

DEFECT REPORT FORM

1. Defect Report Number: **253**

Title: Hierarchy selections problems

2. Source: CEN/ISSS/WS-DIR

3. Addressed to: ISO/IEC JTC1/SC6 and ITU-T SG 7
 Editor Group on the Directory

4. (a) WG Secretariat: UK (BSI)
 (b) ITU-T WP: WP 4

5. Date Circulated by WG Secretariat:

6. Deadline for Response from Editor:

7. Defect Report Concerning:

FDAM 1 to ITU-T Rec. X.518 (1997) | ISO/IEC 9594-4 : 1998

FDAM 1 to ITU-T Rec. X.520 (1997) | ISO/IEC 9594-6 : 1998

8. Qualifier: (e.g.: error, omission, clarification required)

Omission

9. References in Document: (e.g.: page, clause/section, figure, and/or table numbers)

19.3.3.2.4 (old 19.3.3.2.1) of X.518 and 5.12.2 of X.520

10. Nature of Defect: (complete, concise explanation of the perceived problem)

A filter may match one or more entries. However, the **hierarchySelection** may specify non-existing entries. As an example, if a matched entry is the top entry, but the **hierarchySelection** specifies **parent**, no information is returned from that hierarchical group.

It should be signalled in an empty result that if information would have been returned if it had not been for the **hierarchySelection** specification.

F.510 Annex A, Message code 6.2 requires such a signal to be returned.

At one time when it was possible to have distributed hierarchical groups, we then had a **Hierarchy Selection procedure (I)** for handling the distributed nature. When the distributed behaviour of hierarchical groups was abandoned, this procedure was removed. However, step 4) of 19.3.3.2.4 still refers to that procedure, while step 5) has been updated not to do that. Also, steps 4) and 5) imply that a hierarchical group can consist of a single member.

5.12.2 of X.520 includes the value **id-pr-unavailableHierarchySelection**, but its use is not specified anywhere.

11. Solution Proposed by the Source: (optional)

In X.518:

In 19.3.2.2.3, change iiiii) of item 4) and iii) of item 5) to:

If the **hierarchySelection** search control is included in the search request (possibly modified by a search-rule specification) and the entry is part of a hierarchical group, then call the **Hierarchy Selection procedure (I)**.

Reinstate the **Hierarchy Selection procedure (I)**

19.3.2.2.7 Hierarchy Selection procedure (I)

This procedure is executed if a member of a hierarchical group is encountered during the processing of a search request specifying hierarchy selection.

- a) If a hierarchy selection that is not supported the DSA is present, then return with:
 - a **serviceError** with problem **requestedServiceNotAvailable**;
 - a **searchServiceProblem** notification attribute with the value **id-pr-unavailableHierarchySelection**; and
 - a **hierarchySelectList** notification attribute indicating the invalid selection(s).
- b) Otherwise, add all the entries defined by the hierarchical selection as defined in 19.3.2.2.2. If that results in no entry being added, i.e. the hierarchy selections only specify non-existing entries, then set the **emptyHierarchySelect**.

Find the place where to specify that if an empty result is returned and the **emptyHierarchySelect** is set, then include a **searchServiceProblem** with value **id-pr-emptyHierarchySelection** to the notification component of the **PartialOutcomeQualifier**.

In 5.12.2 of X.520 add to the end:

- bb) **id-pr-emptyHierarchySelection** – A hierarchy selection was specified that resulted in no entry returned although there were one or more entries that matched the search filter.

Add the object identifier to Annex A.

12. Editor's Response:

(any material proposed for processing as an erratum to, an amendment to, or a commentary on the IS or DIS final text/ITU Recommendation or Draft Recommendation is attached separately to this completed report).