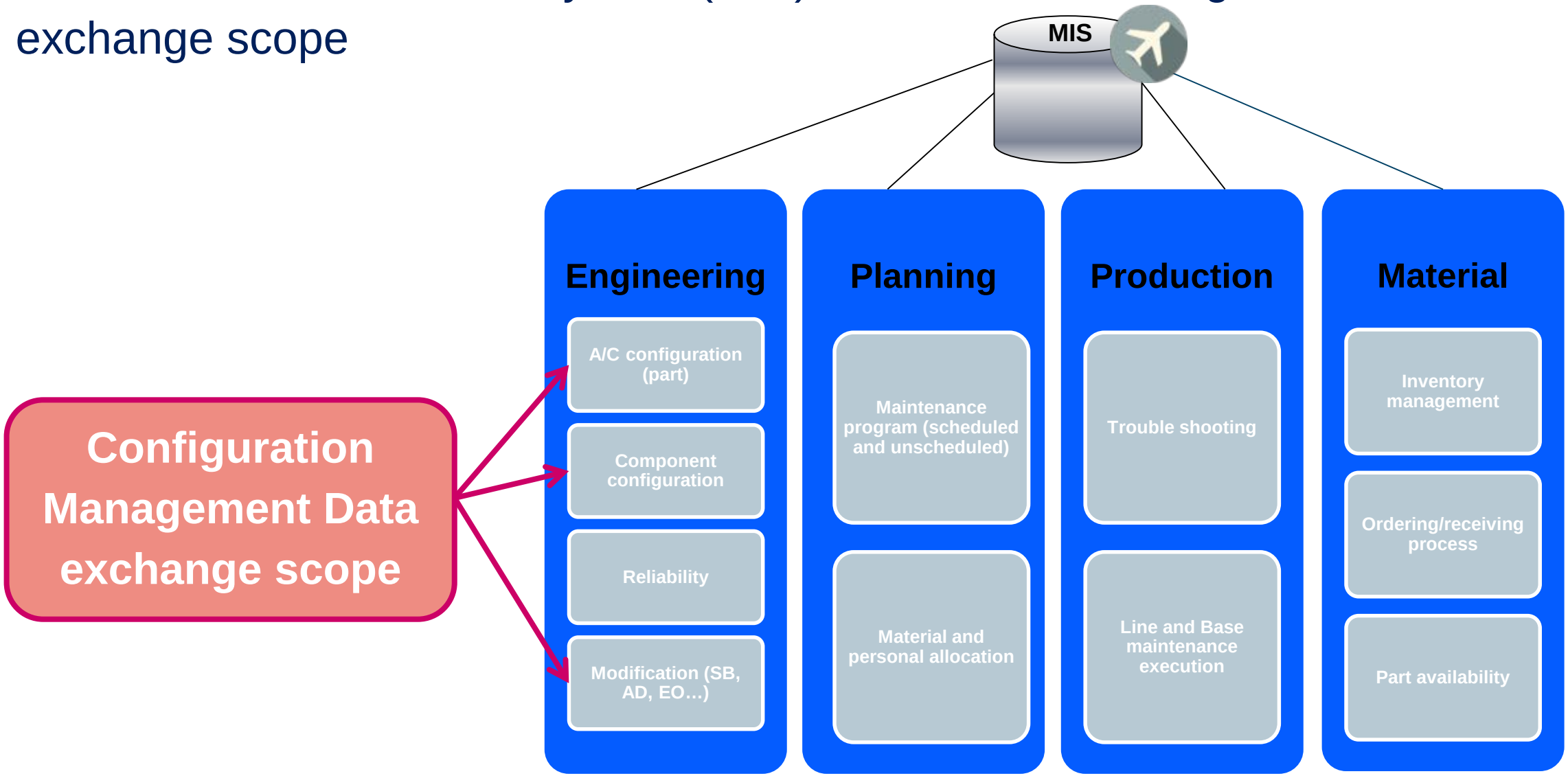
AIRBUS

Summary

- Configuration data scope
- Data exchange use cases
- Involved ATA e-Business exchange standards

