



# Product Life Cycle Support Version 1.0

## Committee Specification Draft 02

19 July 2013

### Specification URIs

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### Additional artifacts:

This prose specification is one component of a Work Product which also includes:

- PLCS Platform Specific Model: EXPRESS information model:  
[http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm\\_model/plcs\\_psm.exp](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm_model/plcs_psm.exp)
- PLCS Platform Specific Model: XML Schema:  
[http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm\\_model/plcs\\_psm.xsd](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm_model/plcs_psm.xsd)  
[http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm\\_model/common.xsd](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm_model/common.xsd)
- PLCS Platform Specific Model: OWL Reference Data: [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm\\_model/refdata/plcs-psm-en.owl](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm_model/refdata/plcs-psm-en.owl)
- PLCS OWL Reference Data: <http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/contexts/OASIS/refdata/plcs-rdl-en.owl>

### Related work:

This specification replaces or supersedes:

- *Product Life Cycle Support DEXs Version R5*. 18 November 2010. OASIS Committee Specification 01. [http://docs.oasis-open.org/plcs/dexlib/cs01/oasis\\_cover.htm](http://docs.oasis-open.org/plcs/dexlib/cs01/oasis_cover.htm)

This specification is related to:

- ISO 10303-239:2012 "Industrial automation systems and integration -- Product data representation and exchange -- Part 239: Application protocol: Product life cycle support"

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**Declared XML namespaces:**

- <http://docs.oasis-open.org/plcs/ns/plcslib/v1.0/data/contexts/OASIS/refdata/plcs-rdl>
- <http://docs.oasis-open.org/plcs/ns/plcslib/v1.0/data/plcs/plcs-psm/refdata/plcs-psm>
- <http://docs.oasis-open.org/plcs/ns/plcslib/v1.0/data/plcs/plcs-psm/xml-schema/plcs-psm>
- <http://docs.oasis-open.org/plcs/ns/plcslib/v1.0/data/plcs/plcs-psm/xsd/plcs-psm>
- <http://docs.oasis-open.org/plcs/ns/plcslib/v1.0/data/plcs/plcs-psm/express/plcs-psm>

**Abstract:**

The purpose of the OASIS Product Life Cycle Support (*PLCS*) standard is to establish structured data exchange and sharing capabilities for use by industry to support complex engineered assets throughout their total life cycle. The OASIS Product Life Cycle Support (PLCS) standard is defined by Data Exchange Specifications (*DEX*) that are based upon ISO 10303 (*STEP*) Application Protocol 239 Product Life Cycle Support.

The scope of the information content of ISO 10303-239 covers:

- The identification and composition of a product design from a support viewpoint;
- The definition of documents and their applicability to products and support activities;
- The identification and composition of individual products;
- Configuration management activities, over the complete life cycle;
- Activities required to sustain product function;
- The resources needed to perform such activities;
- The planning and scheduling of such activities;
- The capture of feedback on the performance of such activities, including the resources used;
- The capture of feedback on the usage and condition of a product;
- The definition of the support environment in terms of people, organizations, skills, experience and facilities.

The business goals of the OASIS PLCS DEXs are to satisfy three significant requirements for owners/operators of complex products and systems such as aircraft, ships and power plants, namely:

- Reduction in the total cost of ownership;
- Increased asset availability;
- Effective information management throughout the product lifecycle.

**Status:**

This document was last revised or approved by the OASIS Product Life Cycle Support (PLCS) TC on the above date. The level of approval is also listed above. Check the Latest version location noted above for possible later revisions of this document.

Technical Committee members should send comments on this specification to the Technical Committees email list. Others should send comments to the Technical Committee by using the [Send A Comment](#) button on the Technical Committees web page at <http://www.oasis-open.org/committees/plcs/>.

