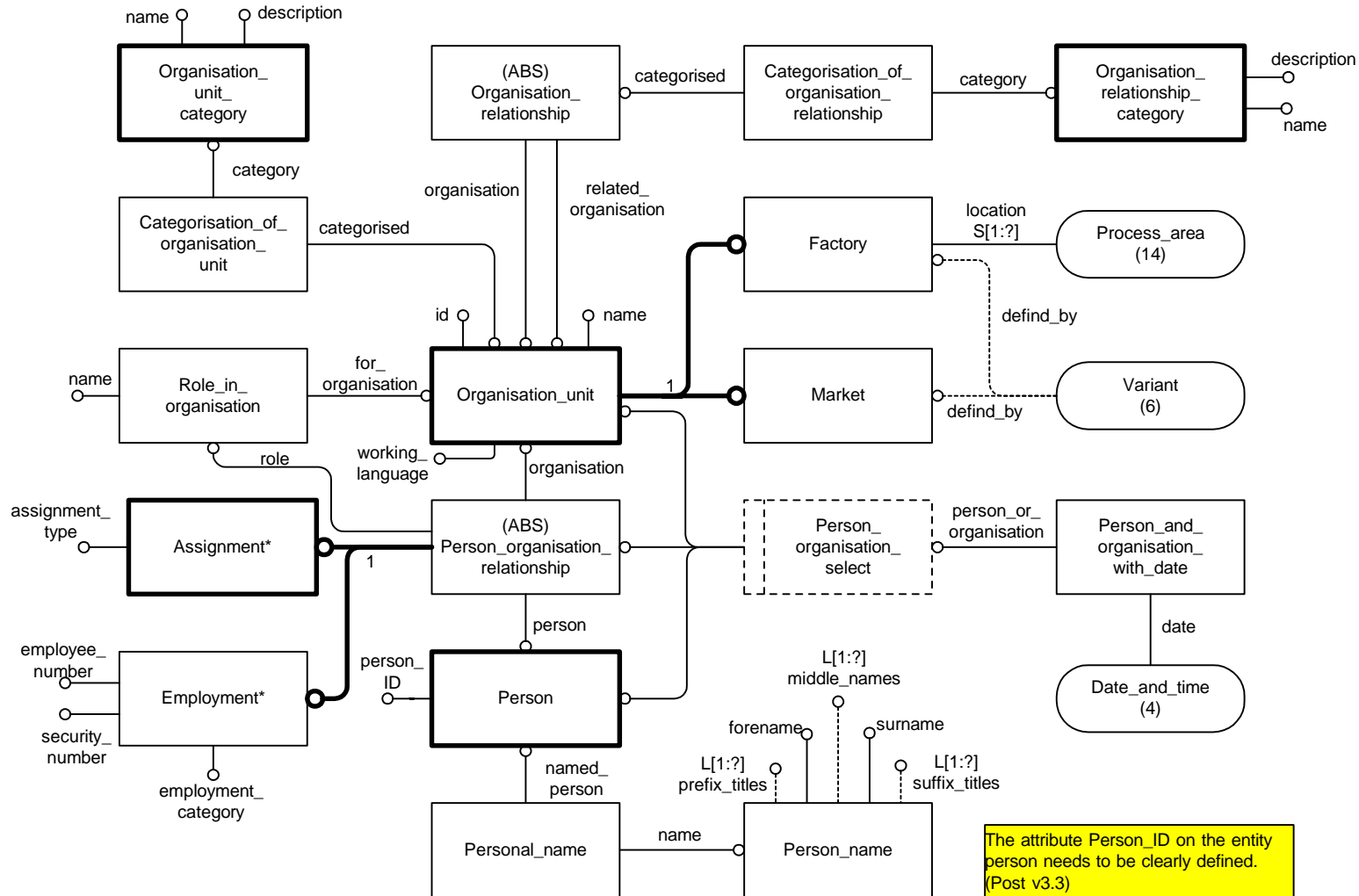


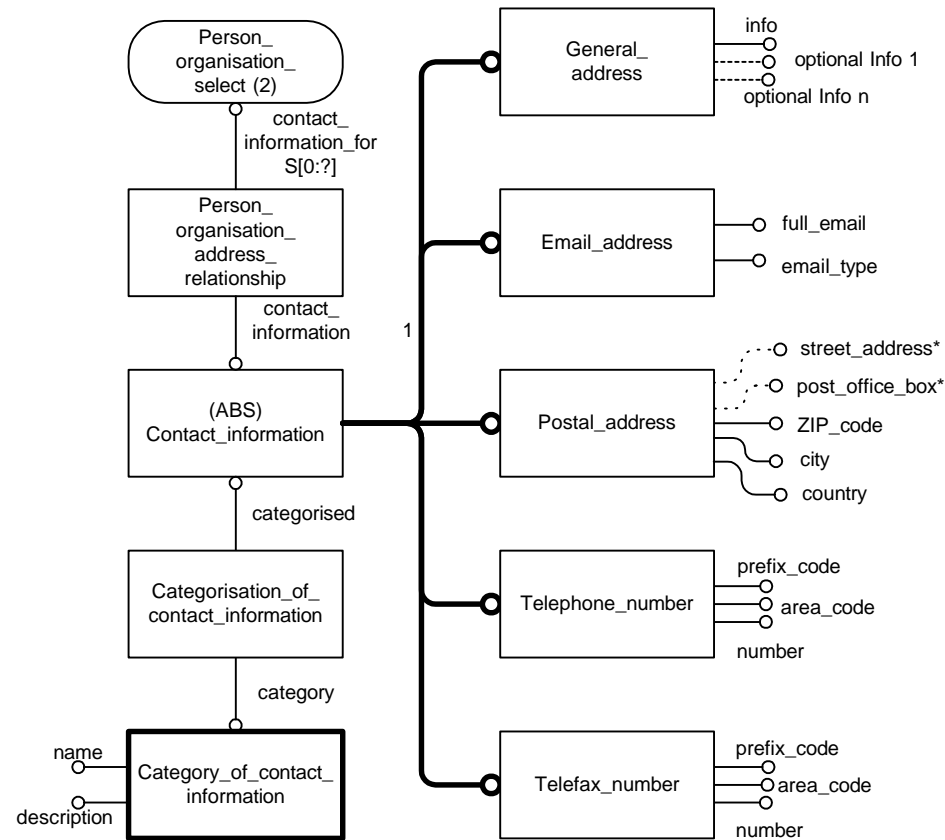
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		2/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PERSONS AND ORGANISATIONS



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 3/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PERS./ORG. CONTACT INFORMATION



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 4/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

DATE AND TIME CONCEPTS



Definitions

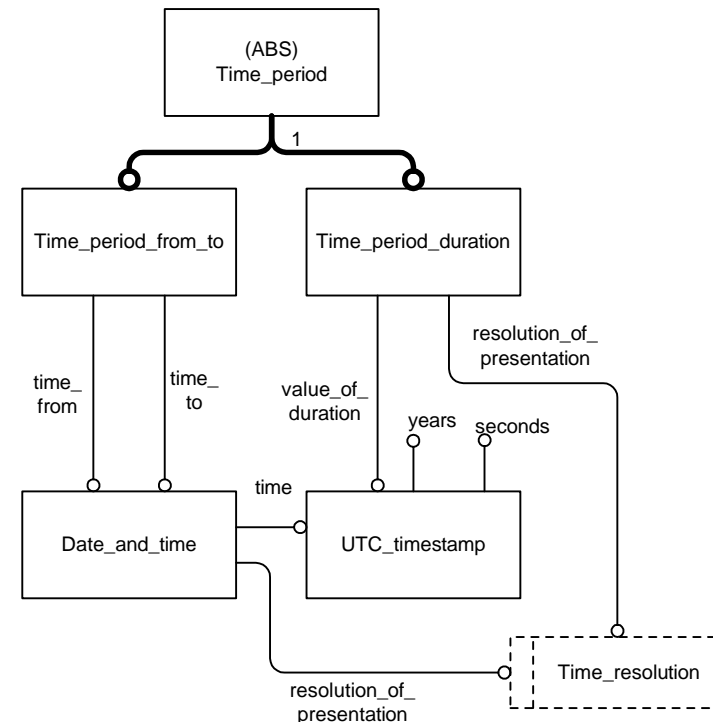
UTC_Timestamp = A year count and seconds counted from the beginning of the year (see ISO 8601).

Notes

- 1) Calendar date, ordinal date, or week and of day-of-week is calculated, via a method (service) from this date and time information.
- 2) Resolution of presentation of a timestamp determines precision of the of a Date_and_time given: (Year, Month, Week, Day, Hour, Minute, Second). Internal storage is seconds relative to a base time.
- 3) Daylight saving to be determined by implementation.
- 4) Implementations shall provide seconds information for a timestamp at a half value of the resolution for all resolutions other than seconds, this will ensure that when presenting information in another timezone the information is correct.

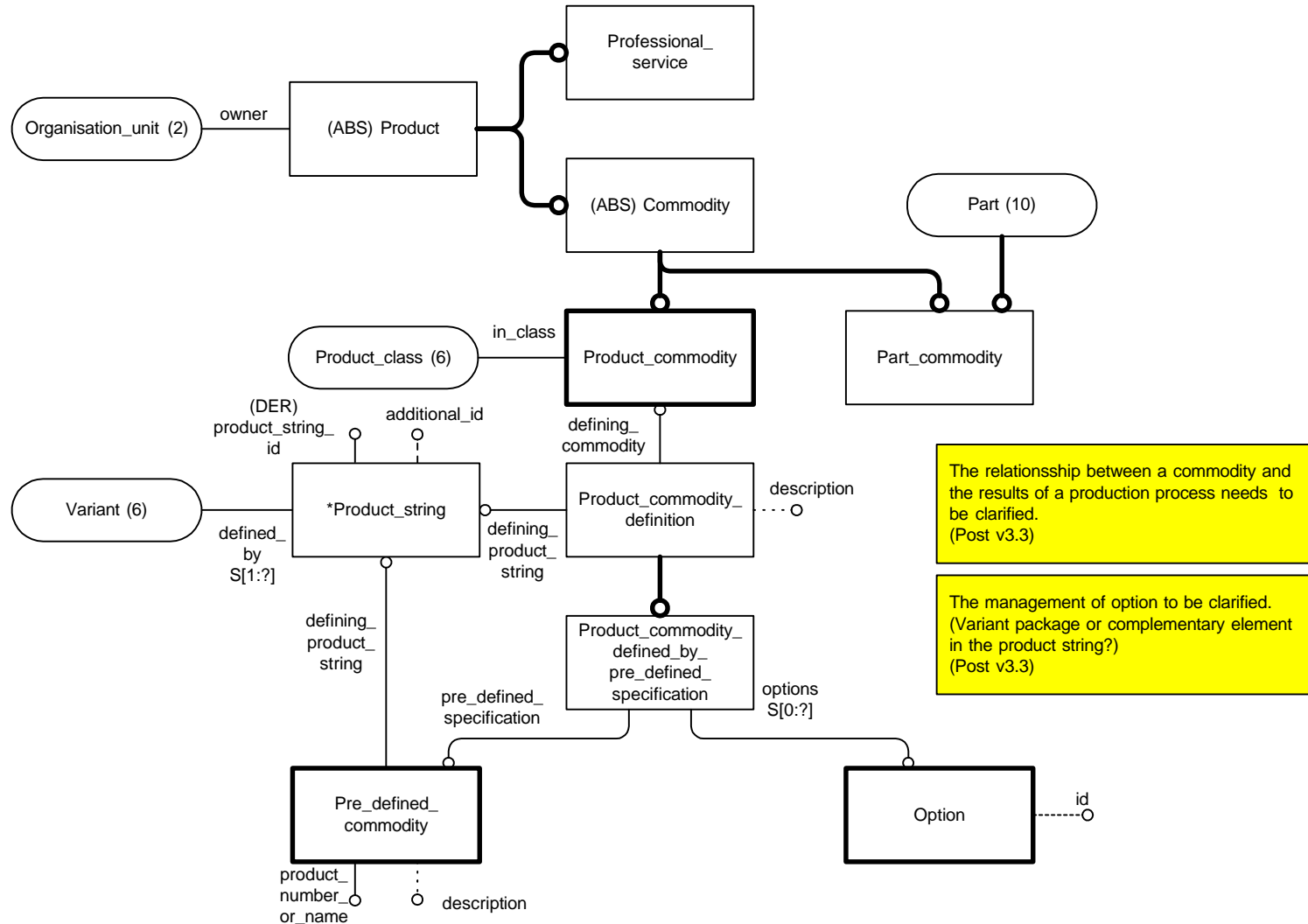
References

ISO 8601
Volvo STD 9122,1,



VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		5/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

