



ATA e-BUSINESS PROGRAM



Host (on behalf of ASD):



ADS is the Premier Trade Organisation for companies in the UK Aerospace, Defence, Security and Space Sectors.

Applicability - Easy to apply

Applicability Concepts based on Customer Experience

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Company/organization: HICO

S1000D User Forum, London

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Personal Data

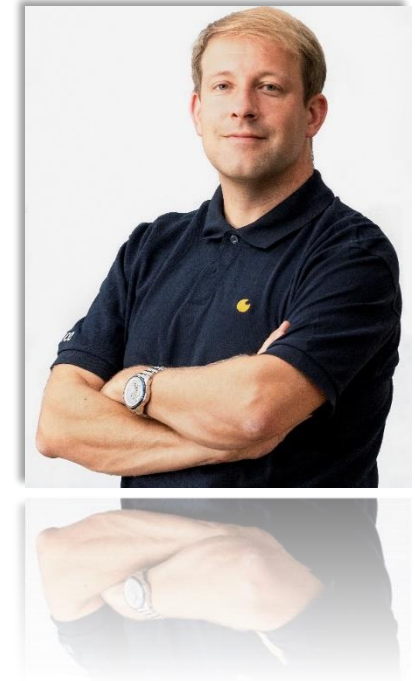
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Steering Committee:



Subject Matter Expert for:



Agenda

- Applicability in ASD S10000D
- Different Applicability Approaches
- Software Support in an IPS Repository



Applicability Definition according ASD/AIA/ATA S1000D

“Applicability provides the mechanism to identify the context for which a data module or parts of a data module is valid. This context is usually associated with the physical configuration of the Product but can include other aspects such as tool availability and environmental conditions. Applicability capabilities can vary greatly, from a simple annotation placed in the content of a data module to managing the life cycle of applicability which includes product definition, applicability authoring and product instance configuration tracking. This chapter provides an overview of applicability capabilities and the mechanisms for managing applicability.”



Applicability Cross-Reference Table



Product Cross-Reference Table



Conditions Cross-Reference Table





BRDP-S1-00316
Decide how to use the

BRDP-S1-00317
Decide whether to use the element <enumeration> containing the entire set or to use multiple elements <enumeration> which each contain only one value or range.

BRDP-S1-00325
Decide whether to use the element <displayName>

BRDP-S1-00324
Decide whether to use a single element <enumeration> containing the entire set or to use multiple elements <enumeration> which each contain only one value or range.

BRDP-S1-00389
Define the required functionality for applicability.

BRDP-S1-00327
Decide which product attributes and conditions to include in the PCT. Conditions that represent operational or environmental properties will usually not be included in the PCT as they are not associated with a product instance.

Decide if textual annotations are allowed for the element <assertion> using the computability applicability condition

allowable conditions on other conditions use of the element <dependency> without using the attribute value of the element <enumeration>.

contains only one value or range.



Not every party is aware of the responsibility!