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**Citation format:**

When referencing this specification the following citation format should be used:

**[PLCS v1.0]**



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# 1 Introduction

The purpose of the ISO Product Life Cycle Support (*PLCS*) standard is to support complex engineered assets such as planes and ships throughout their total life cycle. It puts particular emphasis on the in-service phase of the product and, in particular, it supports the seamless transition from design and manufacture through to product support and feedback of usage and change.

The data needed is often distributed over multiple IT systems and organizations, and historically has been difficult to access and consolidate. The PLCS standard provides a large, integrated information model covering the whole lifecycle. The PLCS standard provides the basic mechanisms enabling neutral file exchanges between IT systems and organisations. This helps remove delays and costs for both the end user of the product and the supplier, and is particularly important for service-based contracts such as "power-by-the-hour".

The PLCS information model is larger than any single existing application, and needs detailed application rules in order to be used uniformly by different users and supported by different software applications. These usage rules cover:

- The subset of the overall information model that needs to be exchanged to meet a particular business objective;
- The data elements that are available to the exchange, selected from the optional data elements in the underlying model;
- Constraints on the population of the model, for example, requiring that a network of subsystems take the form of a tree.

This standard "Product Life Cycle Support Version 1.0" defines how these usage rules are applied to the PLCS information model, as grouped together in Data Exchange Specifications (*DEXs*), each of which specify how the PLCS information model is used to directly support real life business processes. It builds the DEXs from reusable components (s) that guarantee uniform interpretation of PLCS between different DEXs, and adds extensible business terminology (*Reference Data*) to the model. Each Data Exchange Specification (DEX) provides data exchange and sharing capabilities for a focused set of transactions based upon the integrated data model of (*DEX Application Protocol* 239 (Product Life Cycle Support)).

Note: No DEXs are included in this version of the standard, "Product Life Cycle Support Version 1.0", but will be included in future releases.

The information content of PLCS covers:

- The identification and composition of a product design from a support viewpoint;
- The definition of documents and their applicability to products and support activities;
- The identification and composition of individual products;
- Configuration management activities, over the complete life cycle;
- Activities required to sustain product function;
- The resources needed to perform such activities;
- The planning and scheduling of such activities;
- The capture of feedback on the performance of such activities, including the resources used;
- The capture of feedback on the usage and condition of a product;
- The definition of the support environment in terms of people, organizations, skills, experience and facilities.

The business goals of the OASIS PLCS DEXs are to satisfy three significant requirements for owners/operators of complex products and systems such as aircraft, ships and power plants, namely:

- Reduction in the total cost of ownership;

- 
- Increased asset availability;
  - Effective information management throughout the product lifecycle.

## 1.1 Terminology

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in [RFC2119].

## 1.2 Normative References

- [RFC2199] S. Bradner, *Key words for use in RFCs to Indicate Requirement Levels*, <http://www.faqs.org/rfcs/rfc2119.html>, IETF RFC 2119, March 1997.
- [OWL] *OWL Web Ontology Language Reference*, W3C Recommendation 10 February 2004, <http://www.w3.org/TR/owl-ref>, OWL, 2004.
- [XMLSchema] *W3C XML Schema Definition Language (XSD)*, <http://www.w3.org/standards/techs/xmlschema>.
- [Schematron] *ISO/IEC 19757-3:2006 - Information technology -- Document Schema Definition Languages (DSDL) -- Part 3: Rule-based validation -- Schematron*, Schematron, 2006.

## 1.3 Non-Normative References

- [XMI] *MOF 2.0/XMI Mapping Specification, v2.1*, <http://schema.omg.org/spec/XMI/2.1>, 2005.
- [SysML] *OMG Systems Modeling Language(OMG SysML™), Version 1.2*, <http://www.omg.org/spec/SysML/1.2/>, SysML, 2010.
- [OCL] *Object Constraint Language (OCL), Version 2.0*, <http://www.omg.org/spec/OCL/2.0/>, OCL, 2006.
- [10303-11:2004] *Industrial automation systems and integration - Product data representation and exchange: Part 11: Description methods: The EXPRESS language reference manual.*, ISO 10303-11, 2004.
- [ISO 10303-239:2012(E)] *Industrial automation systems and integration - Product data representation and exchange: Application Protocol: Product life cycle support*, ISO 10303-239, 2012.