PRODUCT STRUCTURE - PRODUCTS

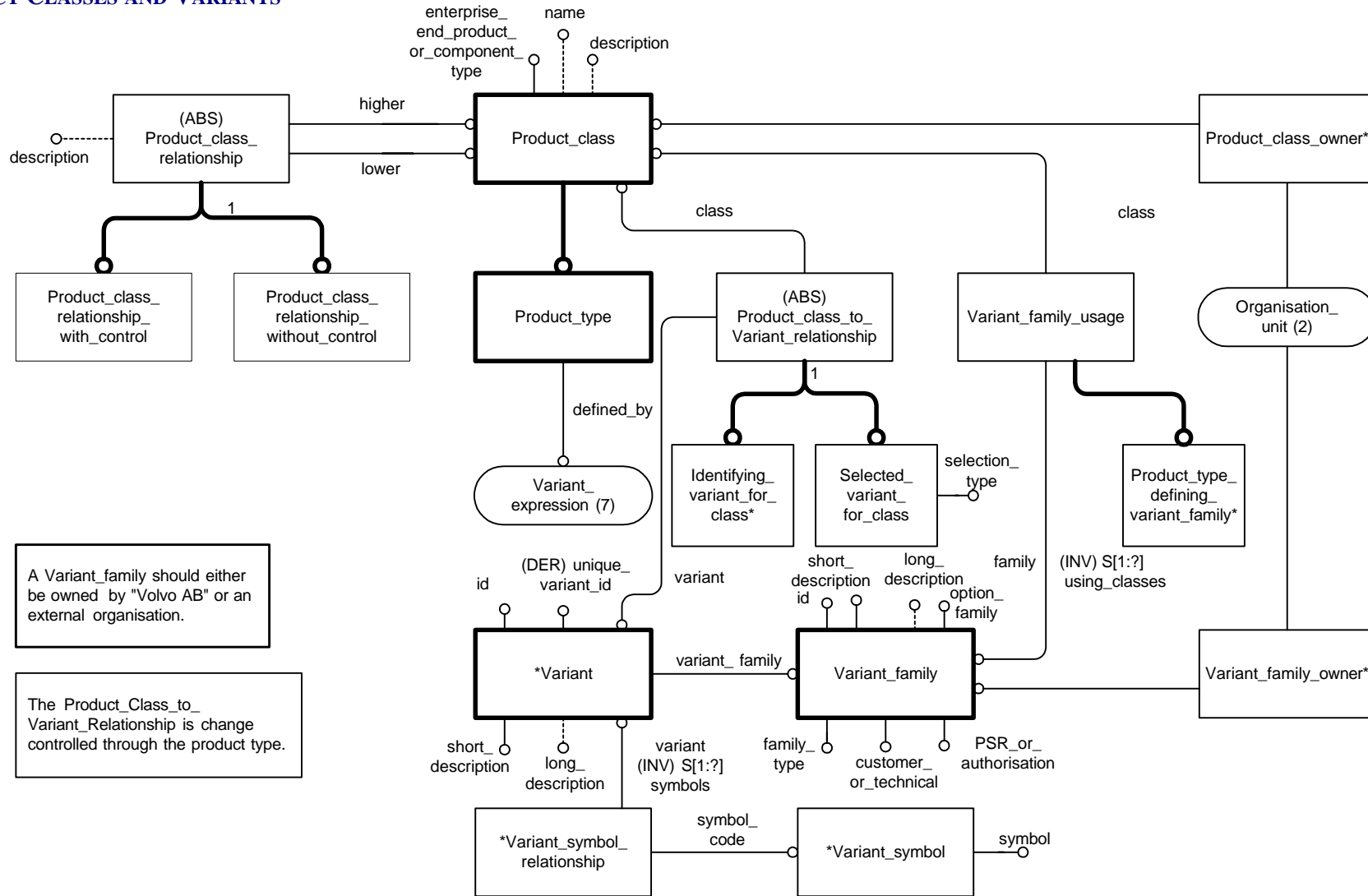


The relationship between a commodity and the results of a production process needs to be clarified. (Post v3.3)

The management of option to be clarified. (Variant package or complementary element in the product string?) (Post v3.3)

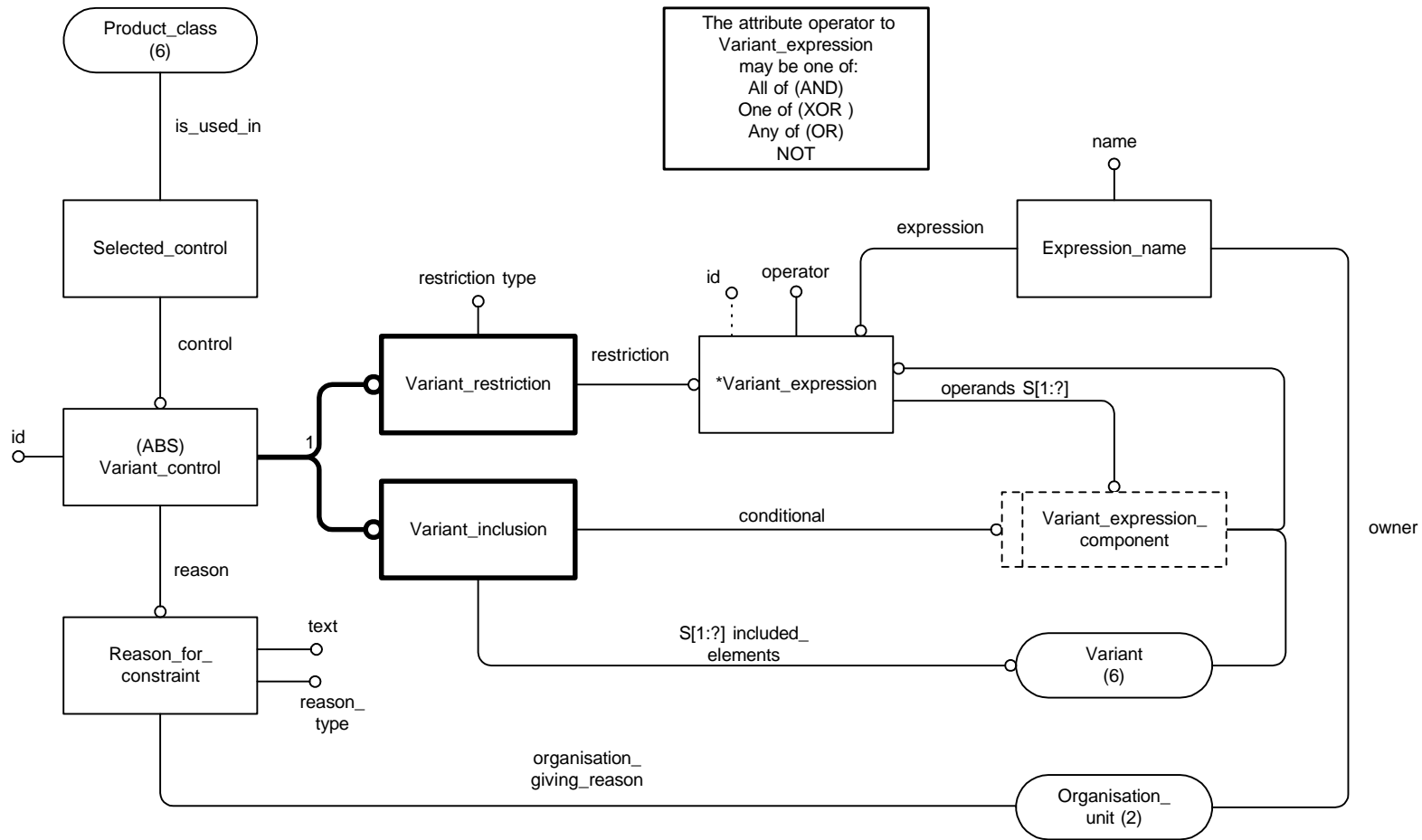
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		6/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

PRODUCT CLASSES AND VARIANTS



VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		7/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

VARIANT CONTROL

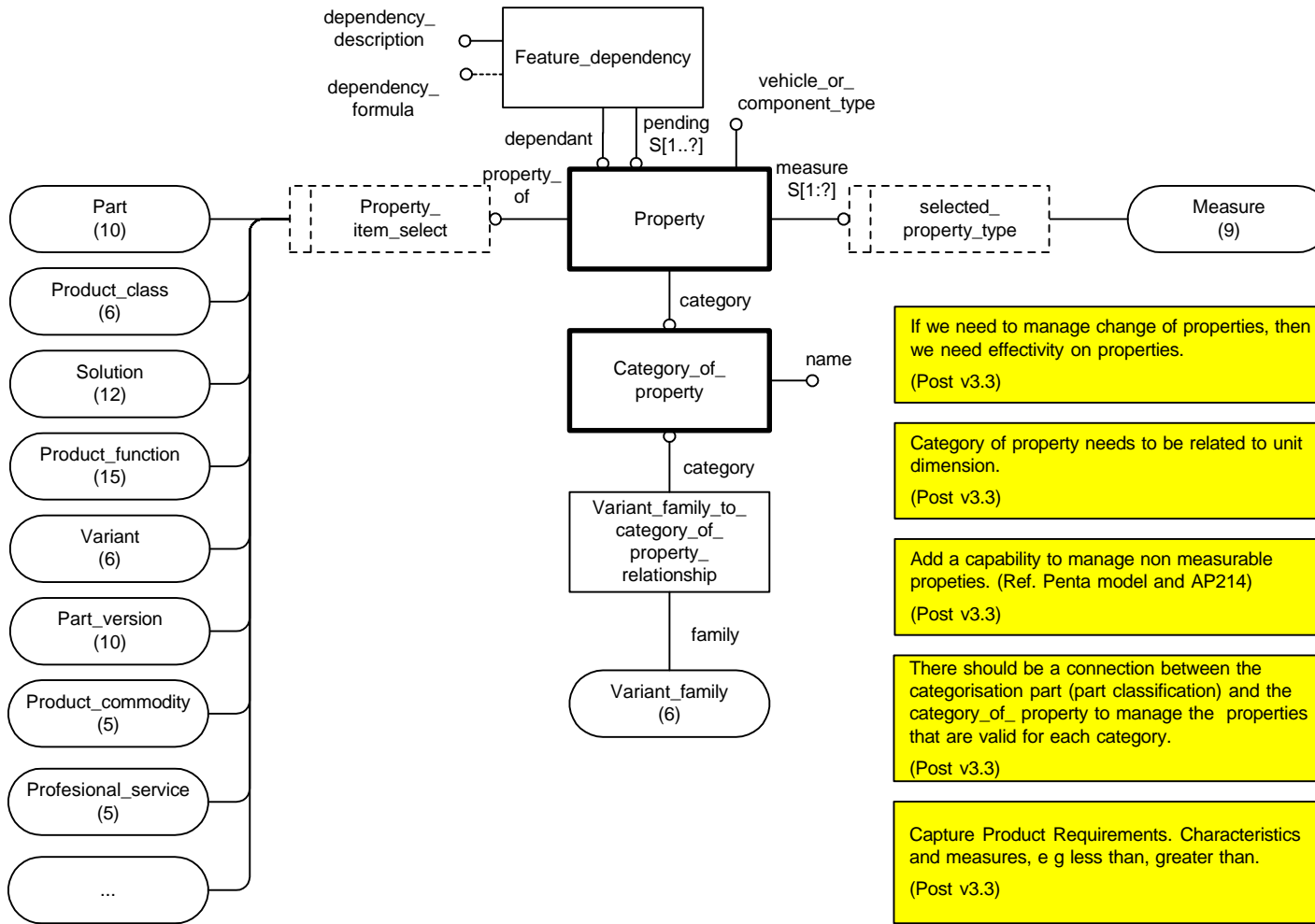


The management of positive Variant_restriction has to be further analysed. (Post v3.3)

Should there be an option to manage variant properties in the rule expressions? (Post v3.3) (VTC)

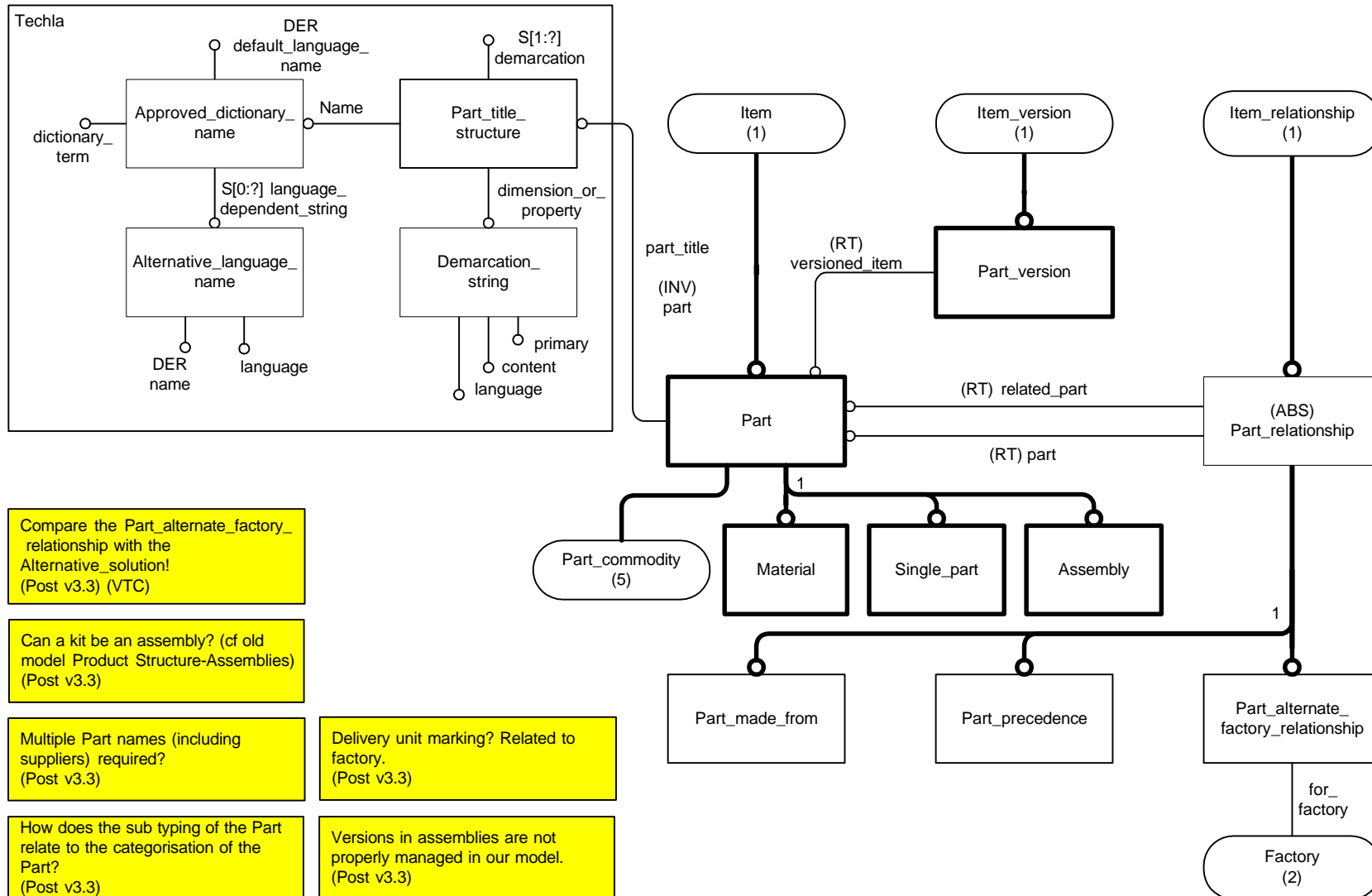
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		8/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PDM PROPERTY



