Finland votes "Yes" to the progression of the Trading function to Committee Draft, with the following comments:

Item: 1

Rationale:

The current ODP trading function document expresses, that the service offers include information that may lead to a contract between the service providing and the service using objects. Both the service offers and the import requests specify, despite contract attributes, also predicates on which a contract can be created. The matching pair of offer and request contains enough information to actually create the contracts by combining the offers and the request. The task of the trader is the negotiation of the contracts.

A trader can perform this negotiation in any environment. The information contents and the contract semantics are not defined in traders themselves, but in a separate type repository. Especially, in the ODP infrastructure, the trading function is part of the binding activity between objects. The binding between two or more objects is created so that each side gives the trader enough information for negotiation of possible bindings. A client has to initiate the establishing behaviour of the binding between the client and a server. When the trader has found a suitable set of offers to form a contract, it informs the client. The client then creates the corresponding contract and informs the selected server that it is required to create a corresponding contract and to follow the establishment behaviour stated in that contracts. When the objects reach a common contractual context, the binding is established.

Required action:

Trading function accomplishes contract negotiation phase, for example, in the binding process of object interfaces. This should be stated more clearly and precisely in the text of the enterprise viewpoint.

Clauses affected: 6

Item: 2

Comment:

We have understood from earlier discussions, especially in Southampton meeting, that many would like to see the presentation of information viewpoint changed. We support this wish, but at the moment can not provide any contribution.

Clauses affected: 7

Item: 3

Rationale:

We feel that information viewpoint concepts of trader link space and links are unnecessary. Especially, we do not agree with the current semantics of the links.

Currently, links represent an established binding (channel) between trader objects. This makes the community of trader objects too static. There should be made a differentiation between a potential and an established link. A potential link is created by add link operation, and it is transformed to an established link when the trader object utilizes a corresponding trading service offer that shows that the purported trader is available. Links include attributes, even dynamic attributes, similarly to service offers.

Also, from the information viewpoint description, it can be easily seen, that no extra semantics is found by introducing the link space.

We feel, that by introducing links in the standard, a large set of possible, interworkable implementations is dismissed. Prescribing the usage of link space sets requirements for the internal implementation of any trader object. However, all ODP objects should be only prescribed via their external behaviour seen at their interfaces. Therefore, this overspecifying model should be abandoned and replaced by a model that uses external terms instead.

For further and more detailed discussion, see the attached article.

Required action:

Reflect link space as one of the trading object properties introduced in the enterprise viewpoint description. Information that has been captured by link spaces should be modelled via discussion of rules related to import action policy (especially global search policy, domain boundary crossing policy, etc), and type policy.

Clauses affected: 7, 8.3, 8.2.2.2

Item: 4

Comment:

We feel, that the idea of trading function does not allow that a trader object stores offers directly to the offer space of another trader. However, we do not deny the possibility to use exporting to another trader as a storage function.

Clauses affected: 8

Item: 5

Rationale:

We do not accept the concept of contexts. Context can be implemented by utilizing the concepts of trading domain and policy. Clients wishing to optimize their searches, should be allowed to do so via search and scope constraints. On the storage side, placement policy can handle the tasks of grouping offers into "contexts".

We are aware that context names are also wanted as a linkage between trading and naming functions. We feel that this approach is not correct. There are two cases: 1) If a client wants to activate another trader, this is not a trading activity, but a service invocation activity instead. This requires the help of binding function, processing services and life cycle services. 2) In another case, the client wants that the traders interwork, but the local trader should not use any resources itself, but pass the request on immediately. For both of these cases, a better solution (than using context parameter), is suggested by items 5 and 6.

Required actions:

Remove the optional argument of context from trading service operations.

Allow (explicitly) in criteria syntax the identification or naming of a context.