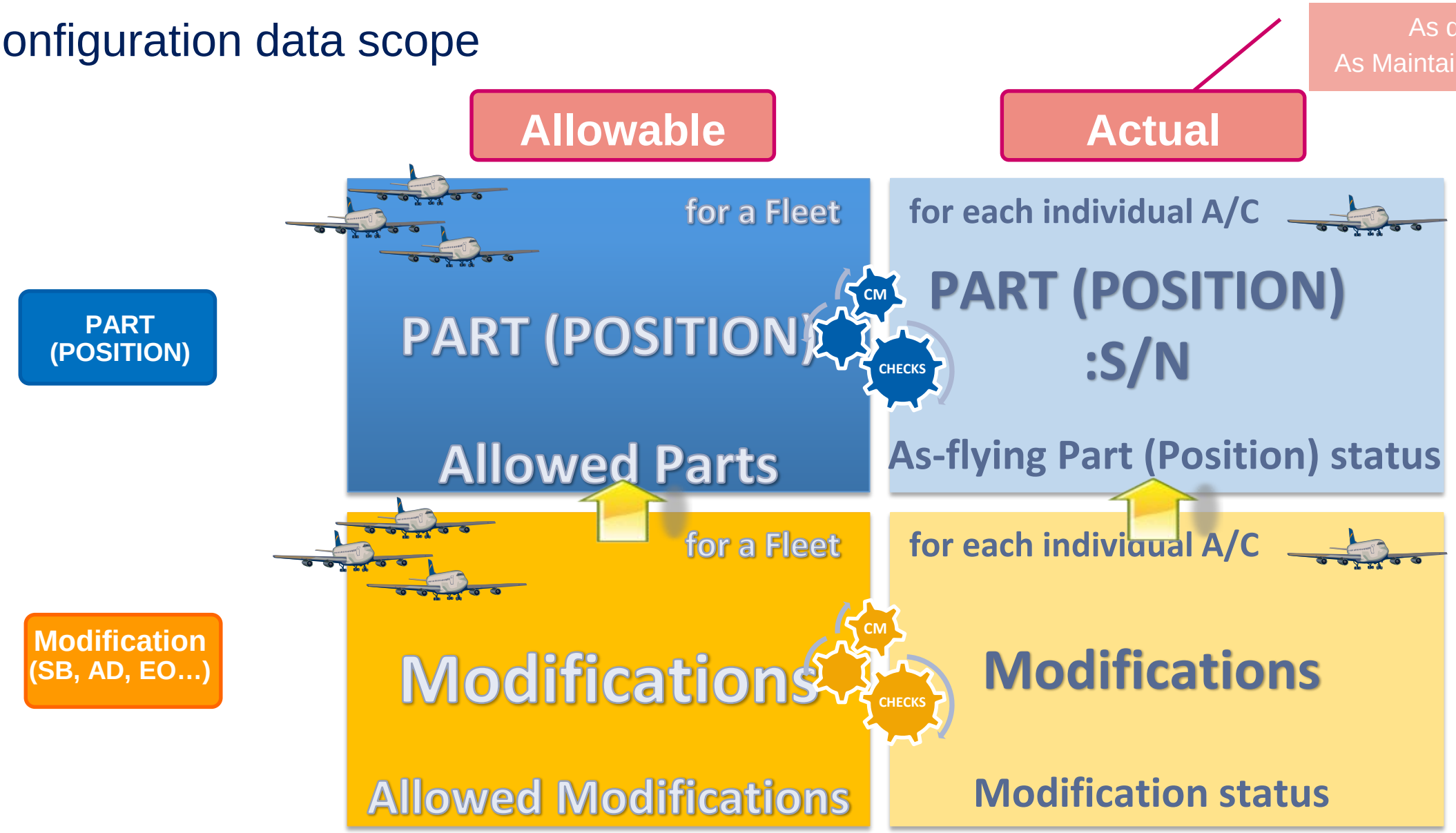
Configuration data scope

Maintenance Information System (MIS) modules and Configuration data exchange scope



Configuration data scope

As delivered
As Maintained / As-Flying

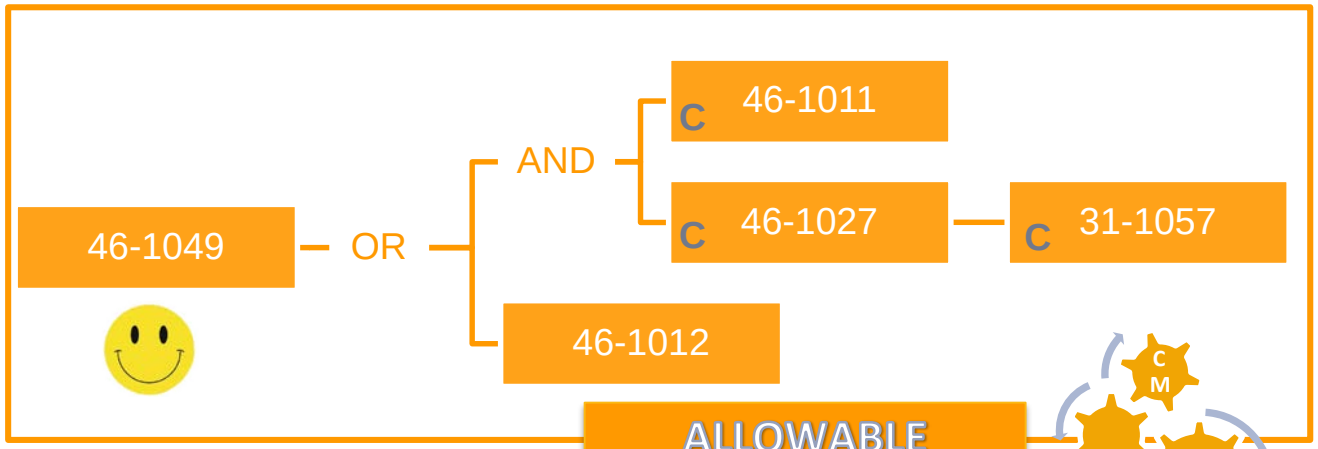


Actual (Modifications) configuration vs Allowable (Modifications) configuration

Aircraft - MSN 2 – registration number XXX

Modification number	Type	EO	AD	Description	Status	Accomplishment date
46-1011	SB				C	10/12/2016
31-1057	SB				C	01/08/2016
46-1027	SB				C	04/05/2016
ST324590	STC				C	16/03/2014

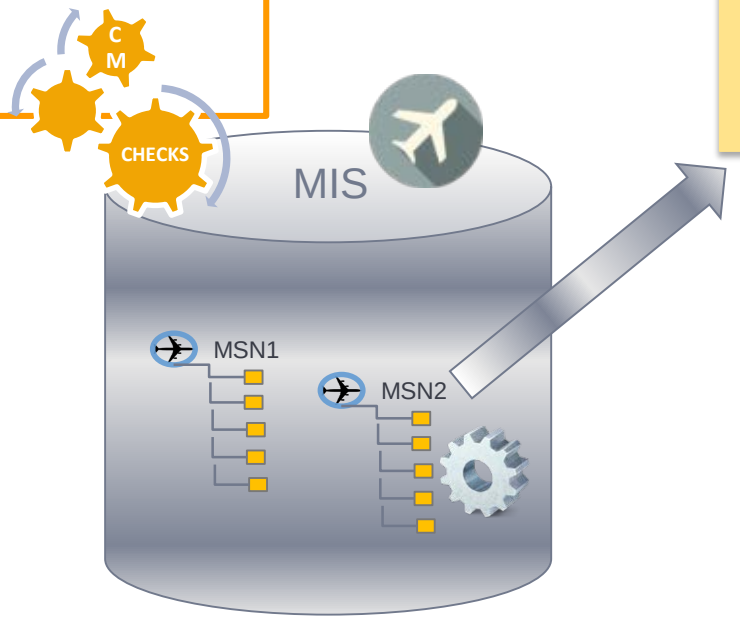
Which Modifications have been embodied on a given A/C?