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 10/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PART CONCEPT



Compare the Part_alternate_factory_relationship with the Alternative_solution! (Post v3.3) (VTC)

Can a kit be an assembly? (cf old model Product Structure-Assemblies) (Post v3.3)

Multiple Part names (including suppliers) required? (Post v3.3)

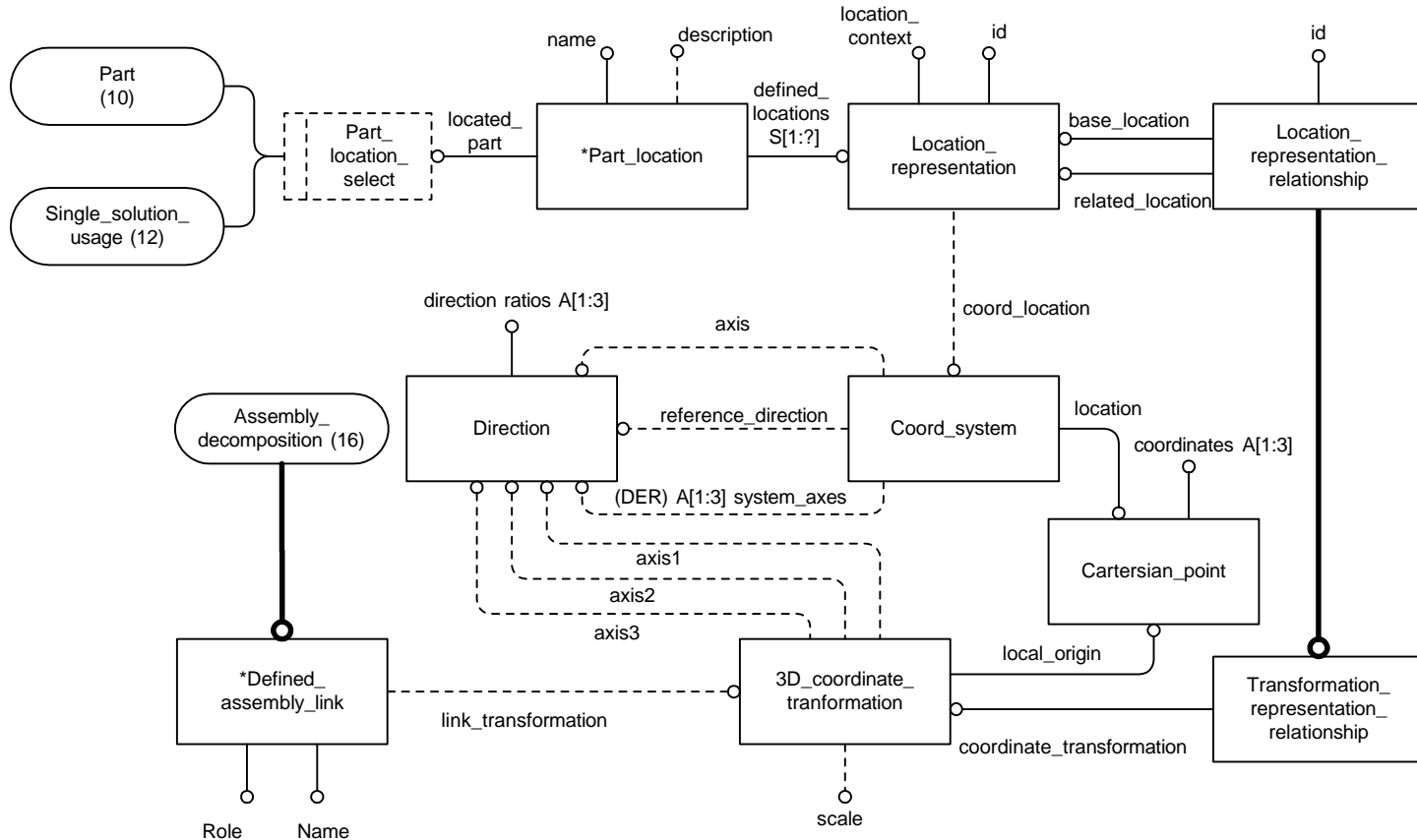
How does the sub typing of the Part relate to the categorisation of the Part? (Post v3.3)

Delivery unit marking? Related to factory. (Post v3.3)

Versions in assemblies are not properly managed in our model. (Post v3.3)

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		11/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PART LOCATION



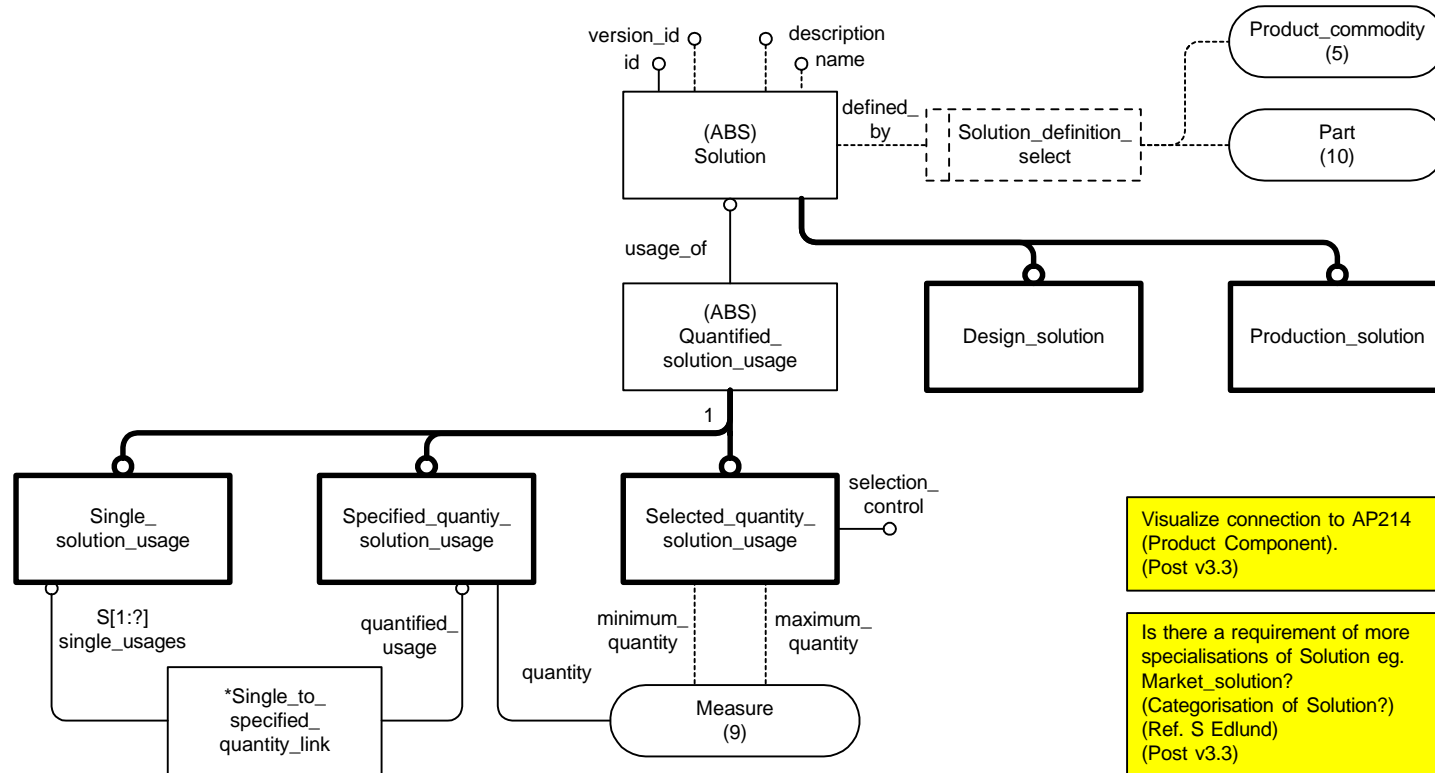
This diagram should be converted into a general location model, covering all kinds of locations, including part locations, production resource locations, Process_area... (Post v3.3) (VTC)

!When reviewing this model, include measure into this model! (Post v3.3)

Position must remain when restructuring the BOM e.g. for manufacturing. (Post v3.3)

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		12/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

SOLUTION

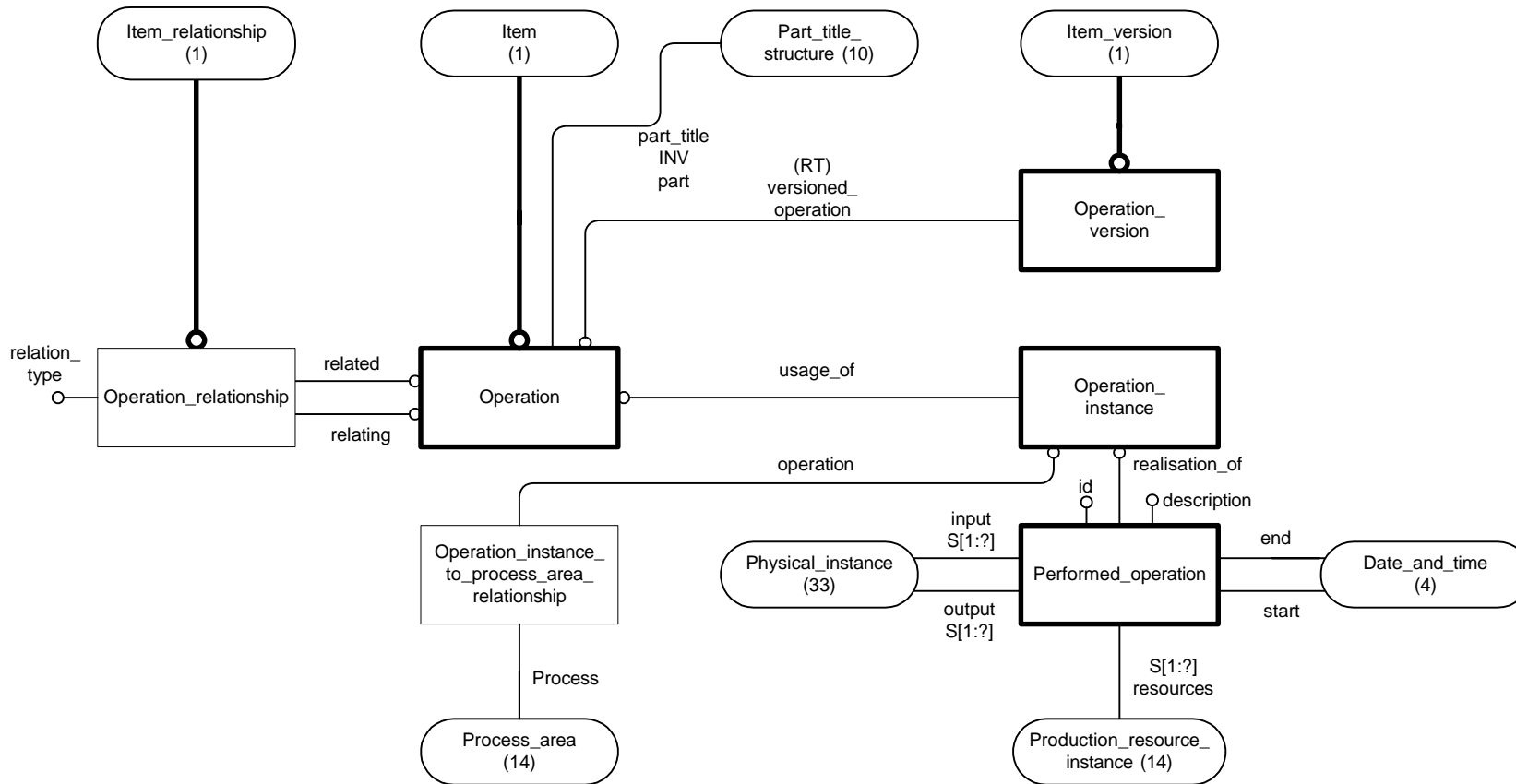


Visualize connection to AP214 (Product Component). (Post v3.3)

Is there a requirement of more specialisations of Solution eg. Market_solution? (Categorisation of Solution?) (Ref. S Edlund) (Post v3.3)