## 1.4 Components of the standard

The Product Life Cycle Support Version 1.0 standard comprises the components summarized below.

Note: This front page is provided as a high level summary of the Product Life Cycle Support Version 1.0 standard. The detailed description of the components listed below is provided as a set of HTML pages which should be accessed through a web browser.

- **Contexts:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/context\\_index\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/context_index_base.html)  
A *Context* identifies a domain or business purpose area for which DEXs are defined;
- **DEXs:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/dex\\_index\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/dex_index_base.html)  
A *DEX* identifies and documents a subset of the ISO 10303-239 (PLCS) information model required for a specific business purpose;

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Note: No DEXs are included in this version of the standard, "Product Life Cycle Support Version 1.0", but will be included in future releases.

- **Templates:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/template\\_index\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/template_index_base.html)  
The usage of the PLCS information model by a DEX is defined through *Templates*. The Templates provide a precise specification of how the model is used to represent a given concept;
- **Model Usage Guides:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/sys/model\\_ug\\_index\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/sys/model_ug_index_base.html)  
*Model Usage Guides* provide guidance on how the information model and templates should be used.
- **Reference data:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/refdata\\_index\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/refdata_index_base.html)  
*Reference Data* provides a tailorable vocabulary that adds business specific semantics to the information model.
- **Concept model:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/concept\\_model/model\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/concept_model/model_base.html)  
A high level model of the main concepts used in ISO 10303-239. It is intended to be used to introduce on a single page the scope that PLCS addresses.
- **Activity model:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/activity\\_model\\_index\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/sys/activity_model_index_base.html)  
The ISO 10303-239 Activity Model that illustrates the business activities that are supported by ISO 10303-239;
- **PLCS PSM:** [http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm\\_model/model\\_base.html](http://docs.oasis-open.org/plcs/plcslib/v1.0/csd02/data/PLCS/psm_model/model_base.html)  
The PLCS Platform Specific Model (*PLCS PSM*) that is used as the data exchange form for all DEXs. The *PLCS PSM* is a *SysML* model with an derived XML Schema;

For a summary of these components and inter relationships, see [DEX technology overview](#).



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## 2 Conformance

This edition of the OASIS PLCS standardizes the following components:

- The [PLCS Platform Specific Model \(PLCS PSM\)](#) that is used as the data exchange form. The PLCS PSM is represented in EXPRESS, SysML and XML Schema with the XML Schema being derived from the EXPRESS and SysML models.
- [Reference Data](#) that provides a tailorable vocabulary that adds business specific semantics to the information model. The Reference Data is represented in OWL.
- [Templates](#) that provide a precise specification of how the PLCS PSM is used to represent a given concept.

Not every implementation will use all the components.

There are two types of conforming implementations:

- a data exchange XML file and
- a data exchange application.

An implementation is a conforming data exchange file, a PLCS Platform Specific Model data file (a PSM data exchange file), if the file is in accordance with the conditions specified in the following sections.

Namely that PSM data exchange file:

1. Conforms to the PLCS Platform Specific Model XML Schemata: [common.xsd](#), [plcs\\_psm.xsd](#) (Section 2.1);
2. Conforms to the PLCS Platform Specific Model Schematron: [plcs\\_psm.sch](#) (Section 2.1);
3. Contains references to the OWL classes or objects specified in the following OWL ontologies (Section 2.2):
  - PLCS PSM Reference Data [plcs-psm-en.owl](#)
  - PLCS Reference Data [plcs-rdl-en.owl](#)
4. Is structured according to the patterns specified in the Templates (Section 2.3).

An implementation is a conforming data exchange application that must consume and produce any conforming PSM data exchange file.

The following sections describe how the [PLCS PSM](#), [Reference Data](#) and [Templates](#) are used to establish conformance to this standard.