ALLOWABLE (MODIFICATIONS) CONFIGURATION

Conditions based on ACTUAL CONFIGURATION in MODIFICATIONS

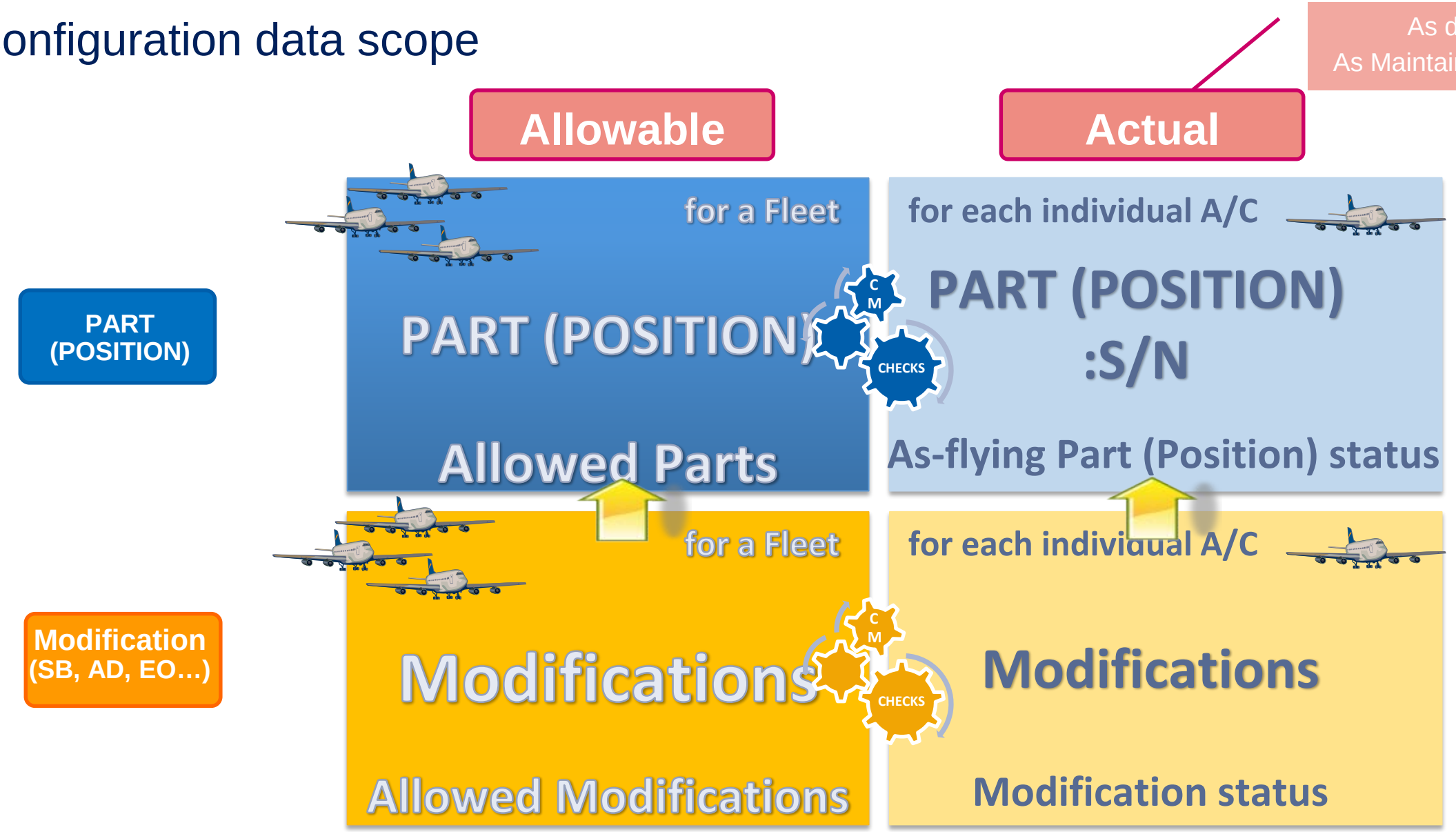
Which SB can be embodied on my A/C ?
And under which conditions ?



