

## DECISION SHEET

<b>Standard:</b> IEC 60950-1, ed. 1	<b>Sub clause:</b> 2.10.5.4, Third paragraph	<b>Dec. No.</b> DSH-542
<b>Subject:</b> Application of Annex U and 2.10.8 to spirally wound insulation required to be treated as a cemented joint	<b>Key words:</b> spirally wound insulation; cemented joints; Annex U.2	<b>Decision of:</b> 40 <sup>th</sup> CTL meeting /2003
<p><b><u>Question:</u></b></p> <p>When applying the 3rd paragraph of 2.10.5.4, what is the intent of the requirement for spirally wrapped insulation (tape) when the CLEARANCES and CREEPAGE DISTANCES between layers, as wrapped, are less than the required minimum value for Pollution Degree 1?</p> <p><b><u>Decision:</u></b></p> <p>The intent is, if the CLEARANCES or the CREEPAGE DISTANCES between layers, as wrapped, are less than the required minimum value for Pollution Degree 1, the spirally wrapped insulation should be sealed and pass the tests of both:</p> <ul style="list-style-type: none"> <li>· Annex U, which requires an electric strength test per Annex U.2 at the voltage specified in U.2;</li> <li>and</li> <li>· 2.10.8, which requires an electric strength test of 1.6 times the values in 5.2.2 after the testing in 2.10.8.</li> </ul> <p><b><u>Explanatory Notes:</u></b></p> <p>The 3<sup>rd</sup> paragraph of 2.10.5.4 reads as follows:</p> <p>“In 2.10.5.4 b) and 2.10.5.4 c), for spirally wrapped insulation where the CREEPAGE DISTANCES between layers, as wrapped, are less than those given in table 2L for Pollution Degree 1, the path between layers shall be sealed as for a cemented joint in 2.10.8 and the test voltages of the TYPE TESTS in U.2 are increased to 1,6 times their normal values.”</p> <p>In English language, the word “and ” means additional, and from the above wording it may be interpreted that “the test voltages of the TYPE TESTS in U.2 are increased to 1,6 times their normal values”.</p> <p>WG6 of TC108 MT2 at its last meeting in London in April 2003 made it clear that the test voltages are increased to 1,6 times the required test voltage only after the test of 2.10.8 and not for the type tests in U.2. The following is from the minutes of the meeting:</p> <p>“The tests of 2.10.8 apply to any cemented joint including cemented joints in winding wires. The test voltage for cemented joint is increased only during the test of 2.10.8 (including the cemented joint test for wires). The test voltages are not increased during the tests of U.2 because they are not for testing cemented joints.”</p> <p>Also, this has been clarified further in the upcoming CD on the rewrite of 2.10 of IEC 60950-1.</p>		