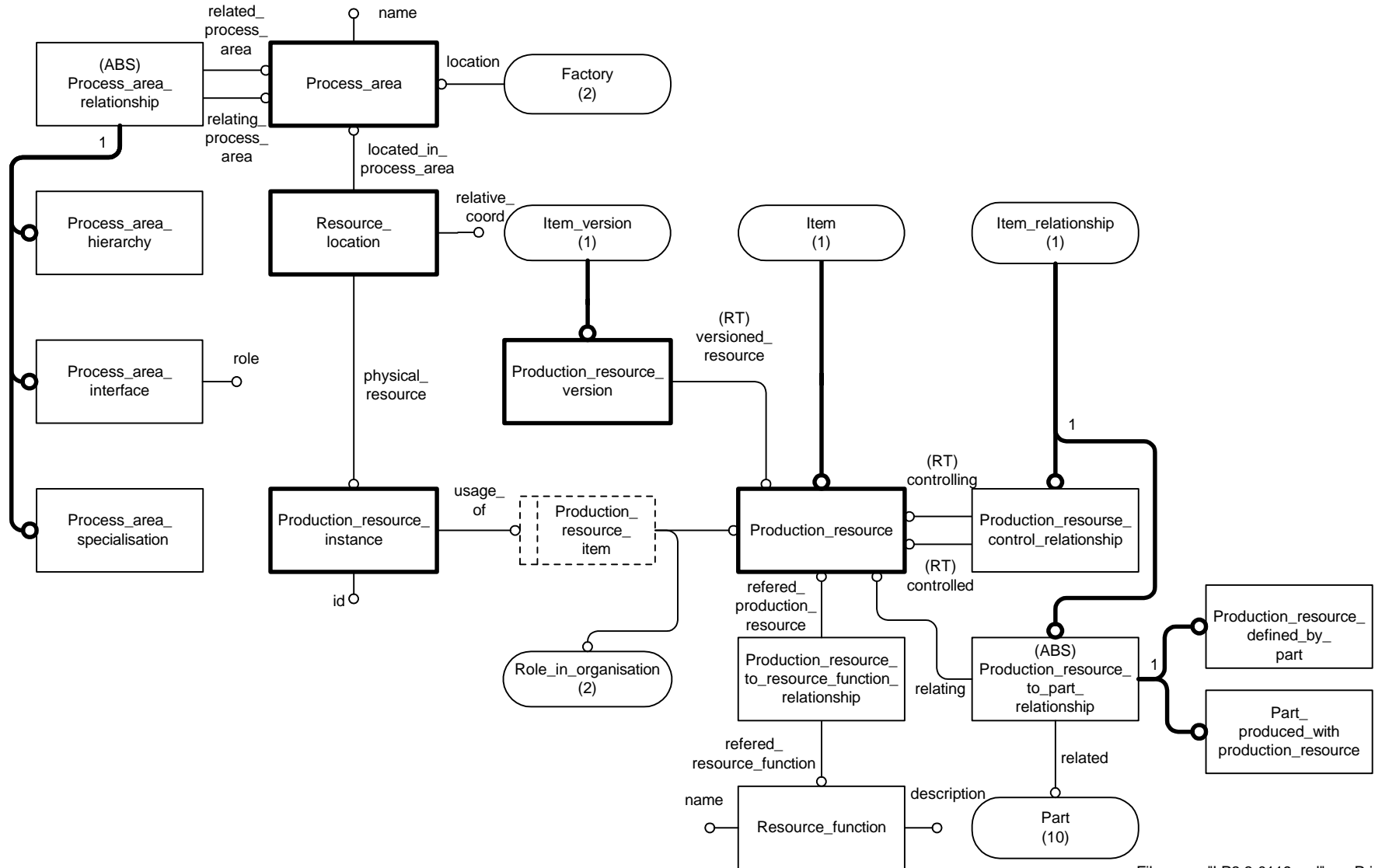
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		13/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

OPERATION STRUCTURE



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 14/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

MANUFACTURING RESOURCE STRUCT.



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 15/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PRODUCT STRUCTURE - GENERIC

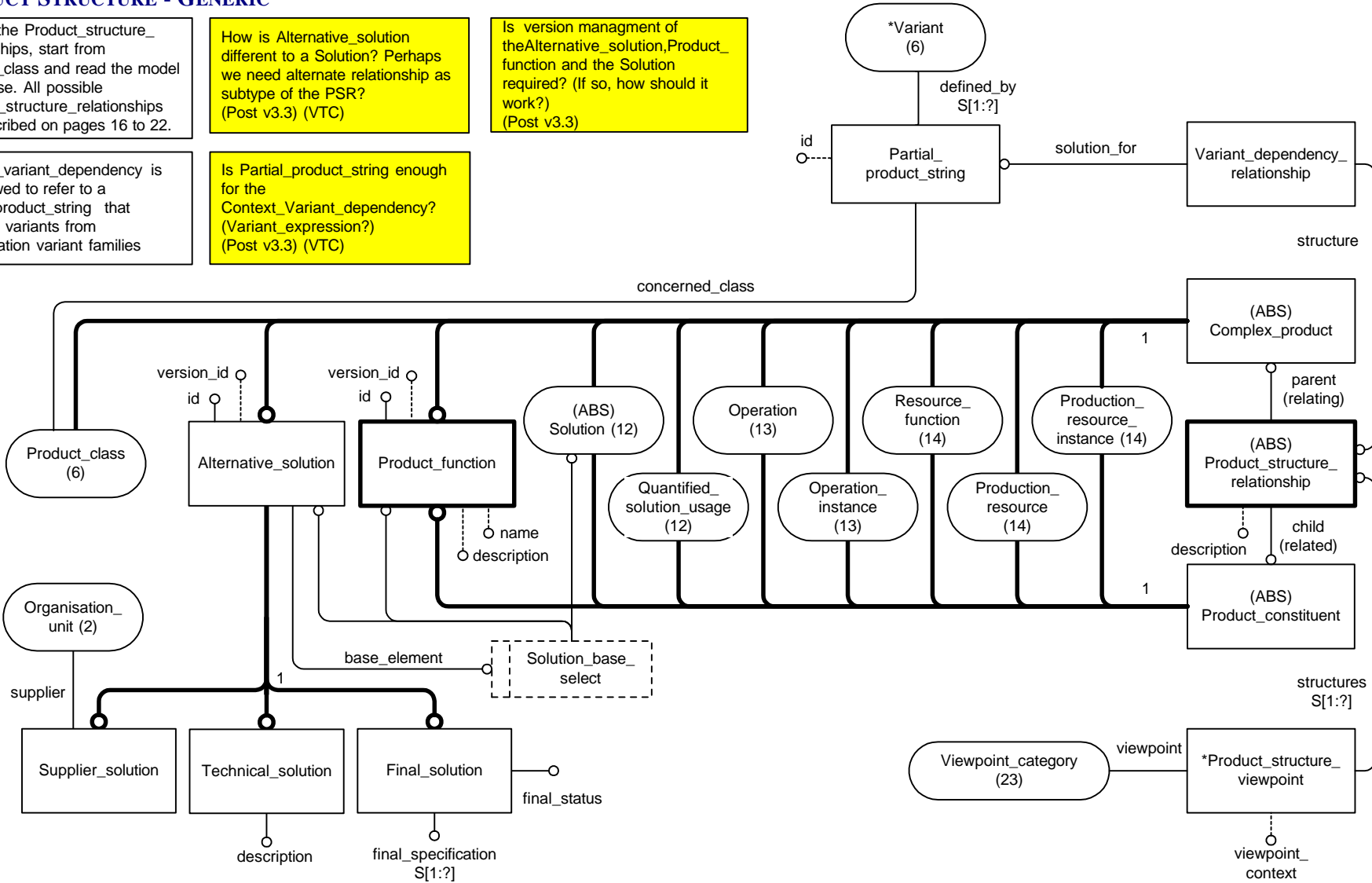
To find the Product_structure_ relationships, start from Product_class and read the model clock-wise. All possible Product_structure_relationships are described on pages 16 to 22.

How is Alternative_solution different to a Solution? Perhaps we need alternate relationship as subtype of the PSR? (Post v3.3) (VTC)

Is version management of the Alternative_solution, Product_function and the Solution required? (If so, how should it work?) (Post v3.3)

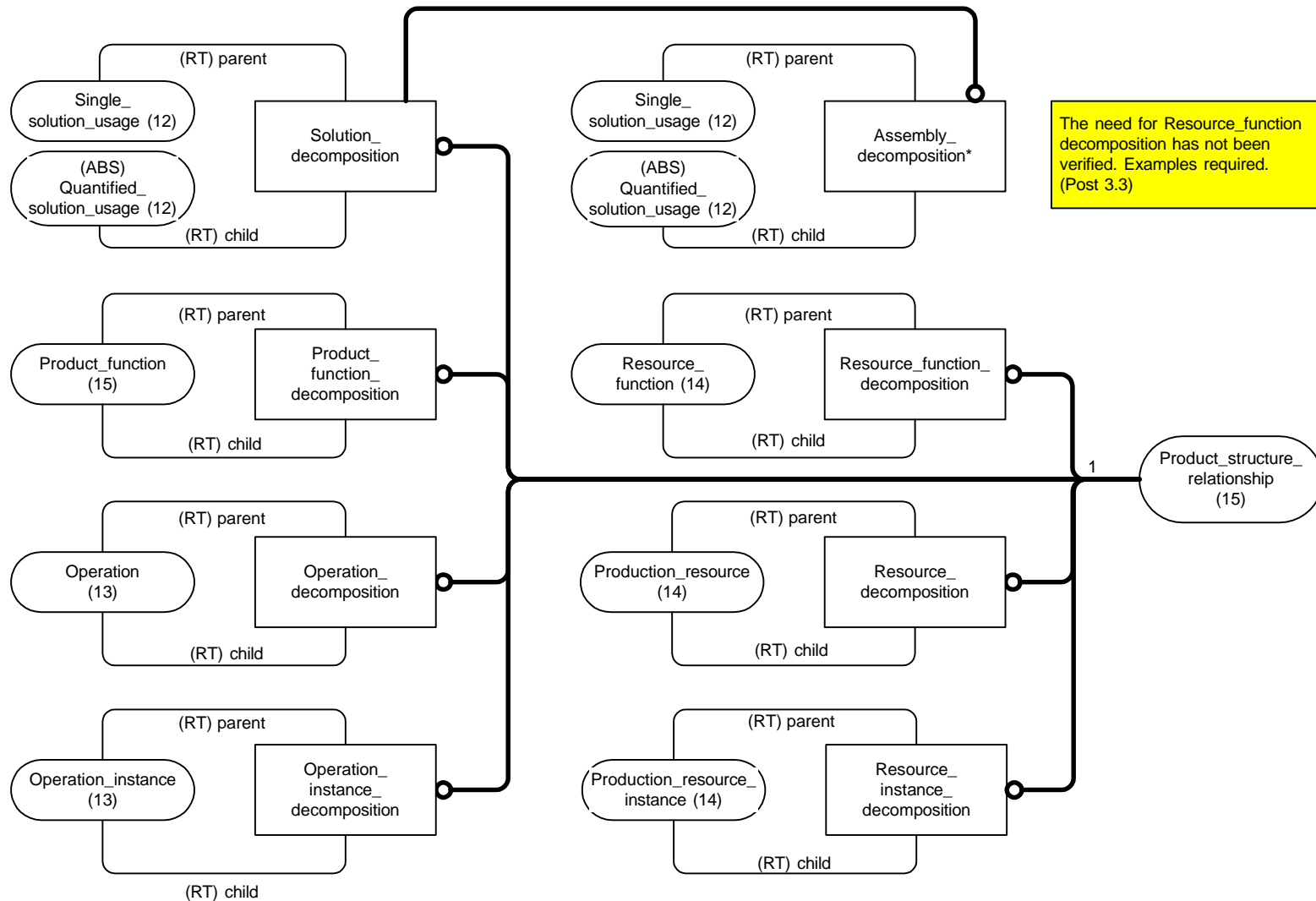
Context_variant_dependency is not allowed to refer to a Partial_product_string that contains variants from authorisation variant families

Is Partial_product_string enough for the Context_Variant_dependency? (Variant_expression?) (Post v3.3) (VTC)



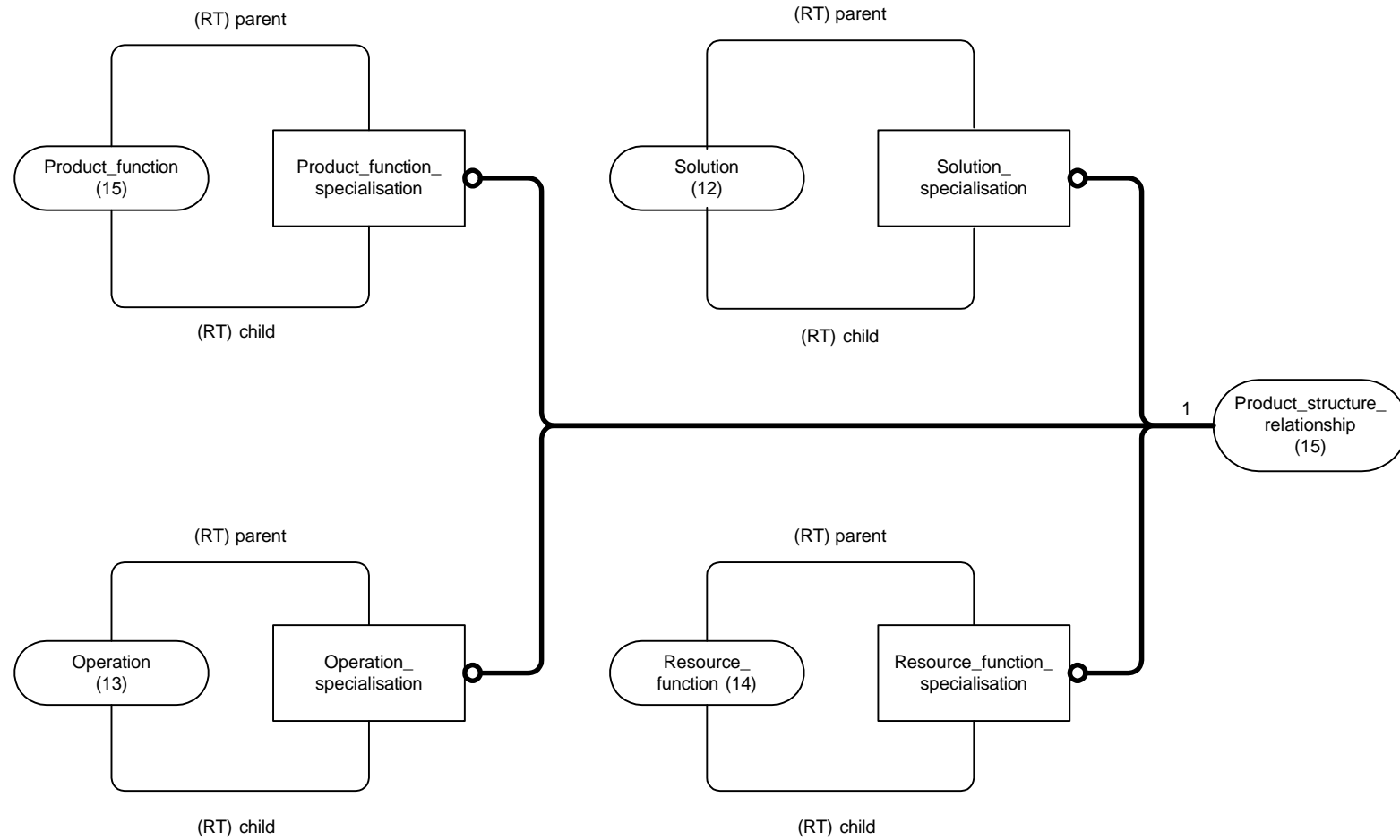
VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 16/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PRODUCT STR. - DECOMPOSITION