### 2.1 PLCS Platform Specific Model (PLCS PSM)

The [PLCS Platform Specific Model \(PLCS PSM\)](#) is a specification of the data exchange form.

The PLCS PSM is represented in EXPRESS, SysML and XML Schema with the XML Schema being derived from the EXPRESS and SysML models.

The following models are provided for explanatory purposes:

- PLCS Platform Specific Model [EXPRESS](#);
- PLCS Platform Specific Model canonical [SysML XMI](#).

The PLCS PSM exchange format, to which implementations shall conform, is represented as the following XML Schemata with an associated set of Schematron rules:

- PLCS Platform Specific Model XML Schema: [common.xsd](#), [plcs\\_psm.xsd](#);
- PLCS Platform Specific Model Schematron: [plcs\\_psm.sch](#).

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An implementation is a conforming data exchange file, a PLCS Platform Specific Model data file (a PSM data exchange file) that:

- Conforms to the PLCS Platform Specific Model XML Schemata: [common.xsd](#), [plcs\\_psm.xsd](#);
- Conforms to the PLCS Platform Specific Model Schematron: [plcs\\_psm.sch](#).

An implementation is a conforming data exchange application that must consume and produce any conforming PSM data exchange file.

## 2.2 Reference Data Ontologies

*Reference Data* provides a tailorable vocabulary that adds business specific semantics to the by [PLCS Platform Specific Model](#) .

The Reference Data is represented in OWL.

An implementation is a conforming data exchange file, a PLCS Platform Specific Model data file (a PSM data exchange file) that:

- Conforms to the PLCS Platform Specific Model XML Schemata: [common.xsd](#), [plcs\\_psm.xsd](#); (Section [2.1](#))
- Conforms to the PLCS Platform Specific Model Schematron: [plcs\\_psm.sch](#) (Section [2.1](#));

The PSM data exchange file may contain references to OWL classes or objects. When such references occur they must refer to OWL classes or objects in the following OWL ontologies:

- PLCS PSM Reference Data [plcs-psm-en.owl](#)
- PLCS Reference Data [plcs-rdl-en.owl](#)

An implementation is a conforming data exchange application that must consume and produce any conforming PSM data exchange file.

## 2.3 PLCS Templates

The usage of the PLCS information model by a *DEX* is defined through *Templates*. The Templates provide a precise specification of how the [PLCS Platform Specific Model](#) is used to represent a given concept.

Implementations shall conform to the specific Templates used.

An implementation is a conforming data exchange file, a PLCS Platform Specific Model data file (a PSM data exchange file) that:

1. Conforms to the PLCS Platform Specific Model XML Schemata: [common.xsd](#), [plcs\\_psm.xsd](#); (Section [2.1](#))
2. Conforms to the PLCS Platform Specific Model Schematron: [plcs\\_psm.sch](#) (Section [2.1](#));
3. Where PSM contains references to OWL classes or objects, such references occur they must refer to OWL classes or objects in the following OWL ontologies:
  - PLCS PSM Reference Data [plcs-psm-en.owl](#)
  - PLCS Reference Data [plcs-rdl-en.owl](#)
4. Contains data elements structured according to the patterns specified in the Templates.

The following Templates are standardized:

- Template: ActualActivity
- Template: ActualMission

- 
- Template: ActualMissionItem
  - Template: ActualProductUsage
  - Template: Applicability
  - Template: Approval
  - Template: Baseline
  - Template: Breakdown
  - Template: BreakdownElement
  - Template: BreakdownElementRealization
  - Template: BreakdownStructure
  - Template: Catalog
  - Template: CatalogItem
  - Template: CatalogItemRealization
  - Template: CatalogItemStructure
  - Template: Certification
  - Template: ClassCode
  - Template: Classifier
  - Template: Collection
  - Template: Contract
  - Template: DatedEffectivity
  - Template: Descriptor
  - Template: DirectedActivity
  - Template: Document
  - Template: EffectivityAssertion
  - Template: Envelope
  - Template: EnvironmentDefinition
  - Template: EnvironmentObserved
  - Template: EventReport
  - Template: EventReportItem
  - Template: Fleet
  - Template: FleetItem
  - Template: FunctionalBreakdown
  - Template: FunctionalBreakdownStructure
  - Template: FunctionalElement
  - Template: Identification
  - Template: IndividualCode
  - Template: Justification
  - Template: MeasuredProperty
  - Template: Message
  - Template: Name
  - Template: Observation