Examples for Decisions that have an major impact on Applicability

Marketing Concept

- Individual Product
- Customizable Product
- Level of Customization

Maintenance Concept

- Planned Maintenance Levels

Deliveries

- IETP and/or PDF
- Other Deliveries

Process

- 150% Approach or Applicability for all IPS/ILS disciplines

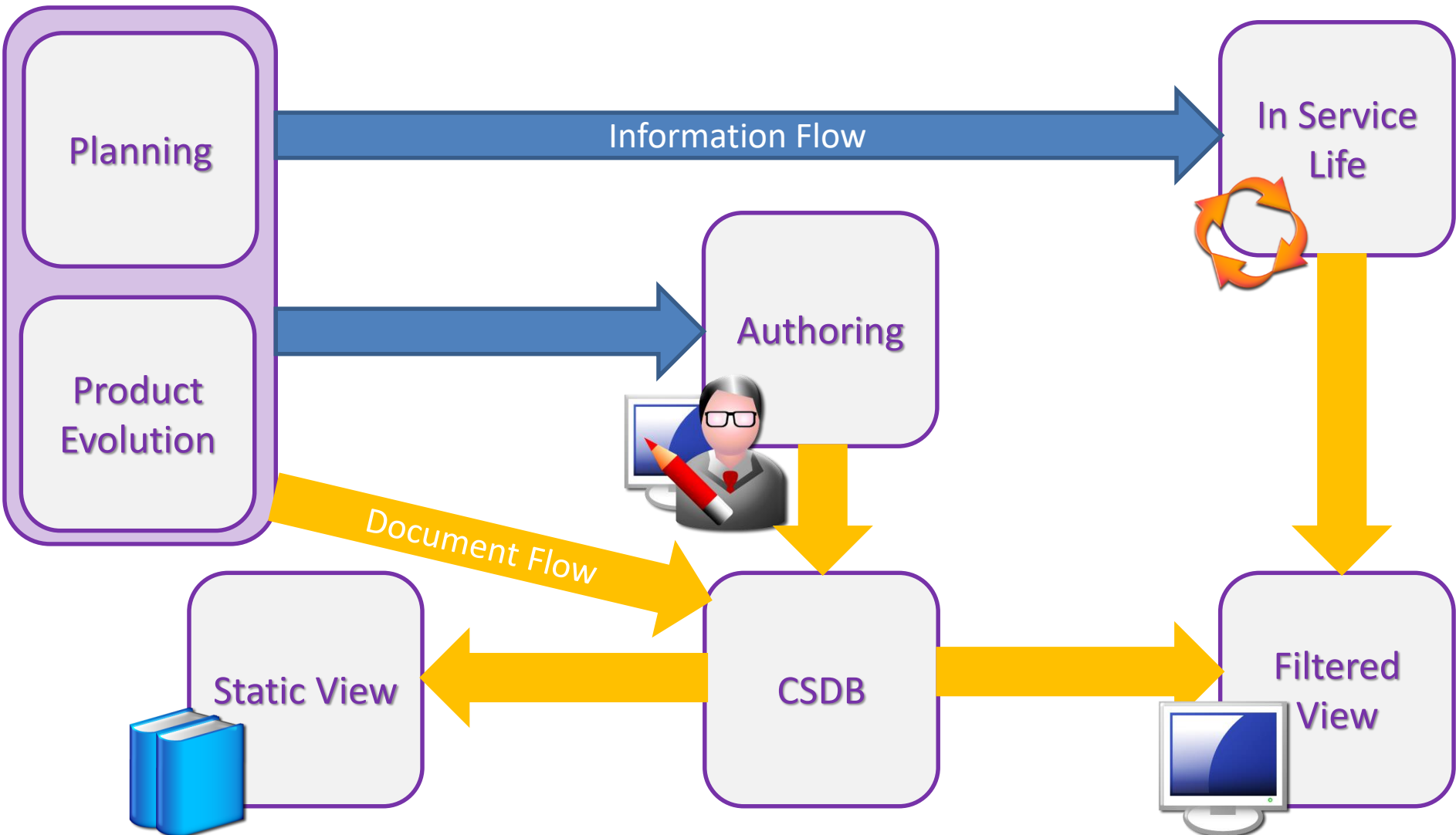
Software Tools & Resources

- Capabilities
- Involved Tools



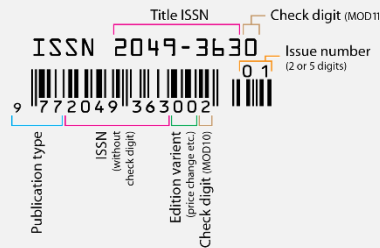
Applicability Concept

Applicability Life Cycle



Applicability from Customer's perspective

show me my Product!



Applicability from the perspective of configuration management

Manage Product Variants



Applicability from Authors perspective

More Work?