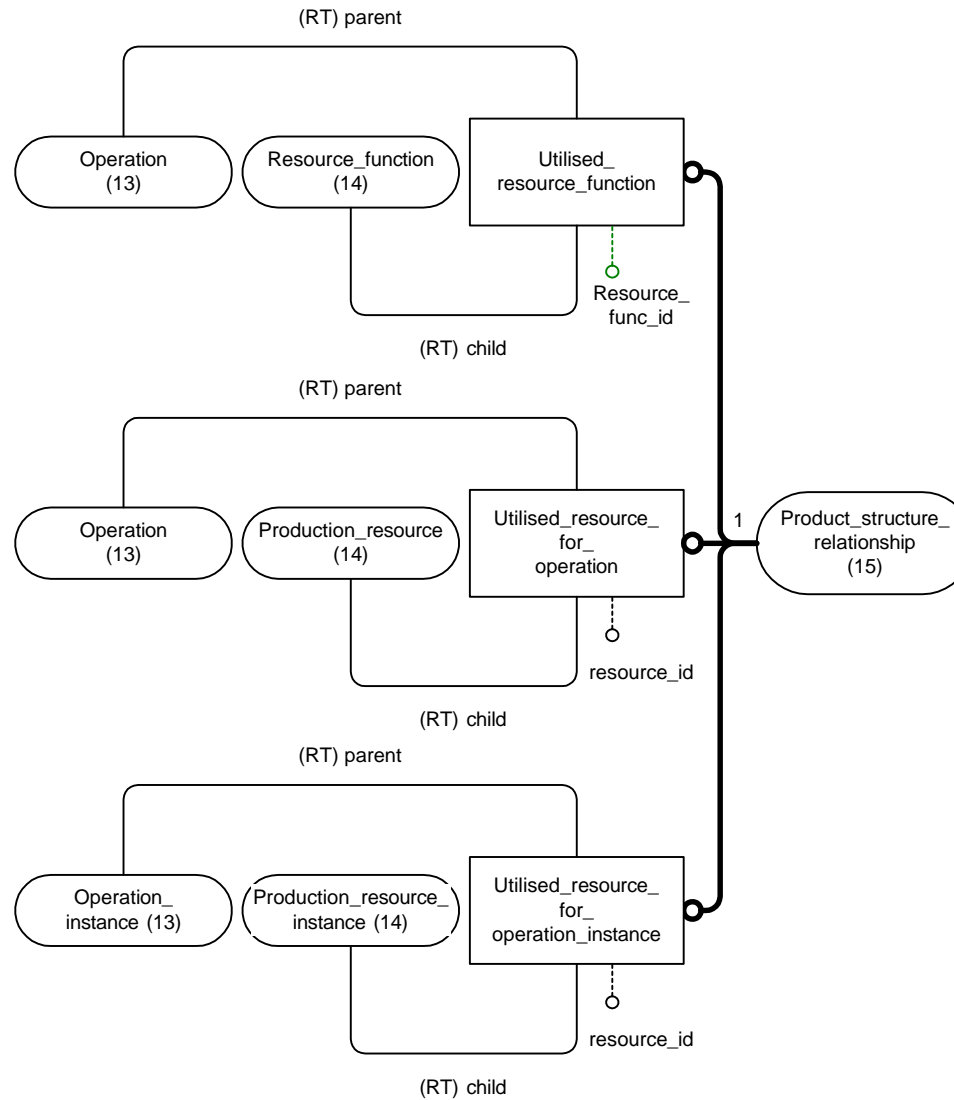
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		17/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

PRODUCT STR. - SPECIALISATION



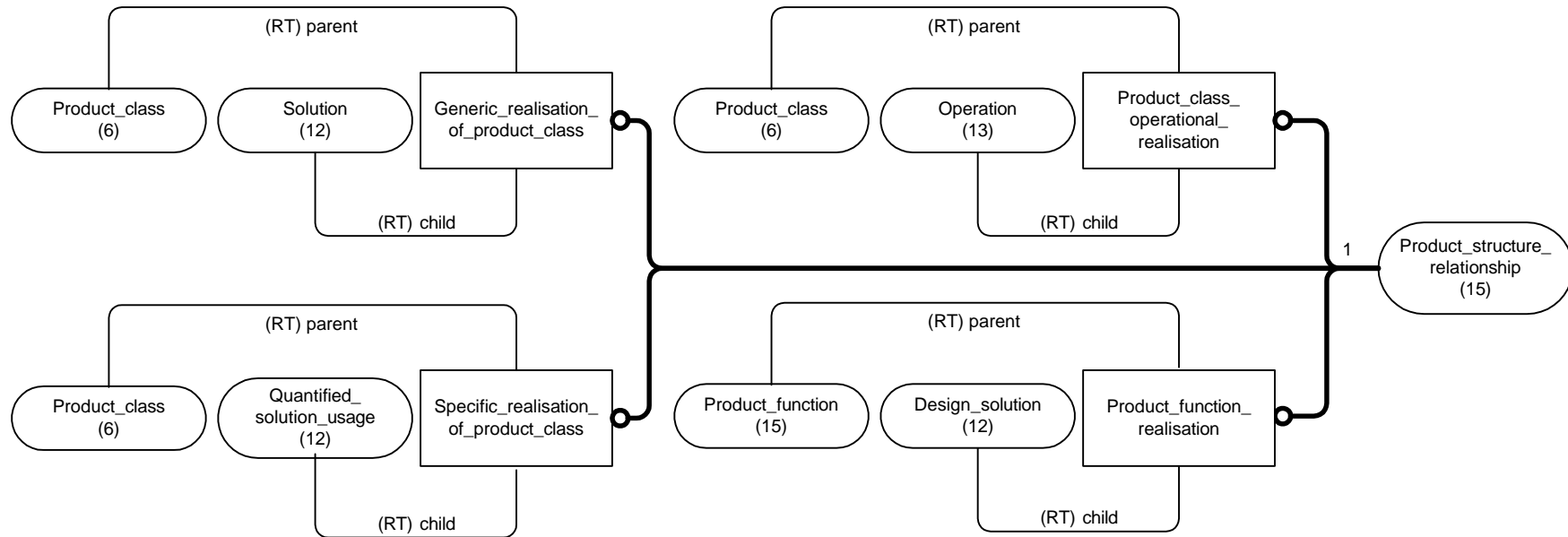
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		19/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

PRODUCT STR. - RESOURCE REL.



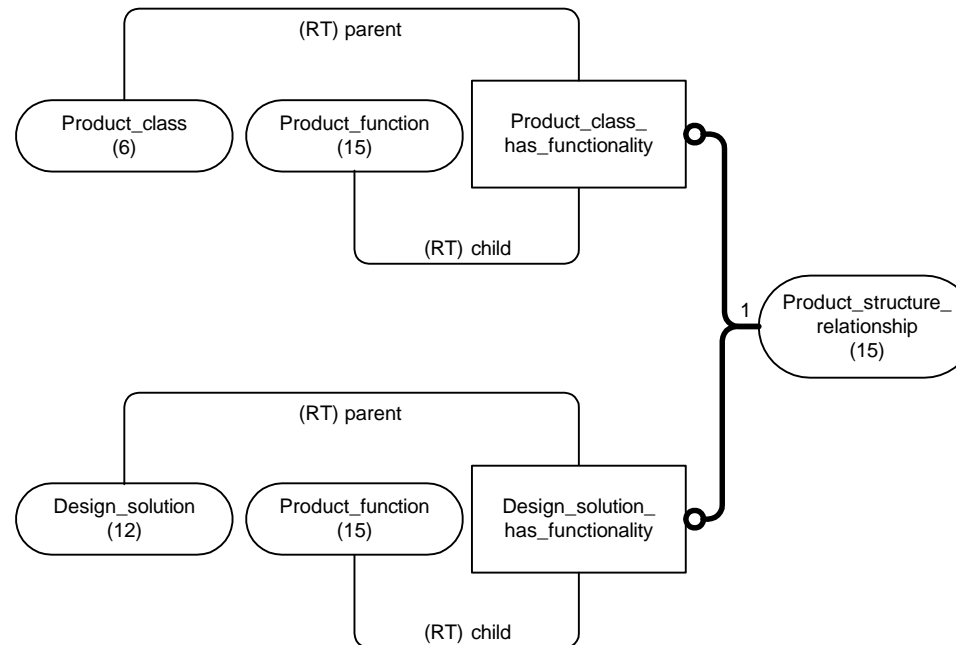
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		20/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

PRODUCT STR. - REALISATION



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 21/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

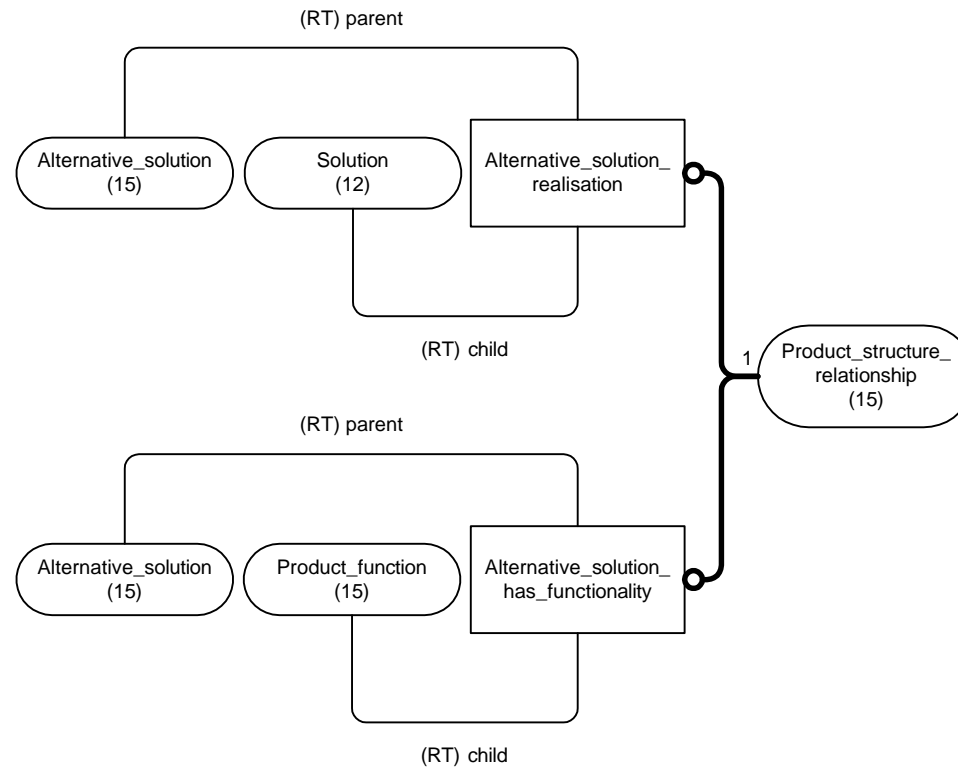
PRODUCT STR. - FUNCTIONALITY



Should there be an relationship between an operation that tests a certin functionality and the product_function that is tested?
(Post v3.3)

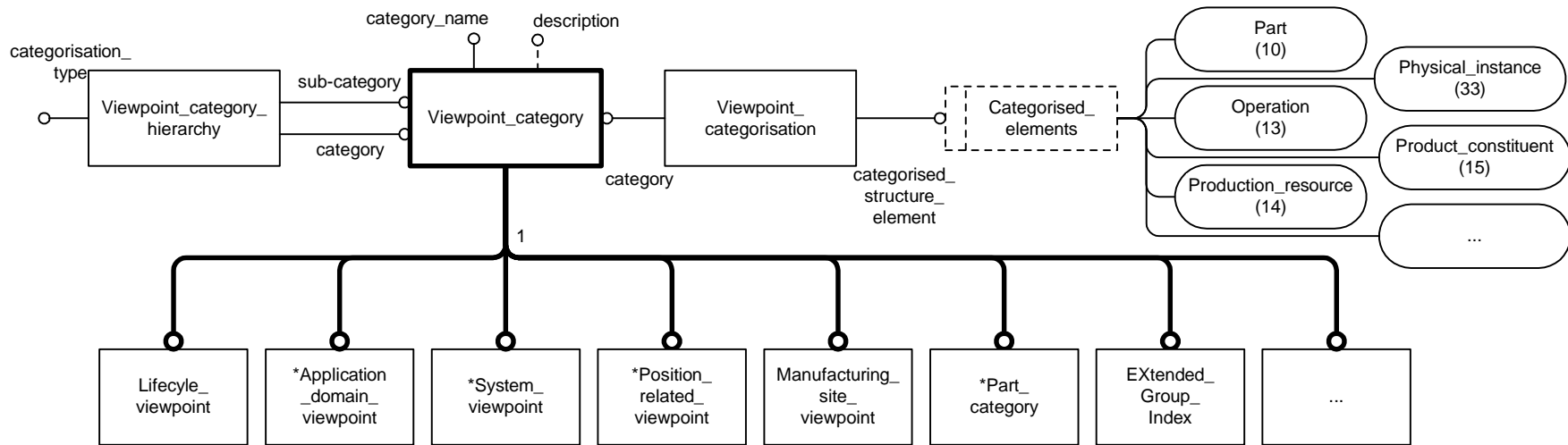
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		22/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PRODUCT STR. - ALT. SOL. REL.



VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		23/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

PRODUCT STR. - CATEGORISATION



Notes:
The rules on the entities above will enforce valid categorisations and enforce a specified MINIMUM set of categories.

lifecycle_viewpoint

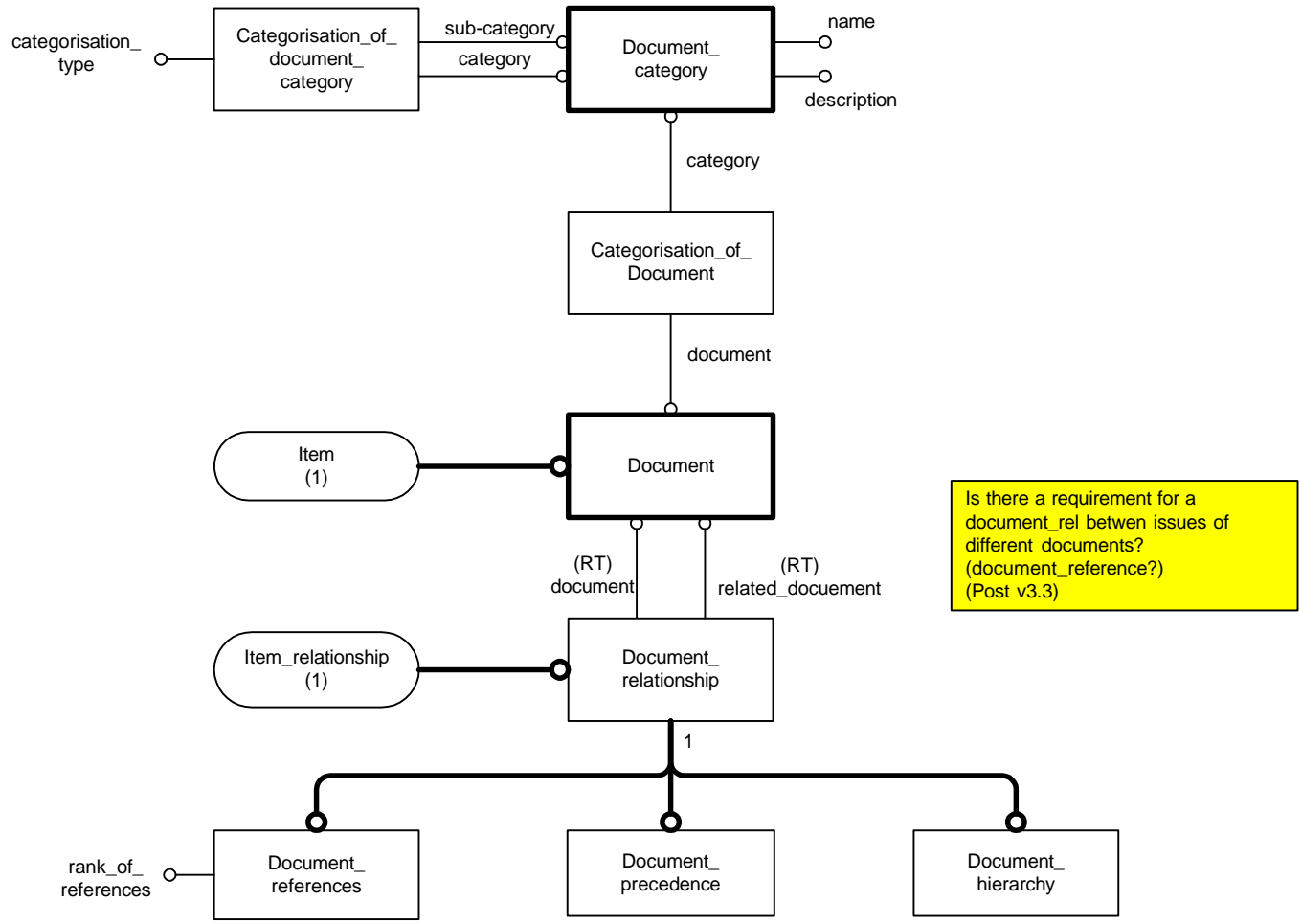
- requirements
- functional
- concept
- detailed design
- production engineering
- manufacturing
- logistics
- after-sales

application_domain_viewpoint

- mechanical
- electrical
- electronic
- software

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		24/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

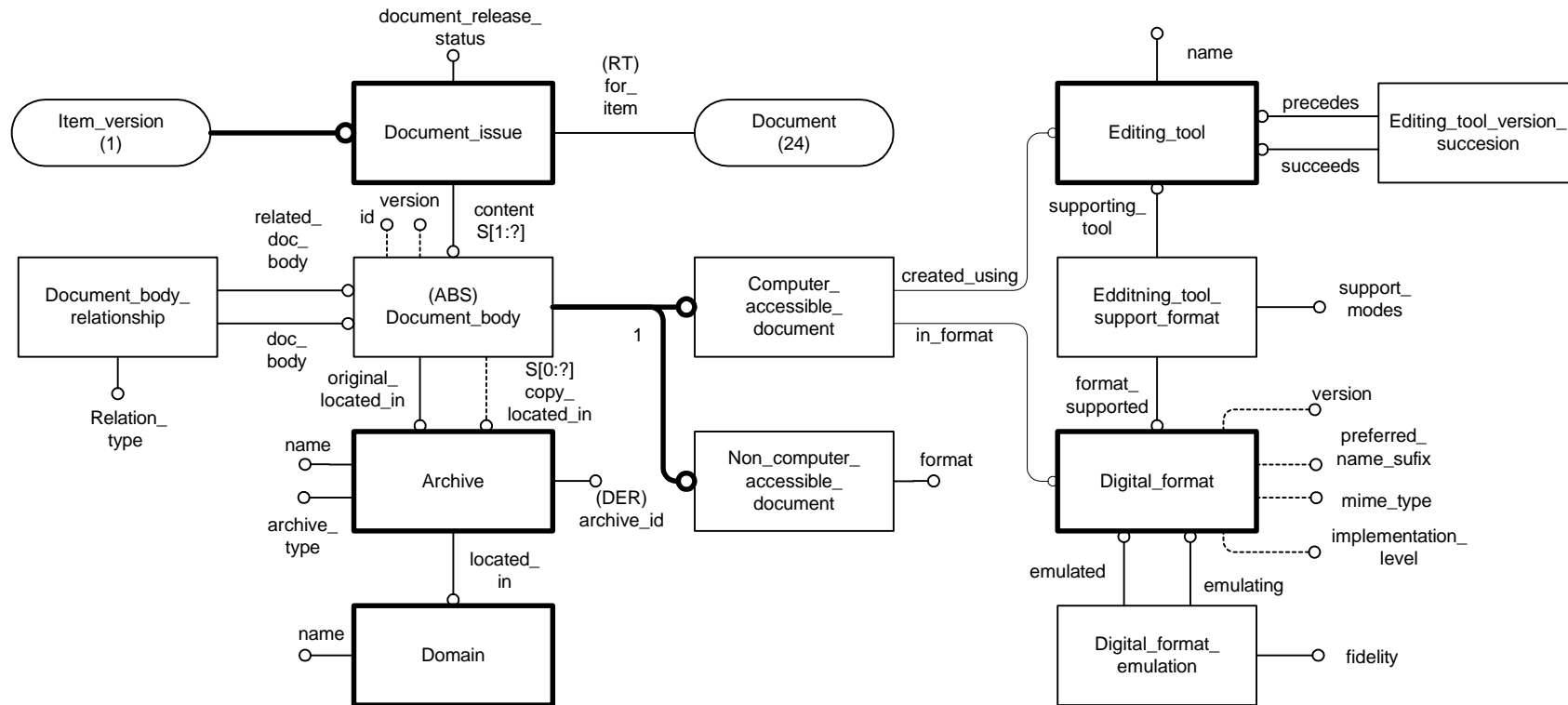
DOCUMENTS - CATEGORISATION



Is there a requirement for a document_rel between issues of different documents? (document_reference?) (Post v3.3)

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		25/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

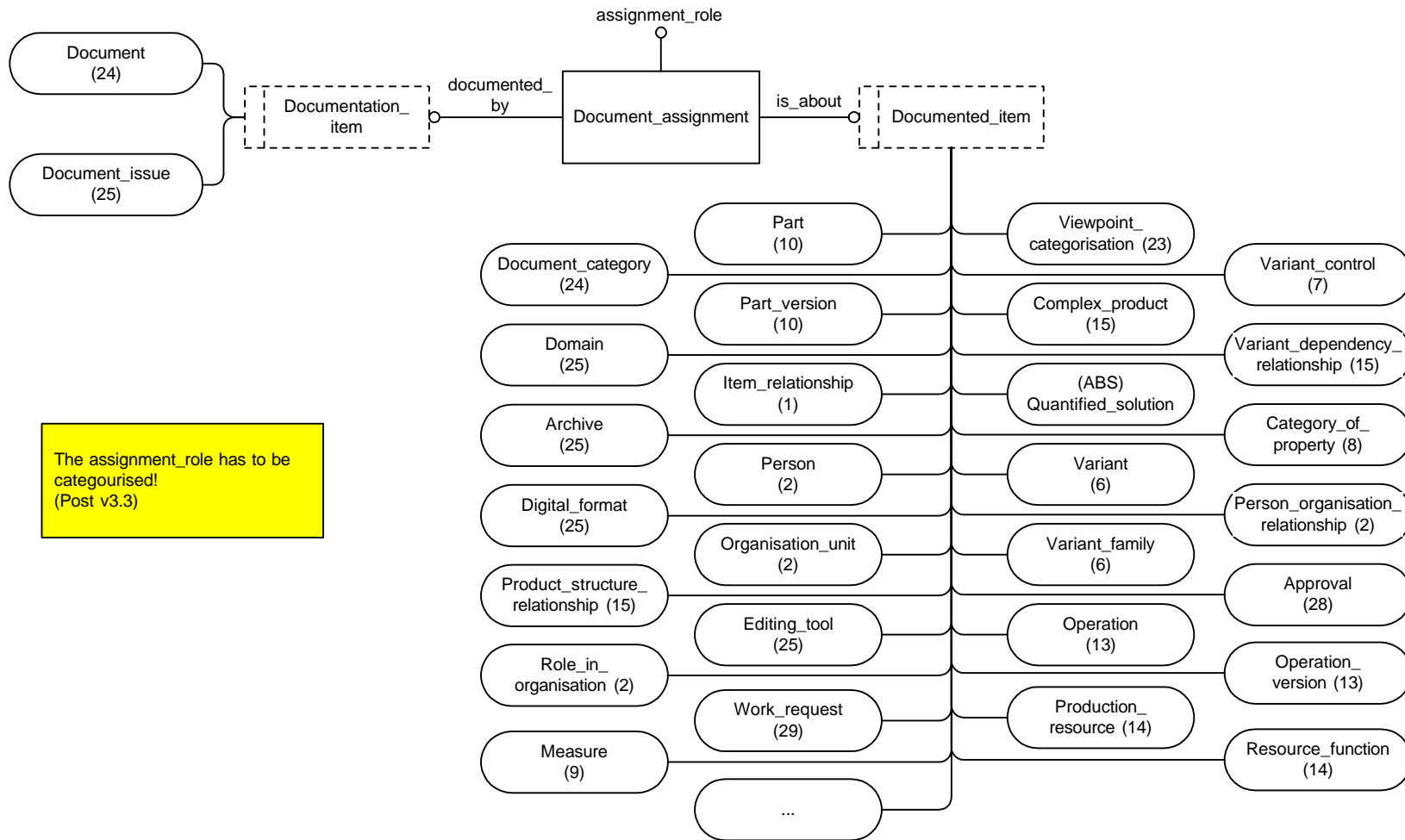
DOCUMENTS - STRUCTURE



Is there a requirement of the management of document templates?
(Post v3.3)