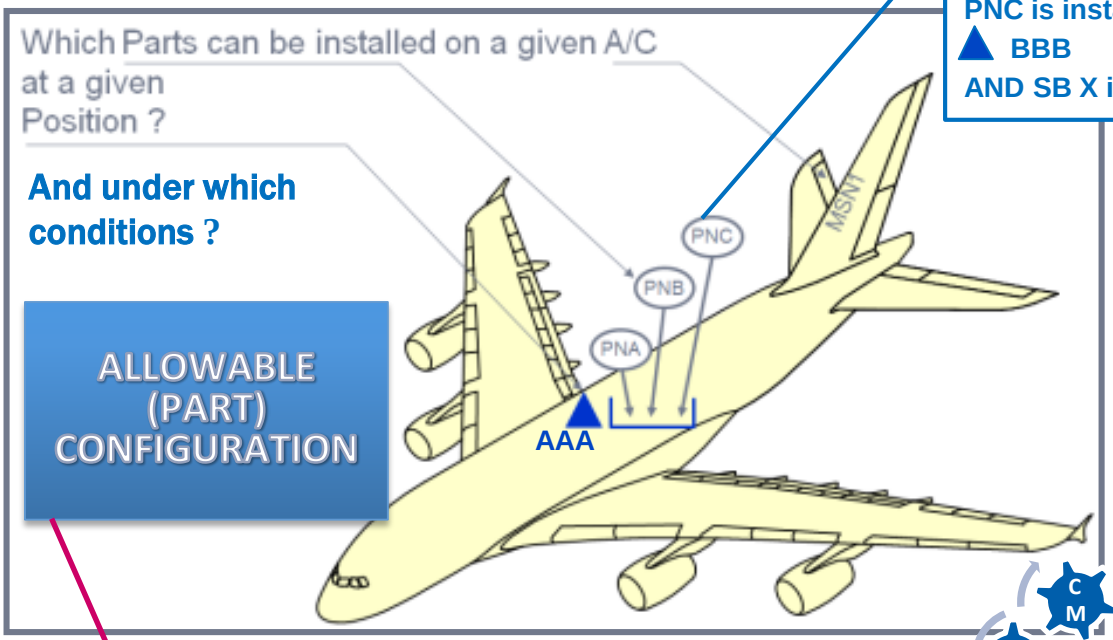
ACTUAL (MODIFICATIONS) CONFIGURATION

Configuration data scope

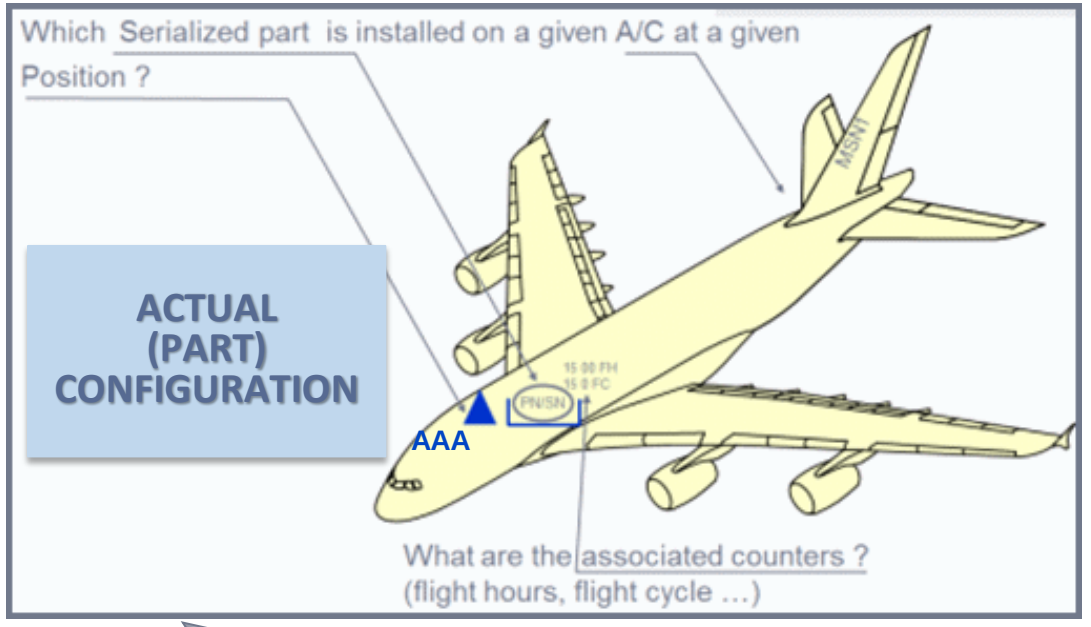
As delivered
As Maintained / As-Flying

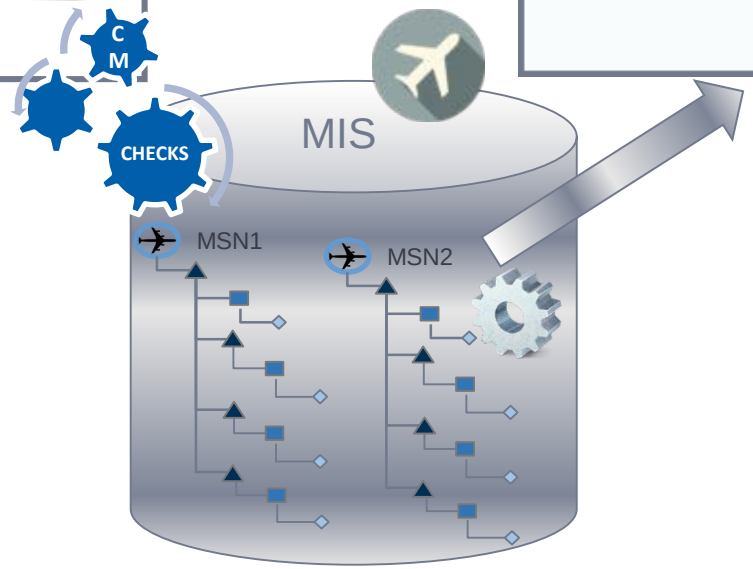


Actual (Part) configuration vs Allowable (Part) configuration



IF
PNC is installed on position
▲ BBB
AND SB X is embodied