Marketing Concept: Basics

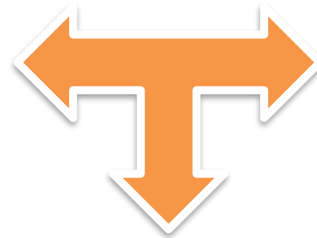
Limited number of
Products / Individual
Product or limited
Product Variants



Many Variants or high
Level of Customizations



Factors

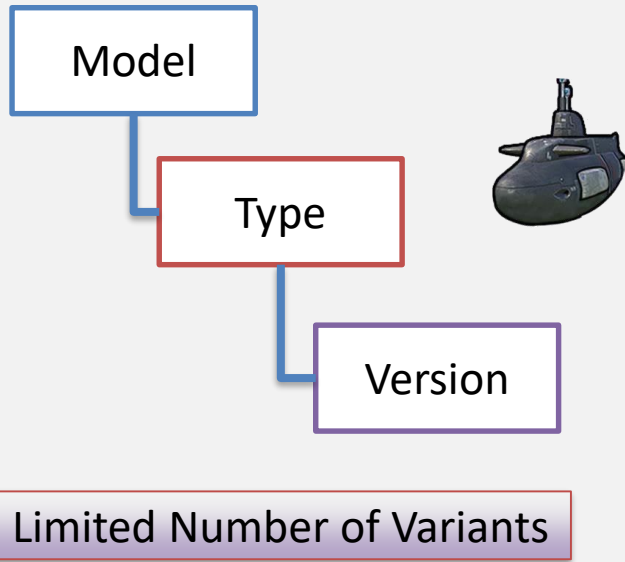


Military / Governmental or Civil / Commercial

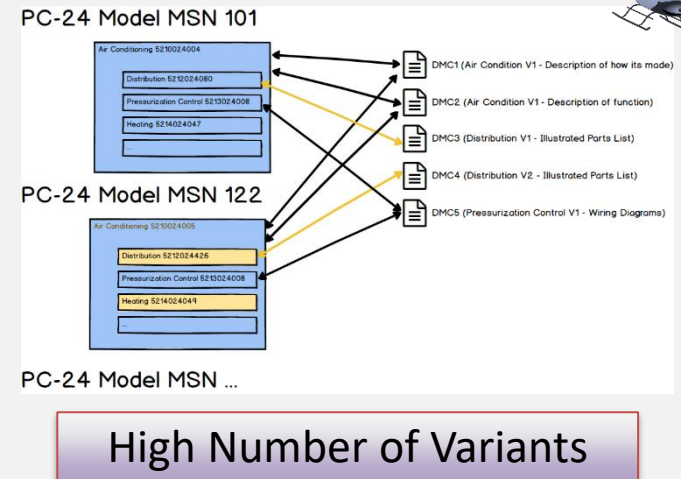


Marketing Concept: Horizontal or Vertical Applicability

Horizontal Applicability



Vertical Applicability (Item Applicability)



Important Aspect

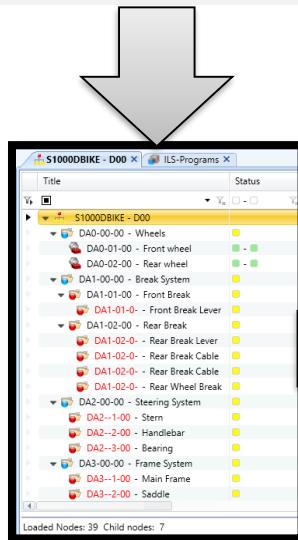
Both options can be mixed as long as the tool environment supports it.
E.g. vertical applicability in the data modules and horizontal applicability in the IETP/PDF