Clauses affected: 8.2.1, 8.2.3, 8.2.4, 8.2.5, 8.2.6

Item: 6

Rationale:

In computational viewpoint Describe offer operation is redundant and should be removed. Import operation should be able to response also for these queries, because they are only a special, minimal information case. Import operations should therefore be slightly modified.

Required actions:

Allow (explicitly) in criteria syntax the identification or naming of a server or a service offer.

Clauses affected: 7.2.6, 8.1

Item: 7

Rationale:

Trading management interface is unnecessary complex. The operations of trading management interface are also inconsistent.

Required actions:

At least, it should be made clear what is the relationship between trader properties, links and trader policies. A potential relationship is to have link spaces and policy spaces as properties.

Check the consistency of trading management interface operations, and also their naming convention.

Clauses affected: 7, 8 (8.2.2.2, 8.3)

Item: 8

Rationale:

The service offer evaluator interface is described in a misleading way. It should be expressed to be a client interface, in contrary to trading service interface and trading management interface. It is unclear why this client interface is specified in this document, while other client interfaces, such as storage function interface, are not.

Required actions:

Clarify text.

Clauses affected: 8.4

Item: 9

Rationale:

Often arises a misunderstanding or a question about property values returned by a trader object to an importer. The trader should only return readily evaluated values, not indirect references to external service offer evaluators. The clients are most probably unable and disallowed to utilize these interfaces themselves.

Returning a service offer to an importer has differing intended meaning in each viewpoint, and this causes problems for readers.

Required action:

Clarify text: Instead of "service offers conforming to the matchingConstraint argument can be returned" write "service offers conforming to the matchingConstraint argument can be selected and information obtained by evaluating these offers is returned".

Clauses affected: 8.2.1

Item: 10

Comment:

We think that the message sequence charts in annex B improve the readers' understanding of the specification.

Item: 11

Rationale:

Annex C seems not to be part of the trading function. Instead it is a component composition of trading function and X.500 directory used as a storage function. The description is not a computational viewpoint description, but an engineering viewpoint description, which is suitable for a composition specification.

Required action:

We suggest that SC21 would consider separating the Annex C as a standard of its own.

Describe in Annex A that the X.500 Directory can act as a storage function for trading function implementations. The combination is a component composition standard.

Clauses affected: Annex C, Annex A

Item: 12

Rationale:

Improving readability and understandability.

Required actions:

Explanatory material from annex H should be moved to the tutorial in annex A.

Clauses affected: Annex A, Annex H

Item: 13

Rationale:

Following ODP terminology.

Required actions:

Check the usage of terms community and domain.

Clauses affected: 5, 6.6, A.3.1

Item: 14

Rationale:

The role of the trader manager is not within the scope of the trading function. If a object combines the roles of trader and trader manager, is an implementation choice, that does not affect this standard.

Required actions:

Remove line: "trading management interface (client role)" from the list of interface that will be instantiated within a trader object.

Clauses affected: 8.2.2.1

Item: 15

Rationale:

All other component standards should follow the example given by the first, the trading function standard. Therefore the computational behaviour descriptions should be carefully considered: they should not include anything that is going to be part of other component standards.

Required actions:

Check whether notions of invocation deliver, termination submit and consulting object security policy are within the scope of trading function.

Clauses affected: all operations in computational viewpoint (8)

Item: 16

Rationale:

If links after all appear (look item 3), they should be considered as potential links, liaisons between trader objects. It is not acceptable to have instantiated interfaces and established bindings (reserved channels) between all interworking traders.

Required actions:

Remove step 4 from AddLink operation. (Note is not understandable.)

Clauses affected: 8.3.1

Item: 17

Rationale:

The titles should not introduce new concepts that are not used elsewhere. It should be clearly shown throughout the text, that this standard does not give one configuration of traders.

Contexts could be easily described through the usage of proper policies.

Required actions:

Change the title of A.5 to Example configurations of interworking traders.

An example, where policies are used to produce a similar effect than the contexts in A.5.1., is given in the attached article.

Clauses affected: A.5