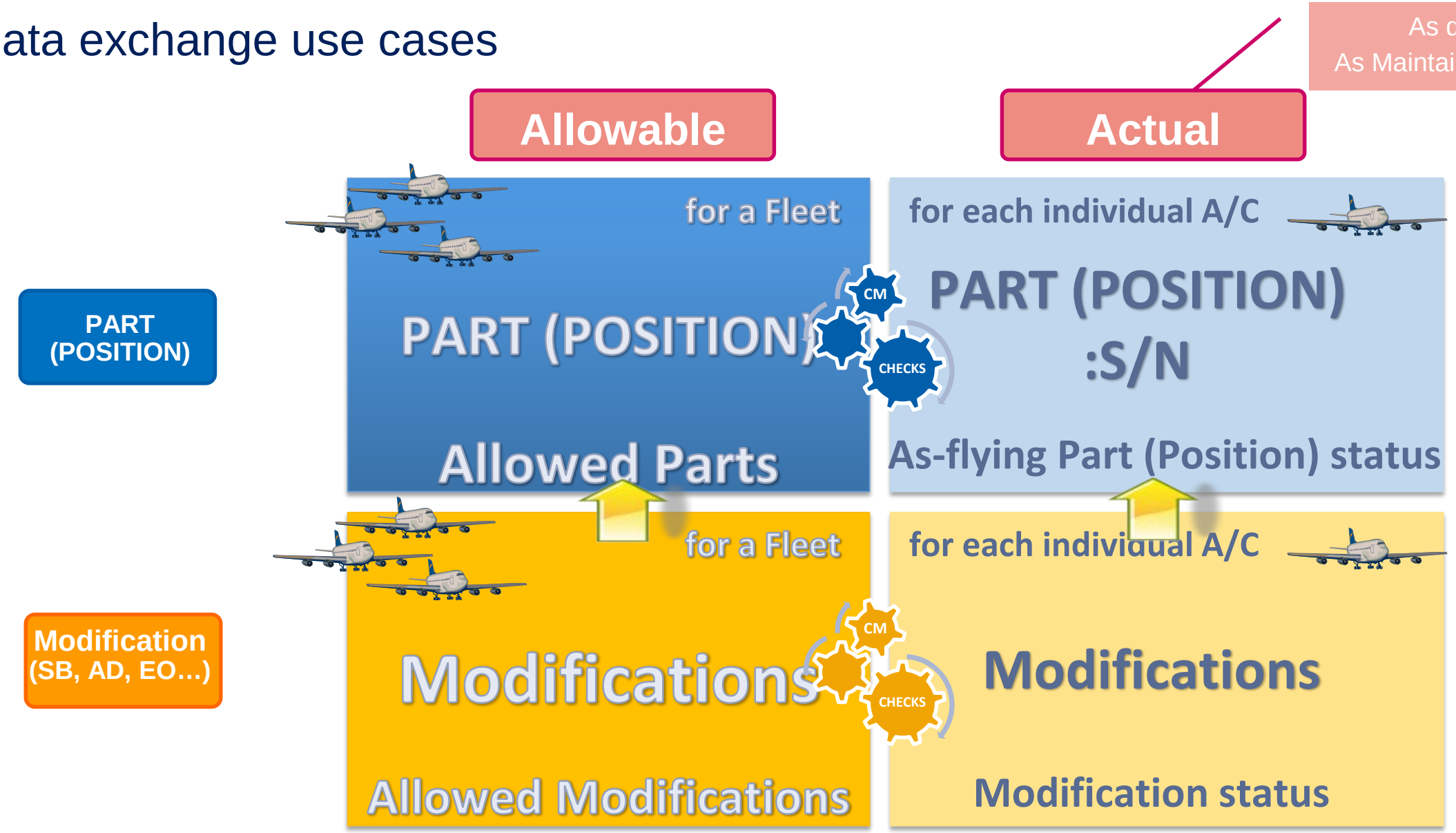


Conditions based on <u>ACTUAL CONFIGURATION</u> in PARTS and MODIFICATIONS

Data exchange use cases

Data exchange use cases

As delivered
As Maintained / As-Flying



Data exchange use cases

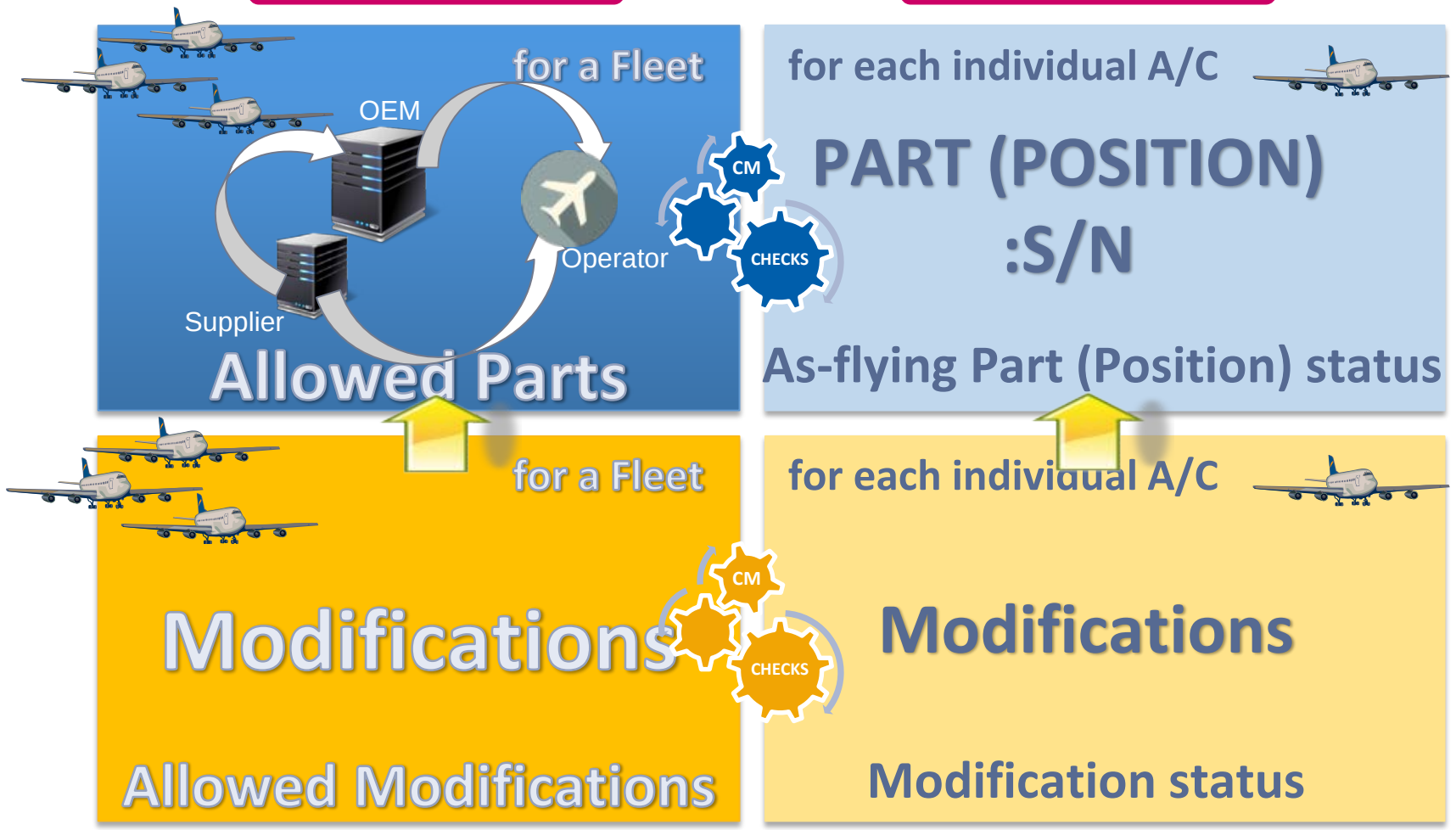
As delivered
As Maintained / As-Flying

Allowable

Actual