Item Applicability

Item Applicability in the Data Module

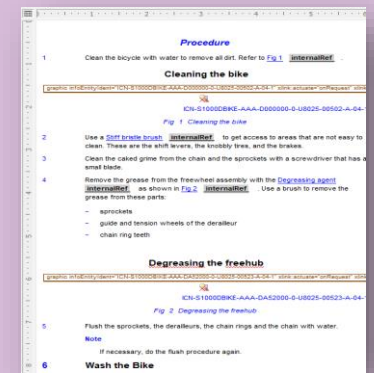
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  <displayText>
    <simplePara>Applicable to: 5210024004, 5210024005, 5210024006 and 5210024007 - AIR CONDITIONING.</simplePara>
  </displayText>
  <evaluate andOr="or">
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    <assert applicPropertyIdent="devicetype" applicPropertyType="prodattr" applicPropertyValues="5210024007"/>
  </evaluate>
</applic>
```

In the product breakdown / BOM it is documented which part / item is applicable

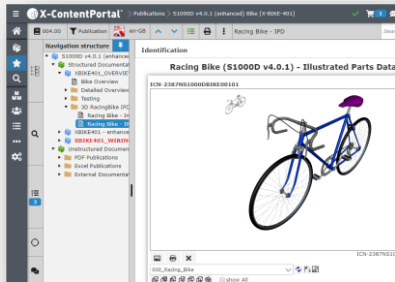


Software aided generation of horizontal / serial number Driven applicability within the

IETP / PDF

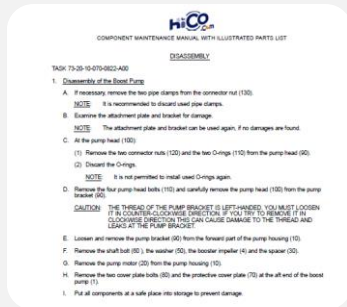


Maintenance Concept: Governmental / Civil Use of IETP/PFG



IETP/PDF: Civil / Commercial Use

In civil / commercial scenarios customers are, in general, allowed to see all applicabilities, respectively product variant publications.

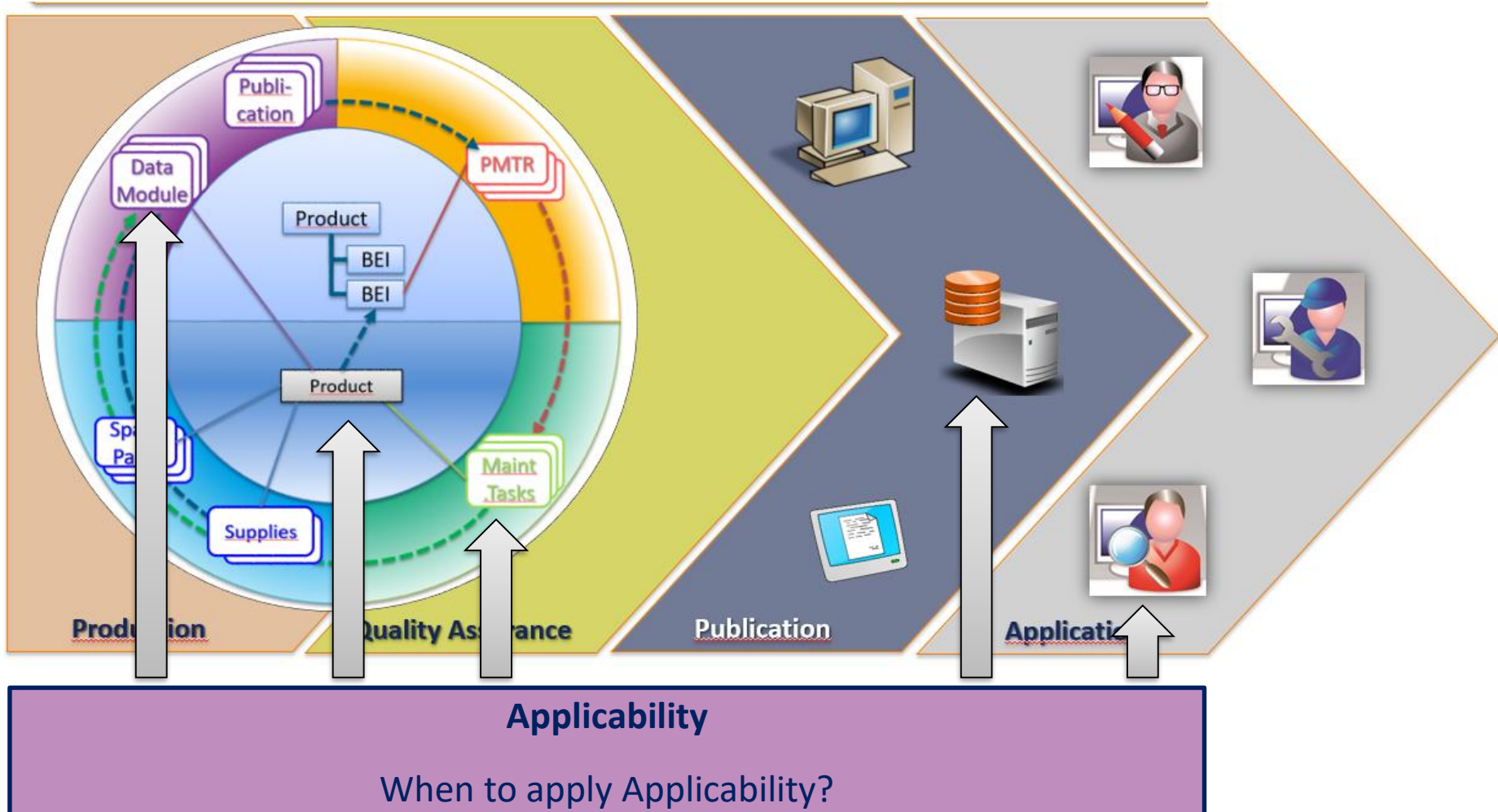


IETP/PDF: Governmental / Military Use

