

## **DEFECT REPORT FORM**

1. Defect Report Number: 287  
Title: bitStringMatch Rule and trailing zeros
2. Source: UK
3. Addressed to:
4. (a)  
(b)
5. Date Circulated by WG Secretariat:
6. Deadline for Response from Editor:
7. Defect Report Concerning:  
ITU-T X.520 (1997) | ISO/IEC 9594-6: 1998 & ITU-T X.520 (2001) | ISO/IEC 9594-6: 2001 (to be published)
8. Qualifier: (e.g. error, omission, clarification required)  
Clarification
9. References in Document: (e.g. page, clause/section, figure, and/or table numbers)  
Clause 6.2.4
10. Nature of Defect: (complete, concise explanation of the perceived problem)  
When the bitStringMatch rule is used to compare BIT STRING values whose type is defined with a NamedBitList, it treats trailing zero bits as significant. Clause 21.7 of X.680:1997 permits ASN.1 encoders and decoders to add or remove trailing zero bits from BIT STRING values where the type definition has a NamedBitList. This means that attribute values and presented values of such a type can have varying numbers of trailing zero bits. This can cause the bitStringMatch rule to give unpredictable results.
11. Solution Proposed by the Source: (optional)  
*In the 3rd edition and 4<sup>th</sup> edition texts, in clause 6.2.4, add the following sentence to the end of the last paragraph.*  
If the attribute syntax is defined with a NamedBitList, trailing zero bits in the attribute value and presented value are ignored.
12. Editor's Response:

Accepted (however, note that the ASN.1 encoding of bit strings and its effect on extensibility is a contentious issue for the Directory Group)