- 
- Template: Organization
  - Template: Part
  - Template: PartAssembly
  - Template: Person
  - Template: PersonInOrganization
  - Template: PhysicalBreakdown
  - Template: PhysicalBreakdownStructure
  - Template: PhysicalElement
  - Template: PlannedActivity
  - Template: ProductConfiguration
  - Template: ProductConfigurationOptionRelationship
  - Template: ProductConfigurationStructure
  - Template: Project
  - Template: PropertyValueNumeric
  - Template: PropertyValueText
  - Template: ProxyItem
  - Template: RealizedPart
  - Template: RealizedPartAssembly
  - Template: Requirement
  - Template: ResourceOrder
  - Template: ResourceOrderAcknowledgment
  - Template: ResourceOrderDelivery
  - Template: ResourceOrderDeliveryReceipt
  - Template: ResourceOrderLineItem
  - Template: ResourcePool
  - Template: ResourcePoolItem
  - Template: Scheme
  - Template: SchemeEntry
  - Template: StateAssertion
  - Template: StateAssessment
  - Template: StatePrediction
  - Template: StockItem
  - Template: SystemBreakdown
  - Template: SystemBreakdownStructure
  - Template: SystemElement
  - Template: Task
  - Template: ViewDefinitionContext
  - Template: Warranty
  - Template: WorkDone
  - Template: WorkOrder

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- Template: WorkRequest

Note: Future versions of this standard, "Product Life Cycle Support Version 1.0", will extend the number of DEXs, Templates and Reference Data, as well as other parts to facilitate the adoption of the PLCS standard.

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## Appendix A. Acknowledgments

### Participants:

The following individuals have participated in the creation of this specification and are gratefully acknowledged:

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## Appendix B. Revision History

Revision	Date	Changes Made
plcs-plcslib-v1.00-csprd02	2013-06-21	Product Life Cycle Support Version 1.0 Committee Specification Draft 02 Public Review Draft 02 Republication for plcs-plcslib-v1.00-csd02 for ballot as Committee Specification Draft 02 Public Review Draft 02
plcs-plcslib-v1.00-csd02	2013-06-21	Product Life Cycle Support Version 1.0 Committee Specification Draft 02 Release addressing issues raised during public review of OASIS Committee Specification Draft 01 / Public Review Draft 01 <a href="http://docs.oasis-open.org/plcs/plcslib/v1.0/csprd01/plcslib-v1.0-csprd01.html">http://docs.oasis-open.org/plcs/plcslib/v1.0/csprd01/plcslib-v1.0-csprd01.html</a> <b>PLCS PSM</b> The following issues have been addressed against the PLCS PSM: <ul style="list-style-type: none"> <li>• Issue: <a href="#">204</a> "SecurityClassification 'level'"</li> <li>• Issue: <a href="#">203</a> "Extend CollectionAssignment select"</li> <li>• Issue: <a href="#">202</a> "SecurityClassificationAssignment.classification"</li> <li>• Issue: <a href="#">201</a> "AttachmentSlotOnProduct needs Id"</li> <li>• Issue: <a href="#">200</a> "JustificationSupportAssignment / justification missing"</li> <li>• Issue: <a href="#">199</a> "Schematron uses prefix plcs:"</li> <li>• Issue: <a href="#">198</a> "Incorrect relationships shown for AttachmentSlotAsRealized &amp; attachmentSlotDesign"</li> <li>• Issue: <a href="#">197</a> "PropertyValueAssignment - descriptions should be improved"</li> <li>• Issue: <a href="#">195</a> "RiskEvent.perceivedProbability - model only allows one probability to be defined"</li> <li>• Issue: <a href="#">194</a> "RiskPerception.riskLevel - model only allows one level to be defined"</li> <li>• Issue: <a href="#">193</a> "RiskPerceptionContext not required"</li> <li>• Issue: <a href="#">192</a> "plcs psm xsd has incorrect nesting of some relationship attributes"</li> <li>• Issue: <a href="#">191</a> "Effectivity should be applicable to ResourceItemRealization"</li> <li>• Issue: <a href="#">189</a> "URI constraint needed"</li> <li>• Issue: <a href="#">187</a> "DateTimeString constraints needed"</li> <li>• Issue: <a href="#">159</a> "DatedEffectivity attribute definitions not updated"</li> </ul> <b>Templates</b> The following issues have been addressed against the Templates: <ul style="list-style-type: none"> <li>• Issue: <a href="#">355</a> "OASIS: WorkDone : change cardinality of property activityInputs"</li> <li>• Issue: <a href="#">354</a> "Use of Connectors in parametric diagrams - should be Binding Connectors"</li> <li>• Issue: <a href="#">351</a> "OASIS:Contract - missing detail in parametric diagram"</li> <li>• Issue: <a href="#">350</a> "OASIS: BreakdownElementRealization : remove realizationRole property"</li> </ul>