In military scenarios only specific publications applicable to the customers are to be delivered.

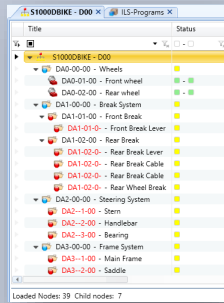


Process: When to apply Applicability?

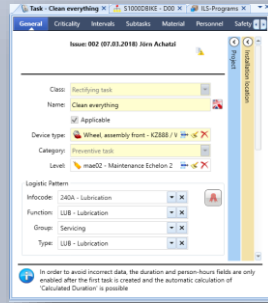


Process: Process Implementation of Applicability

ASD/AIA S3000L

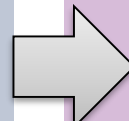
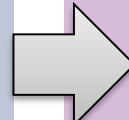


Product Breakdown



LSA / PSA

S3000L Applicability



ASD/AIA/ATA S1000D

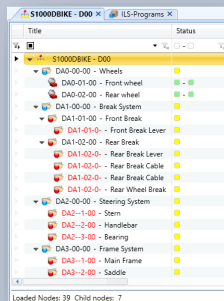
Data Modules with ASD S1000D Applicability



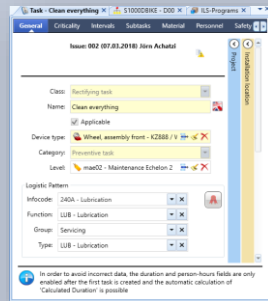
Data Modules without ASD S1000D Applicability (Only Customer Specific Content)



ASD/AIA S3000L

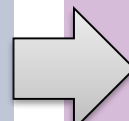


Product Breakdown



LSA / PSA

150% Approach No Applicability



ASD/AIA/ATA S1000D No Applicability



ASD S1000D Applicability on DM Level / during Authoring



Documentation Standard Independent Applicability



Deliverables

ACT / PCT / CCT

ACT, PCT, CCT are intended for data exchange, respectively supplier integration. They define the framework for the use of applicability in data modules.



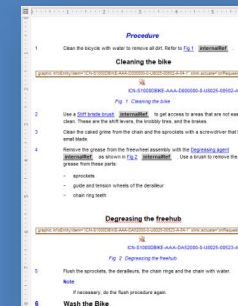
Data Modules