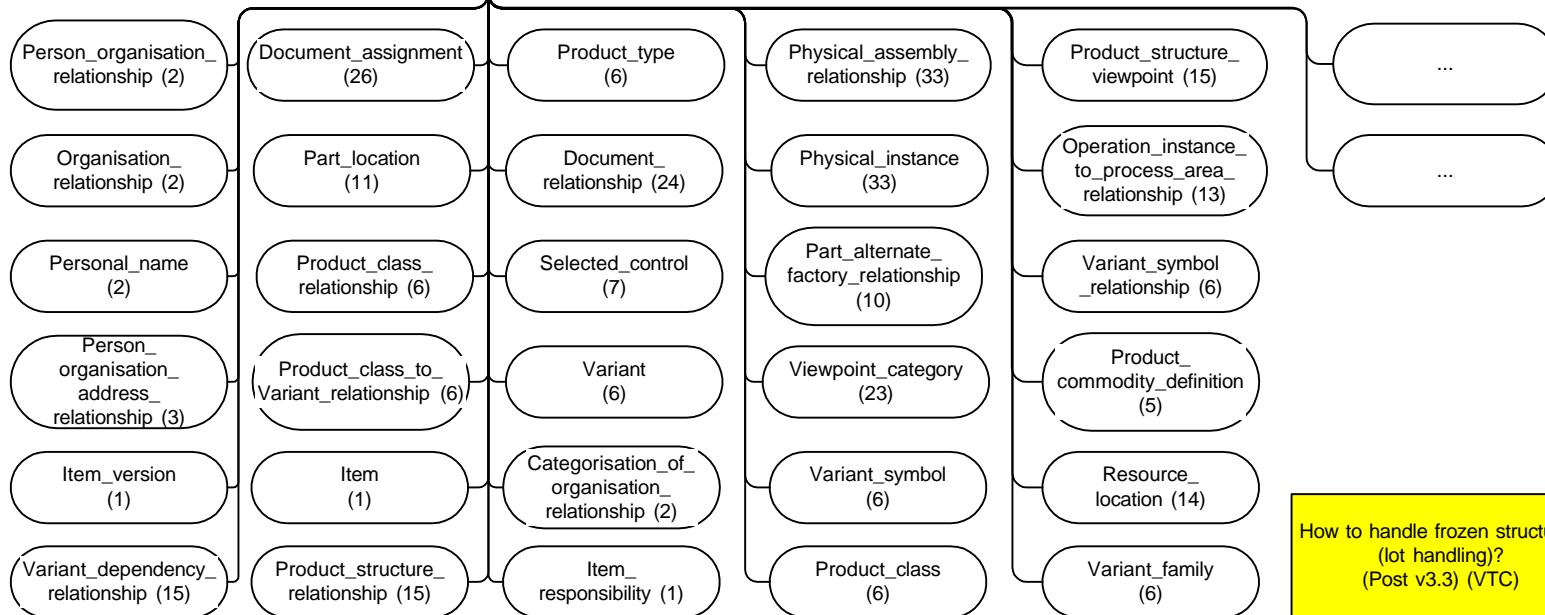
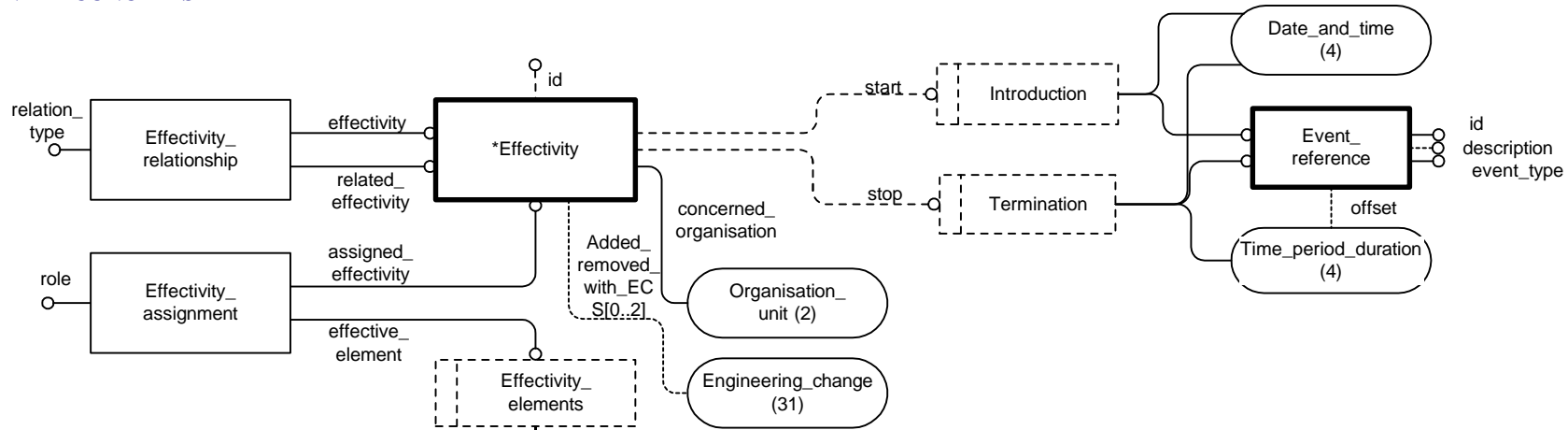
VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 26/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

DOCUMENTS - ASSIGNMENT



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 27/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

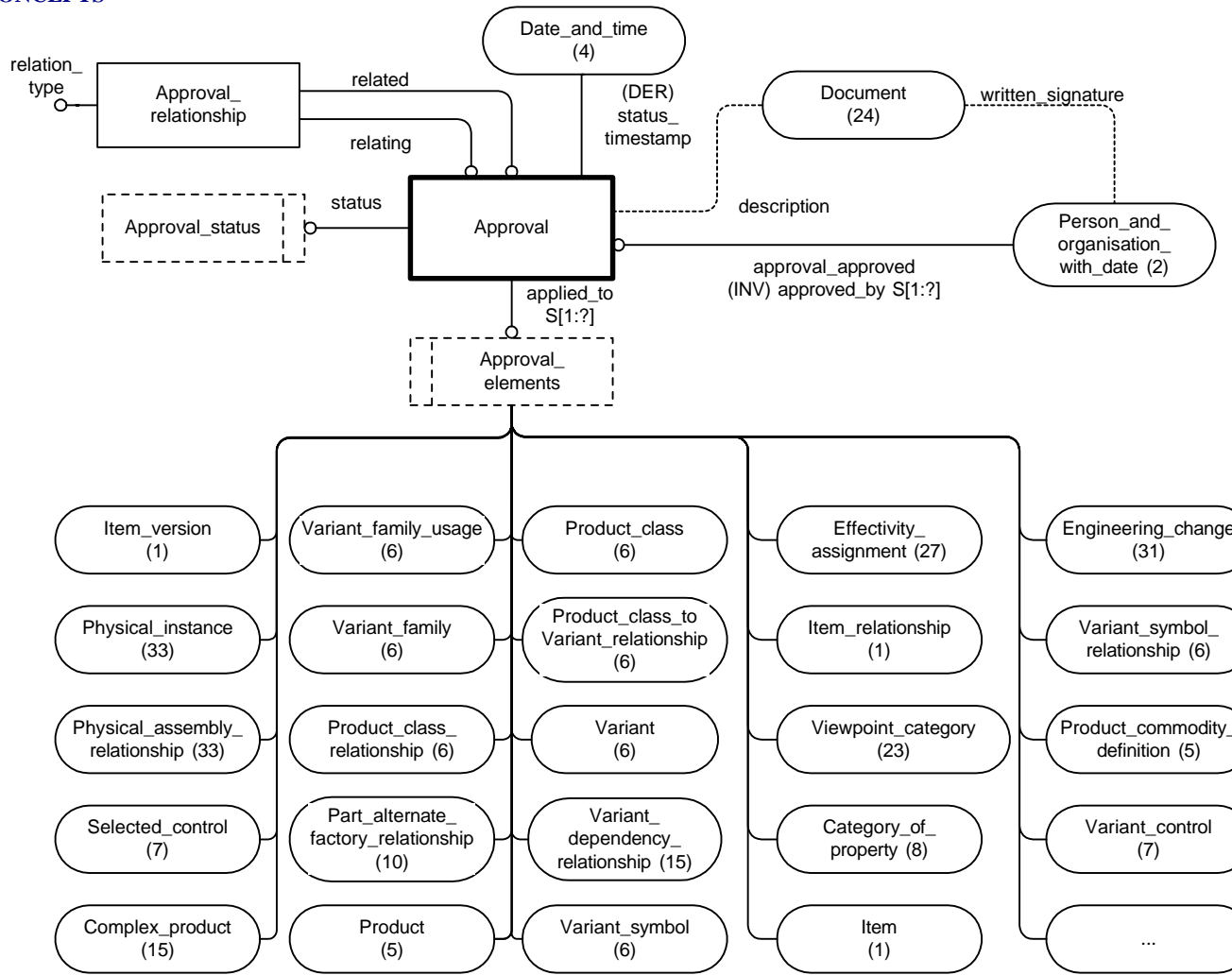
EFFECTIVITY CONCEPTS



How to handle frozen structures (lot handling)? (Post v3.3) (VTC)

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		28/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

APPROVAL CONCEPTS



Should there aswell be a possibility to approve Approval_relationships. (Post 3.3)

How to manage non physical person approval (eg a computer program)? (Post v3.3)

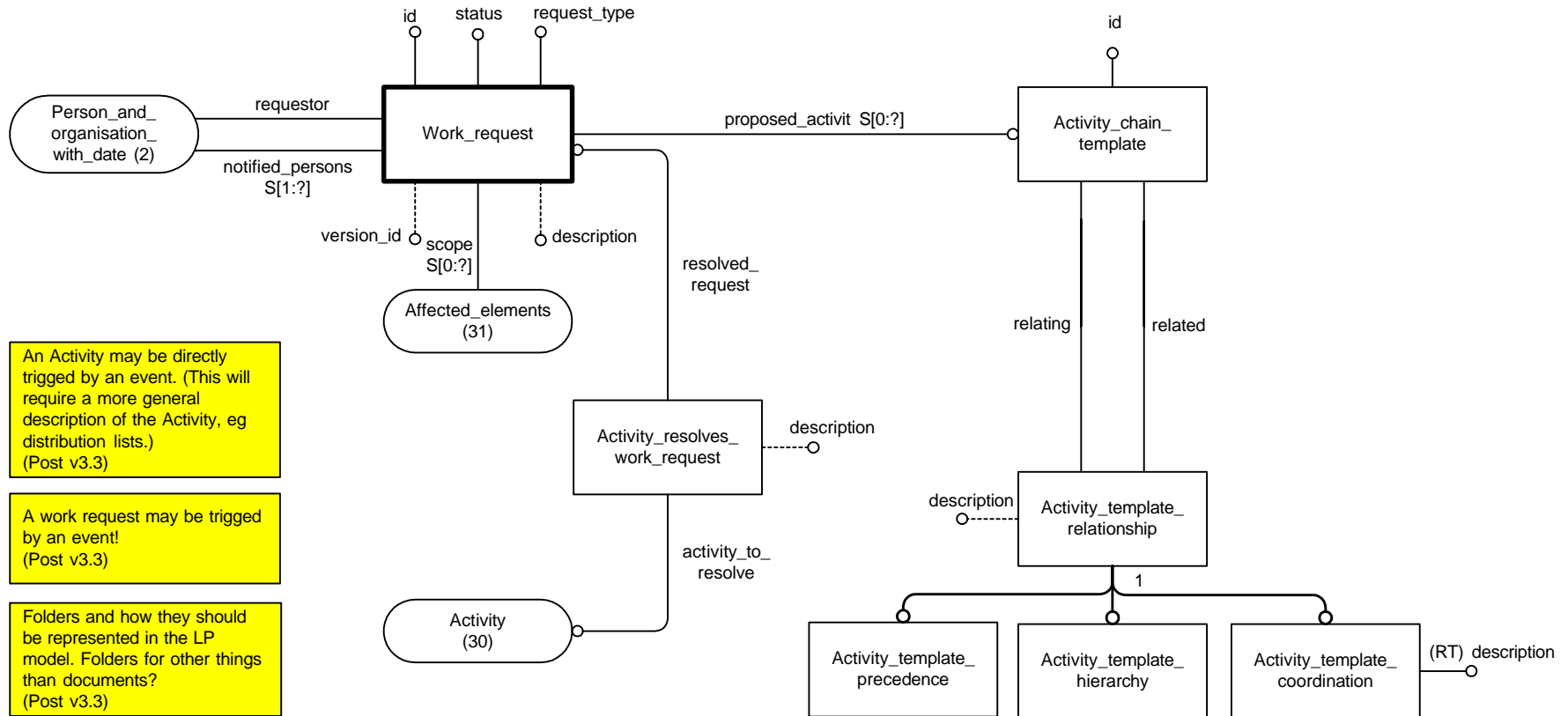
There may be a requirement for identifying the pers/org that initiate an approval. (Post v3.3)

Should there be a scope or context information on the Approval? (Post v3.3)

If some of the apointed persons does not approve, there is no option to store this information. (Post v3.3)

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		29/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

CHANGE MANAGEMENT: WORK REQUEST



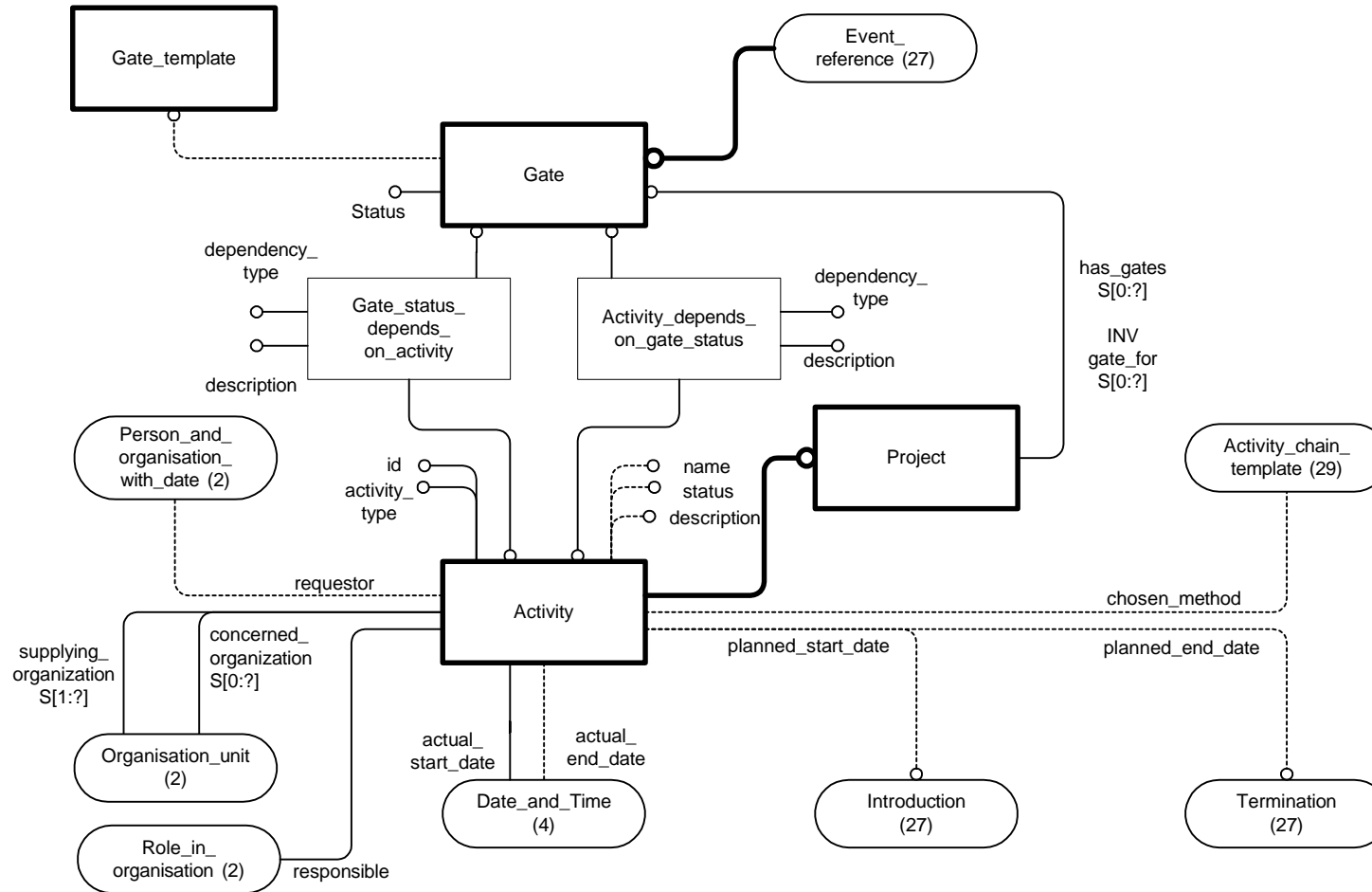
An Activity may be directly triggered by an event. (This will require a more general description of the Activity, eg distribution lists.) (Post v3.3)