		<ul style="list-style-type: none"> <li>• Issue: <a href="#">349</a> "OASIS: Approval - Wrong input property type for approvingPersOrOrg"</li> <li>• Issue: <a href="#">347</a> "OASIS:ResourcePoolItem - Incorrect classification Actual_dated_effectivity"</li> <li>• Issue: <a href="#">346</a> "OASIS:ResourcePool - Incorrect classification Actual_dated_effectivity"</li> <li>• Issue: <a href="#">345</a> "OASIS:ActualMissionItem - Incorrect classification Actual_dated_effectivity"</li> <li>• Issue: <a href="#">344</a> "OASIS:ResourceOrder redundant property 'orderType'"</li> <li>• Issue: <a href="#">343</a> "OASIS:WorkRequest: redundant 'purpose' property"</li> <li>• Issue: <a href="#">342</a> "OASIS: StateAssessment: Add 'Name' [0..1] property"</li> <li>• Issue: <a href="#">341</a> "OASIS: StateAssertion : Add Name [0..1] Property"</li> <li>• Issue: <a href="#">340</a> "OASIS:Requirement binding to public property"</li> <li>• Issue: <a href="#">339</a> "Incorrect Reference Properties"</li> <li>• Issue: <a href="#">338</a> "templates have 'Shared' property - should be 'Reference'"</li> <li>• Issue: <a href="#">337</a> "OASIS:WorkRequest unclear semantic difference between purpose and classifications"</li> <li>• Issue: <a href="#">336</a> "OASIS:SystemBreakdownStructure structureRole is a reference in XMI file and should be part property"</li> <li>• Issue: <a href="#">335</a> "OASIS:ResourceOrder classifications should be a part property"</li> <li>• Issue: <a href="#">334</a> "OASIS:PropertyValueText classifier should be a part property"</li> <li>• Issue: <a href="#">333</a> "OASIS: Certification - Template block diagram not exposing all properties"</li> <li>• Issue: <a href="#">332</a> "OASIS: Warranty - Wrong constraint and cardinality on classification"</li> <li>• Issue: <a href="#">331</a> "OASIS: Warranty - Add Names property"</li> <li>• Issue: <a href="#">330</a> "OASIS: Warranty - Template block diagram not exposing all properties"</li> <li>• Issue: <a href="#">329</a> "OASIS:ActualMission - typo"</li> <li>• Issue: <a href="#">328</a> "OASIS:StateAssessment multiplicities wrong"</li> <li>• Issue: <a href="#">327</a> "OASIS:Identifier - merge with Name template"</li> <li>• Issue: <a href="#">326</a> "OASIS:Project has a mandatory Name and optional Id - should be the other way around"</li> <li>• Issue: <a href="#">325</a> "OASIS:Organization - add name property"</li> <li>• Issue: <a href="#">324</a> "OASIS:DirectedActivity- mandatory description property"</li> <li>• Issue: <a href="#">323</a> "OASIS:ActualMissionItem, typo"</li> <li>• Issue: <a href="#">322</a> "OASIS:ActualActivity, move text to MUG for Activity"</li> <li>• Issue: <a href="#">321</a> "OASIS:ActualActivity, suggestion for new wording"</li> <li>• Issue: <a href="#">320</a> "OASIS:ActualActivity, suggestion for new wording"</li> <li>• Issue: <a href="#">319</a> "OASIS:ActualActivity, suggestion for new wording"</li> <li>• Issue: <a href="#">315</a> "OASIS:EventReportItem - incorrect URL"</li> <li>• Issue: <a href="#">314</a> "OASIS: WorkRequest - Cardinality of triggeredByJustification"</li> </ul>
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in BDD"