If data modules are to be delivered, e.g. as a supplier, the concept and business rules should be delivered by the principal.

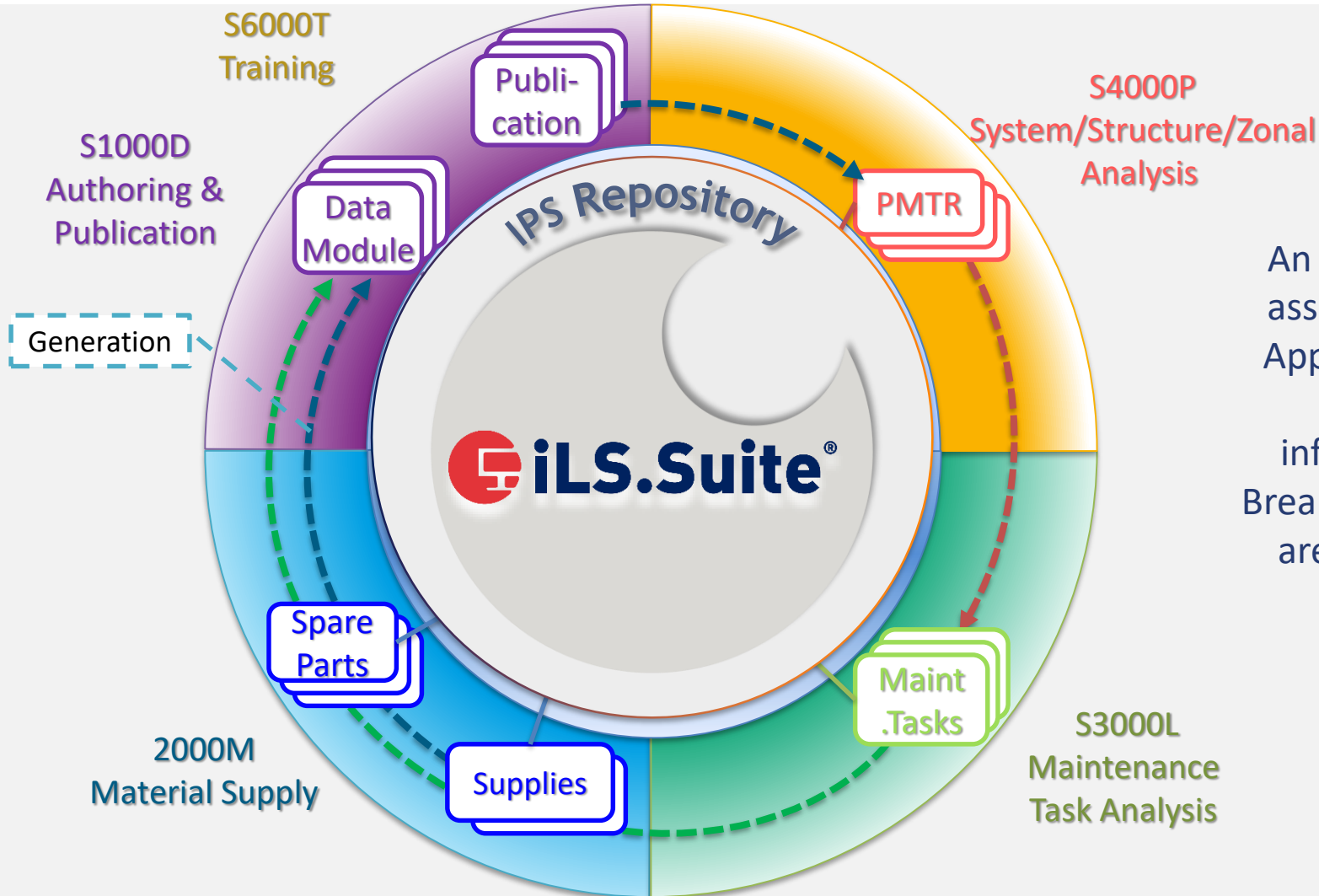
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  seqCode="00" figureCode="00" figureNumber="00" itemCode="0000"
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  <partDef partDefManufacturerCodeValue="R2777" partNumberValue="1801001"/>
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  <serviceArea/serviceArea>
  <sourceMaintRecoverability>SAFFD</sourceMaintRecoverability>
  <modelVersion modelVersionValue="00"/>
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  </locationOfSegment>
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```

In-Service

Print/PDF only has limited applicability functionality. For IETP it must be decided how information is presented (e.g. hide or mark)



Software Support



An IPS Repository assists to manage Applicability as all relevant information (e.g. Breakdown / BOM) are available and can be set in relation!

Thank you
for your attention!

Questions?

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