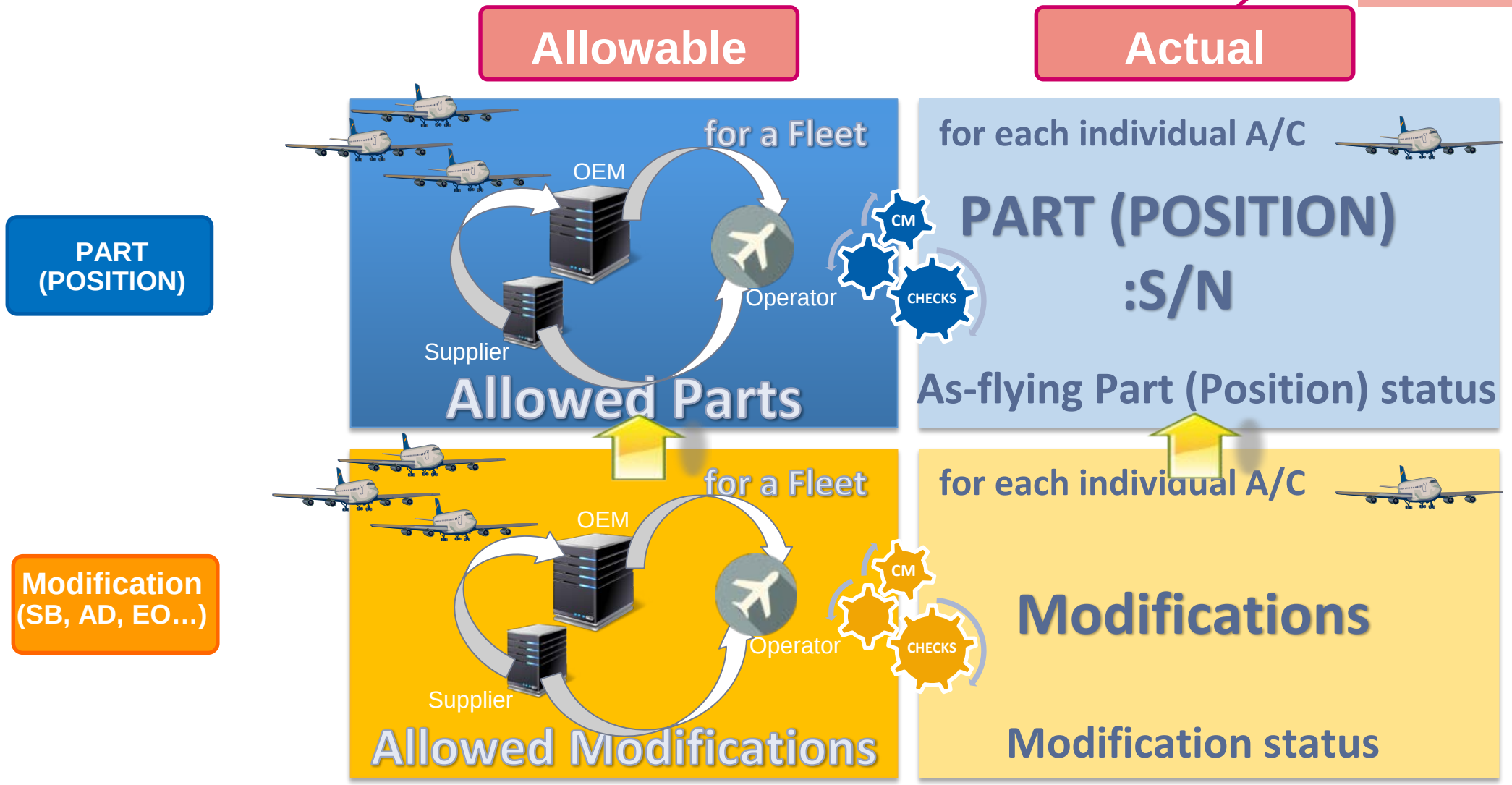
PART (POSITION)

Modification (SB, AD, EO…)



Data exchange use cases

As delivered
As Maintained / As-Flying



Data exchange use cases

As delivered
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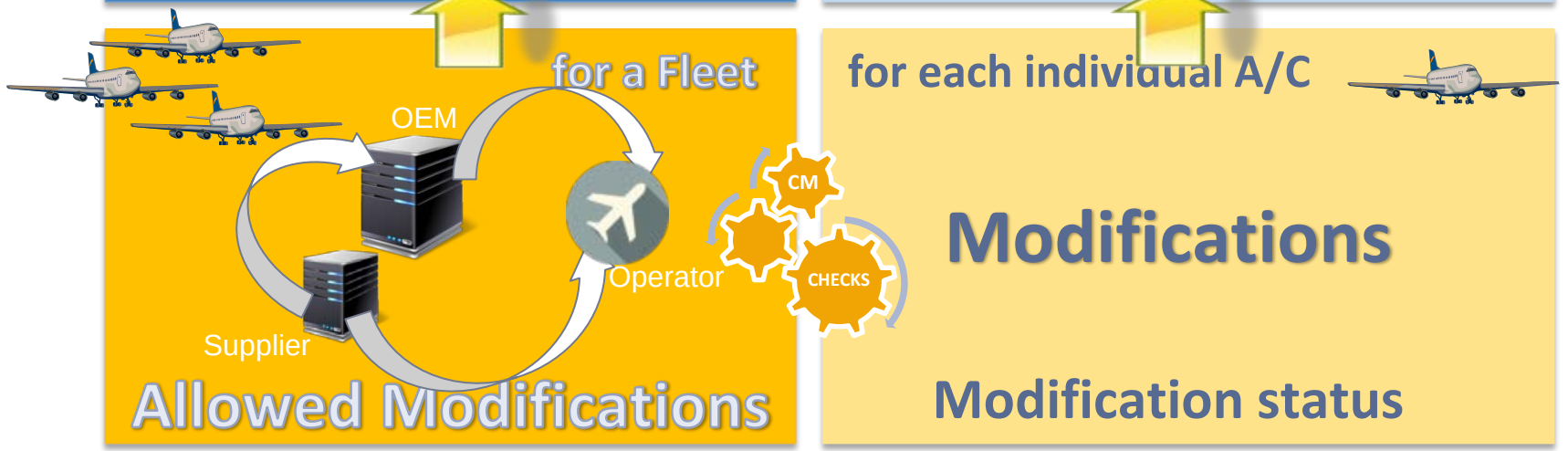
Allowable

Actual

PART (POSITION)

Modification (SB, AD, EO…)