A work request may be triggered by an event! (Post v3.3)

Folders and how they should be represented in the LP model. Folders for other things than documents? (Post v3.3)

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		30/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

CHANGE MANAGEMENT - ACTIVITY



VOLVO	Document No. PDMReq-3.3	Title Information model		Diagram 31/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

CHANGE MANAGEMENT - EC



Coordinate the change of the product and the production process and resources.
(Post v3.3)

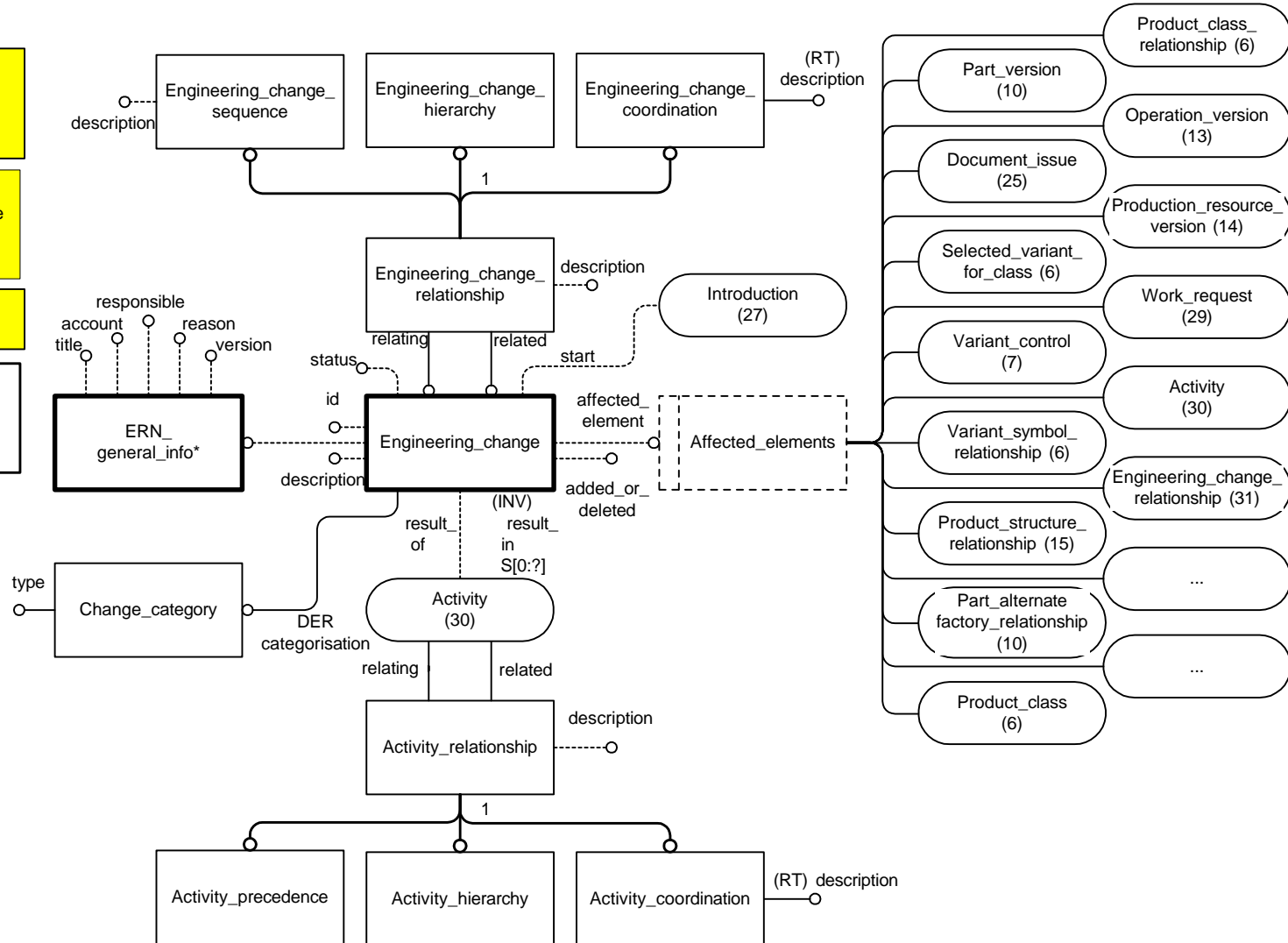
Start of an EC has to be synchronised with start or end of an effectivity for the affected_element.
(Post v3.3)

Sandbox/working file?
(Post v3.3)

When an EC has an Engineering_change_relationship as Affected_elements, then the EC is a correction EC.

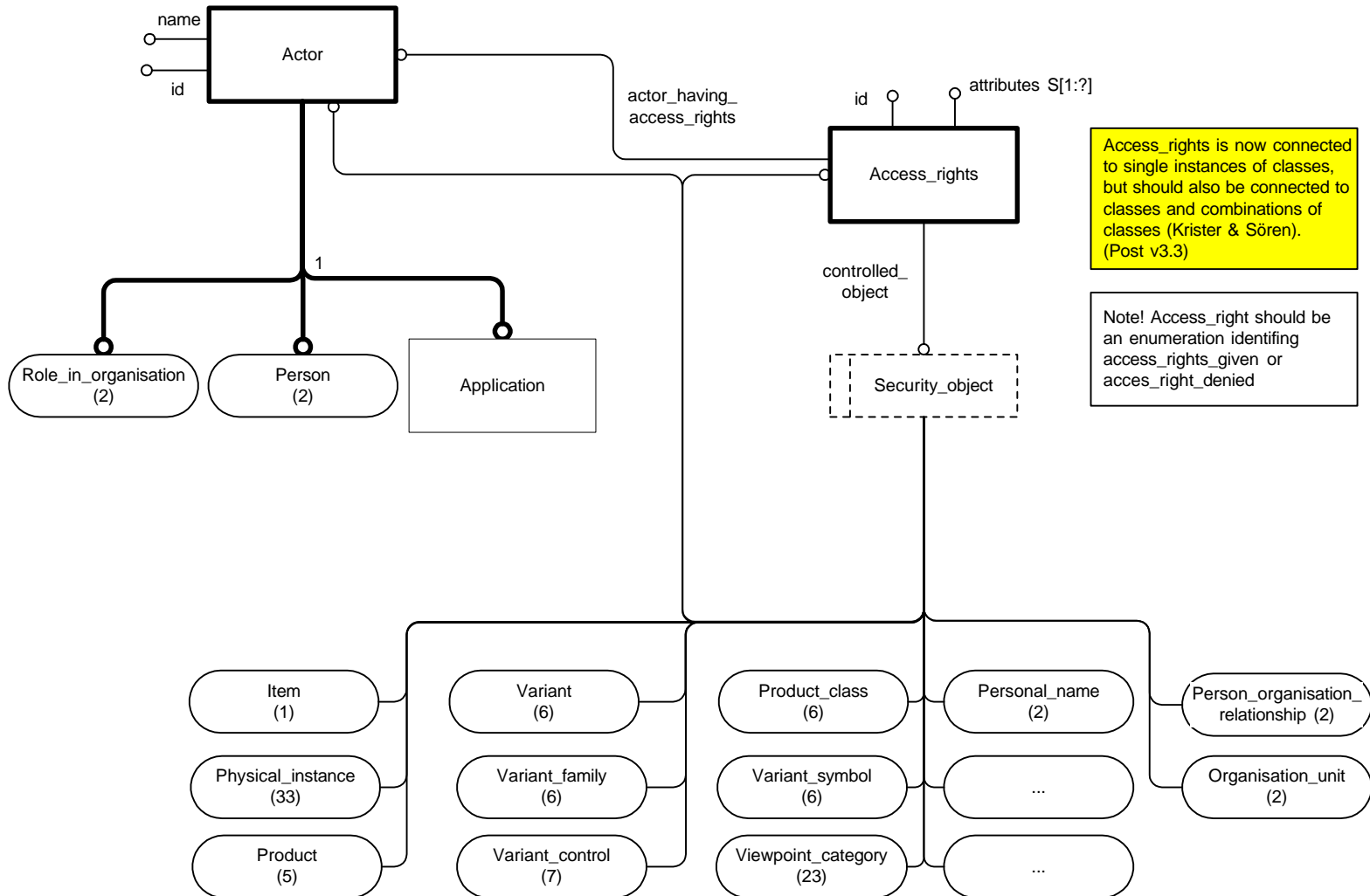
Information connected to an ERN in the business

ERN (frontpage mm)
ERN issue
Approval
Approver
Signature
ERN-Record
Originator
REA
REA issue
ERN Should be connected to a project (object)
.....



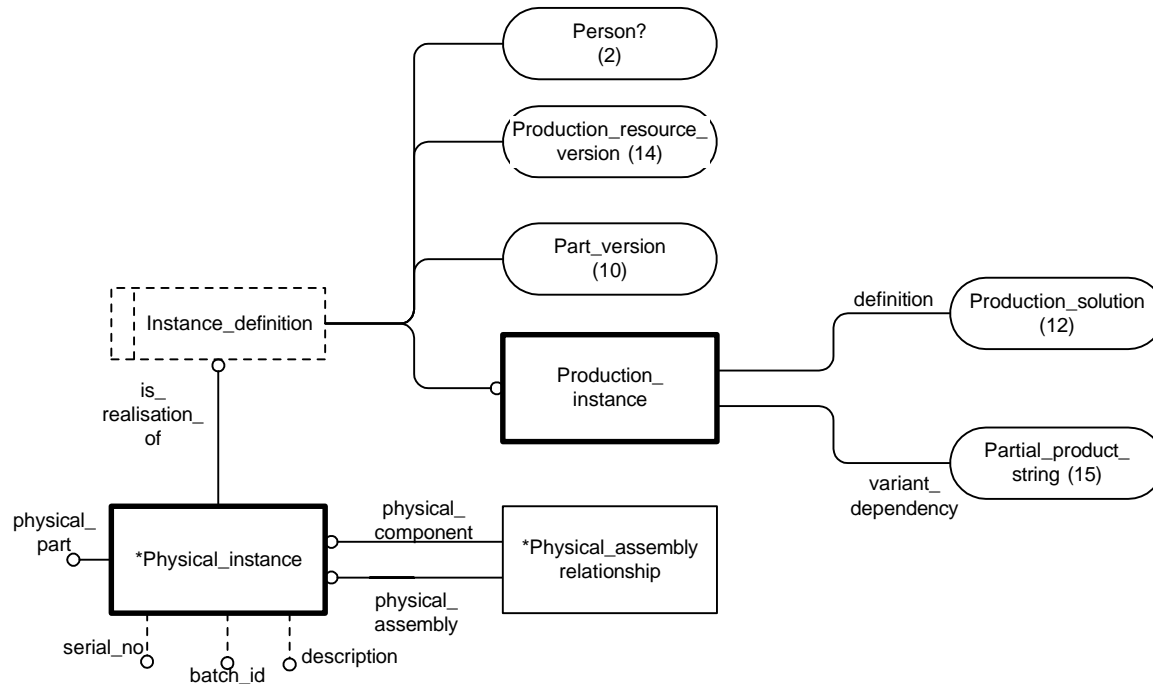
VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		32/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

AUTHORISATION AND SECURITY



VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		33/34
Issuer (dept, name, phone, place, sign)	Status	Date	Version	Reg no
PDM Core Requirements Team, VIT	Frozen	2000-01-19	3.3	
Subject				
Logical Platform for Volvo PDM information requirements				

PHYSICAL INSTANCES



Should the equipment register show up here? (Post v3.3)

Physical instances of a product commodity? Connection to ORDER (Business Object) (Post v3.3) (VTC)

VOLVO	Document No.	Title		Diagram
	PDMReq-3.3	Information model		34/34
Issuer (dept, name, phone, place, sign) PDM Core Requirements Team, VIT	Status Frozen	Date 2000-01-19	Version 3.3	Reg no
Subject Logical Platform for Volvo PDM information requirements				

GENERAL ISSUES



There is no product lifecycle information in the model. It is not possible to tell e.g. whether a measure is a design requirement or an actual measurement of an existing part.

S-notes are not covered in the LP model. Varicodes and how to use them?

How is ownership on business objects going to be described? Extended Enterprise issue.

Aftermarket needs a model of service structure. E.g. changing level of spare parts compared with Prod.struct.

Virtual vehicle req.'s have to be included both in the model and as separate requirements. Is this a process or a LP model issue?

J2008? Standard for services and diagnostics. Applicable for cars and trucks. How is this connected to the PDM work? (contact person = Lars Danstedt?)

Capture Color Management Req's in the LP model

Ask Janny about the +/- handling at VTC.

How to cover "superstructures" for both bus and trucks

Management/handling of testing vehicles (prototypes). There is no way to store prototype, testing and engineering analysis information other than as a document.