- Issue: [313](#) "OASIS:MeasuredProperty - spelling in valueType property"
- Issue: [312](#) "OASIS:Warranty template needed"
- Issue: [311](#) "OASIS: Certification template needed"
- Issue: [310](#) "OASIS: ResourceOrderDeliveryReceipt - Use new Approval template"
- Issue: [309](#) "OASIS: Approval : template needed"
- Issue: [308](#) "Invalid XML example data files"
- Issue: [306](#) "OASIS:ActualProductUsage Property 'product' definition"
- Issue: [305](#) "OASIS:StockItem - property ids should be a Part property"
- Issue: [304](#) "OASIS:Identification example data invalid"
- Issue: [252](#) "Template test data section should be improved"
- Issue: [247](#) "OASIS:DatedEffectivity needs constraint startDate should be before endDate"
- Issue: [228](#) "OASIS:Contract - some constraints required"

#### Reference Data

The following issues have been addressed against the Reference Data:

- Issue: [218](#) "create Perceived\_probability individual of Context\_dependent\_property\_definition"
- Issue: [217](#) "create Risk\_level individual of Context\_dependent\_property\_definition"
- Issue: [213](#) "Some subclasses of Effectivity in the RDL should be subclasses of assignment"
- Issue: [212](#) "supplier reference data required"
- Issue: [82](#) "Add classes for Warranties"
- Issue: [81](#) "Add class: PersOrgAsg\_actual\_custodian PersOrgAsg\_planned\_custodian"
- Issue: [80](#) "Add class: Hypothesized\_fault\_state\_assignment"
- Issue: [79](#) "Add OWL object: Cost"
- Issue: [78](#) "Add class: Activity\_resources\_removed"
- Issue: [77](#) "Add class: Activity\_resources\_fitted"
- Issue: [32](#) "change definition and comment for Approval"

#### General

The following general issues have been addressed:

- Issue: [180](#) "OASIS Coverpage: bulleted lists"
- Issue: [179](#) "Add Property checks"
- Issue: [178](#) "OASIS conformance clarity"
- Issue: [177](#) "Concept model link broken"
- Issue: [176](#) "Overloaded terminology"
- Issue: [175](#) "OASIS cover - Introduction para 1"
- Issue: [173](#) "Normref hyperlinks should open at top level of browser"
- Issue: [172](#) "Incorrect text in the example data section"
- Issue: [171](#) "Change of wording in the Template Parametric diagram"