Data exchange use cases

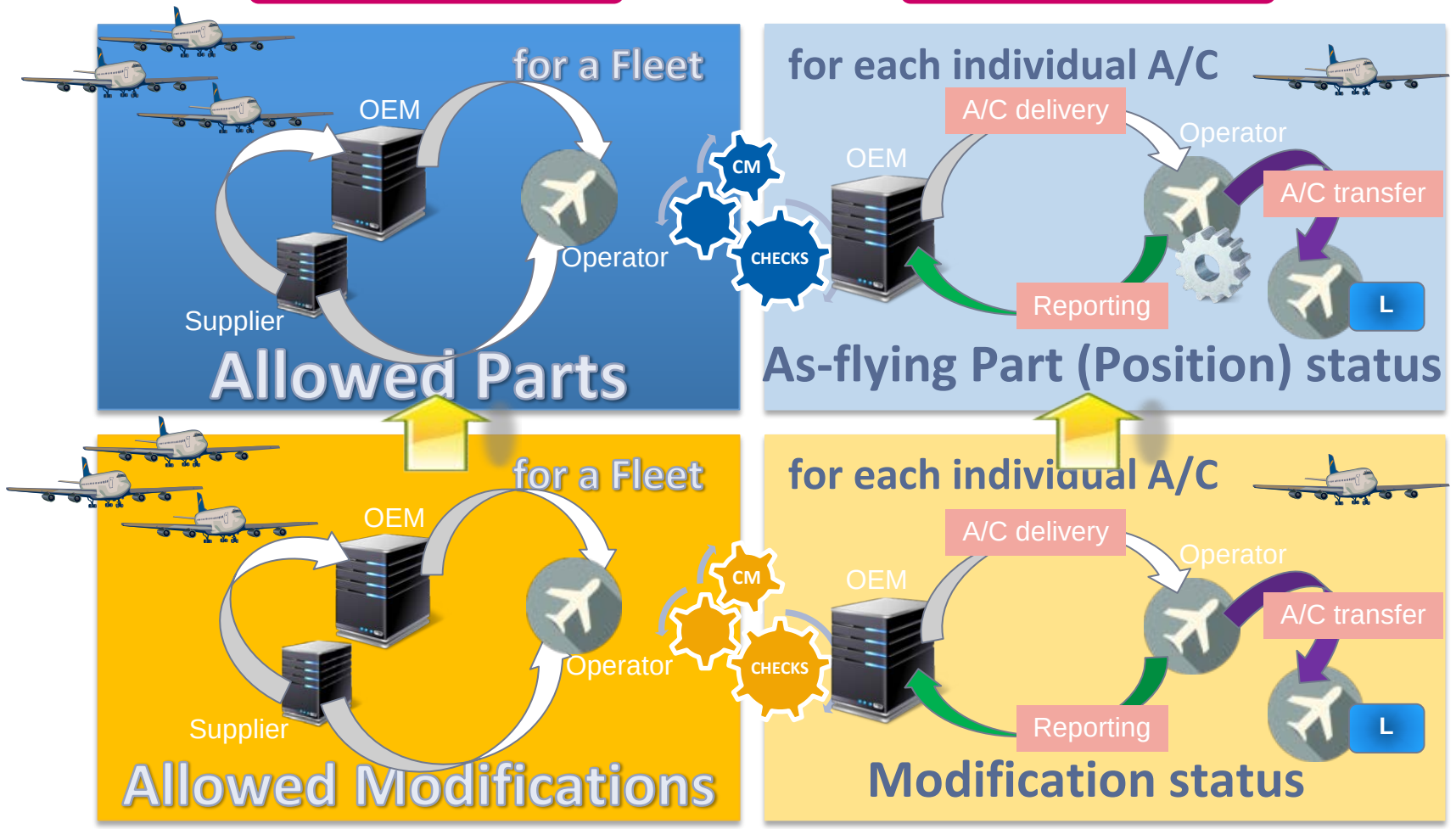
As delivered
As Maintained / As-Flying

Allowable

Actual

PART (POSITION)

Modification (SB, AD, EO…)



Involved ATA e-Business exchange standards

ATA e-Business Configuration Management Working Group

Allowable

Actual

STRONG CONSISTENCY required

for a Fleet

PART (POSITION)

d Parts

CM

CHECKS

for each individual A/C

PART (POSITION) :S/N

As-flying Part (Position) status

for a Fleet

cations

Allowed Modifications

CM

CHECKS

for each individual A/C

Modifications

Modification status

C M W G

Main objective

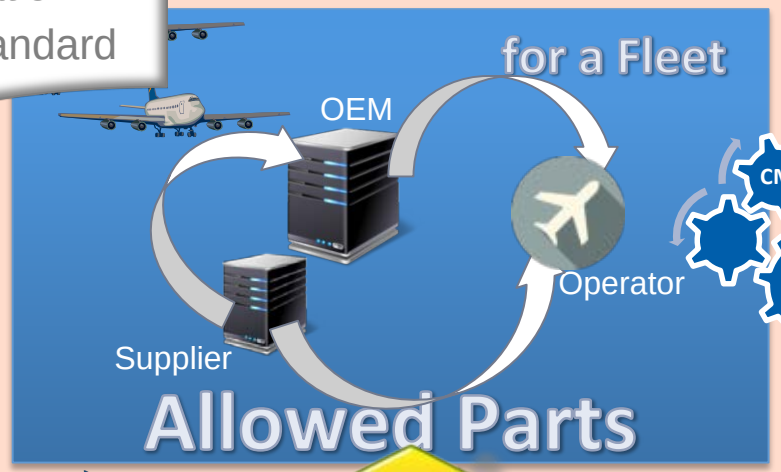
Oversee the development and harmonization of exchange standards pertaining to the global scope of Configuration Management concepts across the ATA e-Business Program specifications

ATA e-Business exchange standards for Configuration data

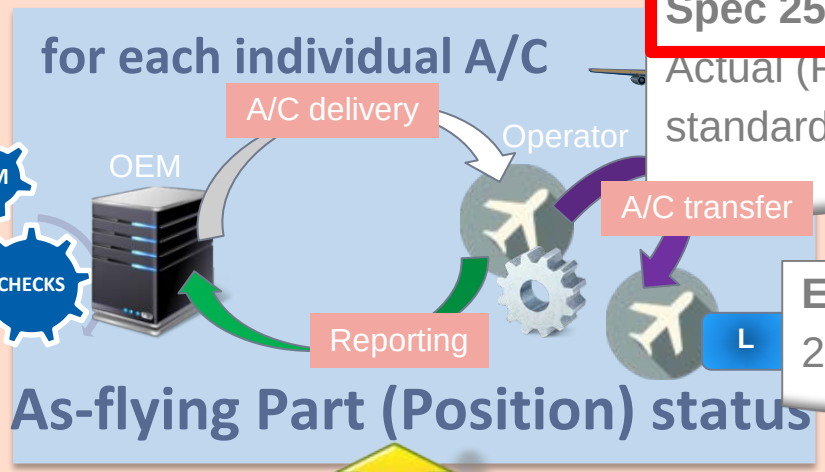
Spec 2400 - New
Allowable configuration (Part) exchange standard

