Interpretation Request #1

Topic: DS_E_BAD_CLASS not specified in service call definitions

Relevant Clauses: 6.8.2

Subclause 6.8.2 of IEEE Std 1224.2-1993 defines the **bad-class** value of the **Problem** attribute of OM class **Library-Error** as “meaning that the OM class of an argument is not supported for this operation.” This seems to mean that when an operation having an argument of type om_object is invoked, and when the value supplied for that argument is of type om_object but is not of one of the classes of object that the specification of the operation permits for that argument, then this error condition arises, and a **bad-class** value should be returned. IEEE Std 1224.2-1993 does not in fact appear to require that this value shall be returned, although (in 6.3.2) it does require that the implementation shall not return a different value.

None of the operation descriptions in section 4 of IEEE Std 1224.2-1993 mention the **bad-class** error. The following operations have arguments of type om_object: ds_abandon, ds_add_entry, ds_bind, ds_compare, ds_list, ds_modify_entry, ds_modify_rdn, and ds_read, ds_receive_result, ds_remove_entry, ds_search, and ds_unbind. However, for several of these, the only arguments of type om_object are “session” or “context” arguments. More specific error values (**bad-session** and **bad-context**) are defined in 6.8.2 of IEEE Std 1224.2-1993 when invalid values are supplied for these kinds of arguments.

Subclause 8.8 of IEEE Std 1327.2-1993 contains a general assertion that **bad-class** is returned when the OM class of an argument is not supported for the above operations, including those where the only arguments of type om_object are “session” or “context” arguments. Section 6 of IEEE
Std 1326.2-1993 contains instantiations of this general assertion for these operations. However, subclause 8.8 and section 6 of IEEE Std 1326.2-1993 also contain assertions that bad-session and bad-context are returned when invalid values are supplied for “session” and “context.”

How are these conflicting requirements to be interpreted?

**Interpretation Response**

IEEE Std 1224.2-1993 is inconsistent.

It should be interpreted as meaning that bad-class should not be returned by operations whose only arguments of type om_object are “session” or “context” arguments, but that bad-class should be returned by the other operations mentioned.

This is being referred to the sponsor.

**Rationale for interpretation**

None.