		<p>section"</p> <ul style="list-style-type: none"> <li>• Issue: <a href="#">170</a> "No reference to OMG OCL"</li> <li>• Issue: <a href="#">169</a> "Publication package: dropdown menus behind cover page items"</li> <li>• Issue: <a href="#">168</a> "Publication package should be consistent wrt dvlp folder files included"</li> <li>• Issue: <a href="#">167</a> "dex_index_content.html incorrect URL"</li> <li>• Issue: <a href="#">166</a> "Template: Add a link in the 'Template Block' section to the 'Template Parametric diagram'"</li> <li>• Issue: <a href="#">165</a> "QA: Check that all template properties are on a parametric diagram"</li> <li>• Issue: <a href="#">163</a> "Model definition: Incorrect display of Real properties"</li> <li>• Issue: <a href="#">162</a> "Common.xsd not copied across into publication package"</li> <li>• Issue: <a href="#">159</a> "Sort model class definitions"</li> <li>• Issue: <a href="#">158</a> "Spelling mistake in AAM"</li> </ul>
plcs-plcslib-v1.00-csprd01	2013-03-12	<p>Product Life Cycle Support Version 1.0 Committee Specification Draft 01 Public Review Draft 01</p> <p>Republication for plcs-plcslib-v1.00-csd01 for ballot as Committee Specification Draft 01 Public Review Draft 01</p>
plcs-plcslib-v1.00-csd01	2013-03-12	<p>Product Life Cycle Support Version 1.0 Committee Specification Draft 01 Initial release for review</p> <p><b>PLCS PSM</b></p> <p>The following issues have been addressed against the PLCS PSM:</p> <ul style="list-style-type: none"> <li>• Issue: <a href="#">185</a> "Effectivity assignment should apply to RelationshipObjects"</li> <li>• Issue: <a href="#">186</a> "ContractAssignmentSelect - Need to be able to assign a contract to Collection"</li> </ul> <p><b>Templates</b></p> <p>The following issues have been addressed against the Templates:</p> <ul style="list-style-type: none"> <li>• Issue: <a href="#">286</a> "OASIS:StockItem id should be ids[1..*]"</li> <li>• Issue: <a href="#">287</a> "OASIS:WorkOrder id should be ids[1..*]"</li> <li>• Issue: <a href="#">288</a> "OASIS:WorkRequest id should be ids[1..*]"</li> <li>• Issue: <a href="#">289</a> "OASIS:Task id should be ids[1..*]"</li> <li>• Issue: <a href="#">290</a> "OASIS:WorkDone id should be ids[1..*]"</li> <li>• Issue: <a href="#">291</a> "OASIS:PropertyValueNumeric incorrect private properties"</li> <li>• Issue: <a href="#">292</a> "OASIS:ActualProductUsage - Incorrect binding between product and ActivityAssignment"</li> <li>• Issue: <a href="#">293</a> "OASIS:Envelope - Wrong use of reference data"</li> <li>• Issue: <a href="#">294</a> "OASIS:Justification - ids should be [1..*]"</li> <li>• Issue: <a href="#">295</a> "OASIS:WorkRequest: Use Justification template "</li> <li>• Issue: <a href="#">296</a> "OASIS:Applicability - call deprecated Individual template"</li> <li>• Issue: <a href="#">297</a> "OASIS:Envelope id should be ids[1..*]"</li> <li>• Issue: <a href="#">298</a> "OASIS:Message id should be ids[1..*]"</li> <li>• Issue: <a href="#">299</a> "OASIS:Justification classify JustificationSupportAssignment"</li> </ul>

		<p>and JustificationAssignment"</p> <ul style="list-style-type: none"><li>• Issue: <a href="#">300</a> "OASIS:StockItem - wrong type for property resourceItemSelect"</li><li>• Issue: <a href="#">301</a> "All templates: Incorrect / missing reference data constraints"</li><li>• Issue: <a href="#">302</a> "OASIS:EventReport - Need to be split into EventReport and EventReportItem"</li></ul> <p><b>Reference Data</b> The following issues have been addressed against the Reference Data:</p> <ul style="list-style-type: none"><li>• Issue: <a href="#">76</a> "Create Event_report_membership class"</li></ul>
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