PART (POSITION)

Allowable



Actual

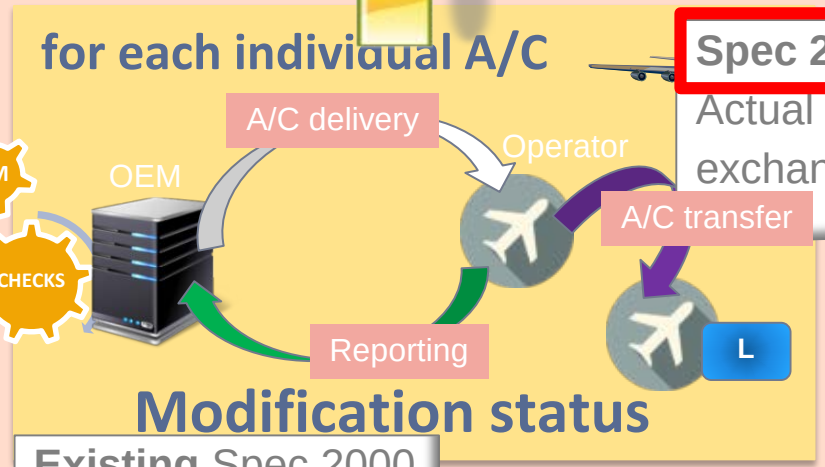


Reporting

Spec 2500 – New
Actual (Part) exchange standard
A/C delivery

Existing Spec 2000 chapter 15
A/C delivery

Modification



Spec 2500 – New
Actual (Mod) exchange standard
A/C delivery

No exchange standard - Data delivered within each SB (through S1000D or *i*spec 2200)
Use cases to be confirmed

Existing Spec 2000 chapter 11
Reporting

ATA new e-Business exchange standards roadmap

First quarter 2018

Spec 2400

June 2017

Spec 2500

Allowable

Actual

PART (POSITION)

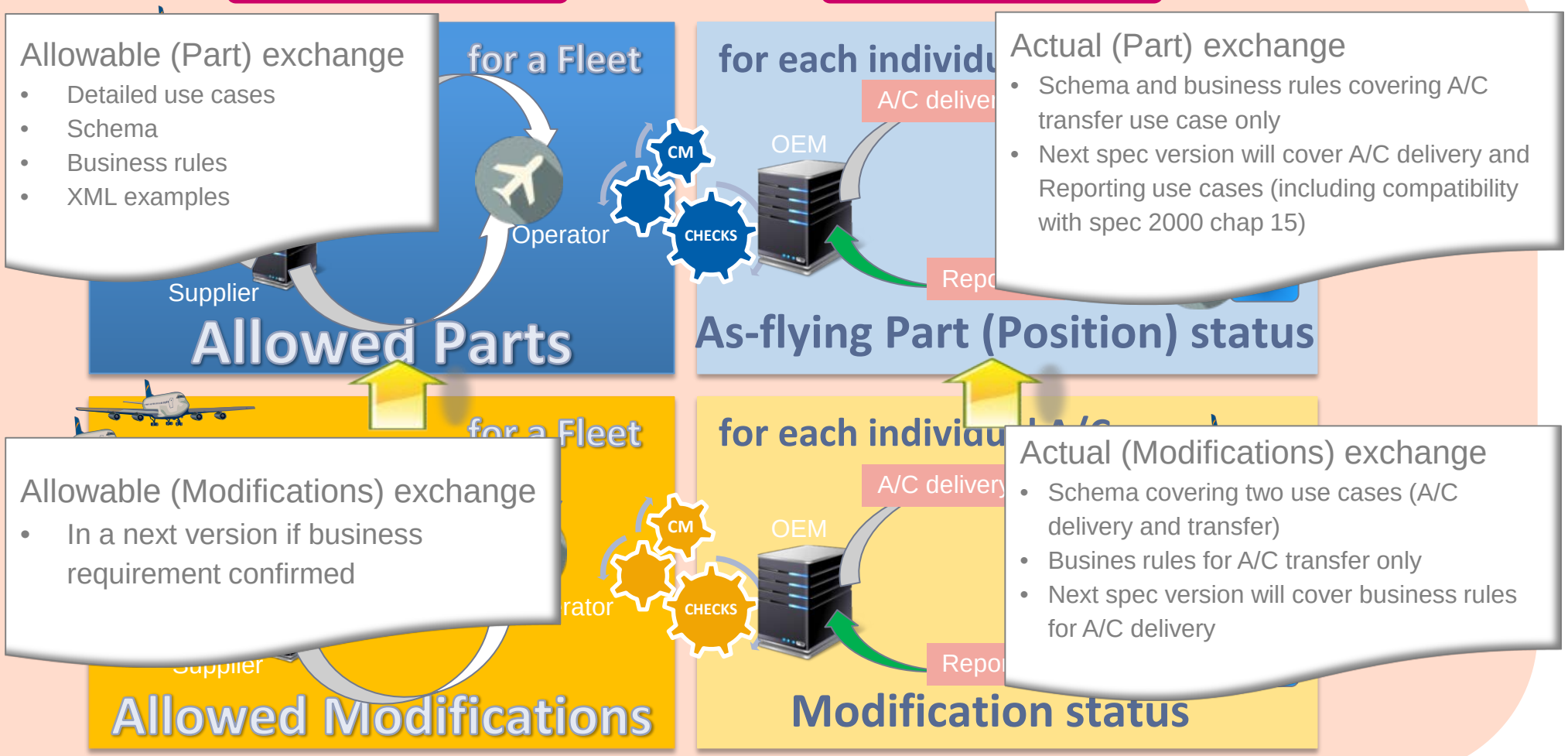
Modification (SB, AD, EO…)

Allowable (Part) exchange
- Detailed use cases
- Schema
- Business rules
- XML examples

Actual (Part) exchange
- Schema and business rules covering A/C transfer use case only
- Next spec version will cover A/C delivery and Reporting use cases (including compatibility with spec 2000 chap 15)

Allowable (Modifications) exchange
- In a next version if business requirement confirmed

Actual (Modifications) exchange
- Schema covering two use cases (A/C delivery and transfer)
- Busines rules for A/C transfer only
- Next spec version will cover business rules for A/C delivery



Thank you