**INTERNATIONAL ELECTROTECHNICAL COMMISSION SYSTEM FOR CERTIFICATION TO STANDARDS RELATING TO EQUIPMENT FOR USE IN EXPLOSIVE ATMOSPHERES (IECEx SYSTEM)**

**TITLE: Compilation of comments on ExTAG/602A/CD – Draft ExTAG Decision Sheet - Materials used to maintain a Sealed Device**

**Circulated to: ExTAG – IECEx Testing and Assessment Group**

**INTRODUCTION**

This document contains the compilation of comments, as well as observations from the originator, UL LLC, US, received on ExTAG/602A/CD – Draft ExTAG Decision Sheet - Materials used to maintain a Sealed Device.

A revised document *ExTAG/602B/CD Draft ExTAG Decision Sheet - Materials used to maintain a Sealed Device* has been prepared and circulated for consideration during the ExTAG 2020 Remote Meeting.

***Please inform the Secretariat immediately of any omissions or errors at-***

***Christine Kane***

***ExTAG Secretariat***

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| **Address:****IECEx Secretariat****Level 33 Australia Square****264 George Street****Sydney NSW 2000****Australia****Web:** [**www.iecex.com**](file:///C%3A%5CUsers%5Cjugauthier%5CAppData%5CLocal%5CTemp%5CnotesC9812B%5Cwww.iecex.com) |

| **ExCB/****ExTL** | **Clause/ Sub-clause** | **Paragraph Figure/****Table** | **Type of****comment****General/****technical/****editorial** | **COMMENTS** | **Proposed change** | **Observation****(to be completed by the originator)** |
| --- | --- | --- | --- | --- | --- | --- |
| **E&E****CMLGB** |  |  |  | This DS is OK |  | **Noted** |
| **FME****GB** |  |  | **Te** | The revised draft DS does not alter our initial view on this subject, which was:While we do not disagree that the housing, base, and “sealed together” all contribute to the effectiveness of the sealing of the sealed device, the current text of IEC 60079-15:2017 – 9.1 excludes the housing and base from consideration as part of the seal. To include those materials would be a technical change to the standard which could only be accomplished with an amendment or a new edition.For IEC 60079-15:2010 this would be introducing a new requirement. Controlling the materials of a sealed device, while technically correct, may be close to impossible for sealed devices that are general industrial products applied as an EPL Gc sealed device. The only way forward might be as a certified Ex Component, but the market may be so small as to be impractical to entice any general industrial product manufacturer to consider such a certification. For these Gc devices, the existing conditioning and testing may provide an acceptable reduction in the risk of ignition in a Zone 2 application where the existence of the flammable atmospheres is infrequent and for short periods; conditions not likely to significantly degrade the sealing of the device.  | Do not publish this DS.Submit to TC31/MT60079-15 for consideration of an amendment to the standard. Noting, however that introducing the requirement proposed by the draft DS would probably result in the removal of ‘sealed devices’ as a practical method of protection for EPL Gc.  | **Not Accepted****Comments provided and Proposed change are identical to the previous comments which were addressed by the previously issued 602/CD. Discussion at ExTAG is suggested.**  |
| **Intertek Testing Services NA, Inc. (USA)** |  |  | **General** | **We agree with the draft decision, including the rationale; however, we also note that production control is not really covered by the protection method standard. ISO/IEC 60079-34 seems to be a more appropriate reference.** | **Add after the final sentence of the *Answer*:****Control of production of Ex equipment is governed by ISO/IEC 60079-34. The situation described in the draft decision sheet is covered by 8.4.1 and 8.4.2 of ISO/IEC 60079-34, in which it is clear that the equipment manufacturer is responsible to control all critical parts and assembly of the equipment, although those clauses do not prescribe specific methods of controlling them.** | **Accepted in part****The following text was added to the answer:****“Control of production of Ex equipment is governed by ISO/IEC 60079-34, the equipment manufacturer is responsible to control all critical parts and assembly of the equipment”**  |
| **LCIE****FR** |  |  | General | We agreed with this draft DS | None | **Noted** |
| **NANIO CCVE (RU)** |  |  | **General** | **We support this DS without comments.** |  | **Noted** |
| **NCC****BR** | **9.1** |  |  | **We keep the previous comments,** **agreeing with the proposed answer.** |  | **Noted** |
| **NEPSI****CN** |  |  | **G** | **We support the draft DS ExTAG/602A/CD.** |  | **Noted** |
| **PTB** **DE** |  |  | **GE** | **The current edition of IEC 60079-15 deliberately names only the seal and makes no special demands with regard to housing and basis. The quality of the entire Sealed Device can only be guaranteed by the manufacturer, e.g. by a suitable incoming goods inspection. A tightening of the requirements is not practicable and should only be carried out by MT, if at all.**  | **Refer to MT60079-15** | **Not Accepted****Comments provided and Proposed change are identical to the previous comments which were addressed by the previously issued 602/CD. Discussion at ExTAG is suggested.** |
| **QPSCA** |  |  |  | QPS supports the changes made to this ExTAG DS and have no further comments. |  | **Noted** |
| **Simtars****AU** |  |  |  | Simtars has no comments for this DS. |  | **Noted** |
| **SIQSI** |  |  |  | We agree with proposal. |  | **Noted** |
| **TC 31** |  |  | **te** | While the housing, base, and seal all contribute to the sealing of the sealed device, the current text of IEC 60079-15:2017 – 9.1 excludes the housing and base from consideration as part of the seal. To include those materials would be a technical change to the standard which could only be accomplished with an amendment or a new edition by TC 31. Controlling the materials of a sealed device, while technically correct, may be close to impossible for sealed devices that are general industrial products applied as an EPL Gc sealed device. The only way forward might be as a certified Ex Component, but the market may be so small as to be impractical to entice any general industrial product manufacturer to consider such a certification.For these Gc devices, the existing conditioning and testing may provide an acceptable reduction in the risk of ignition in a Zone 2 application where the existence of the flammable atmospheres is infrequent and for short periods; conditions not likely to significantly degrade the sealing of the device.Introducing the requirement proposed by the draft DS would probably result in the removal of ‘sealed devices’ as a practical method of protection for EPL Gc.The proposed DS adds an additional requirement to the standard that has intentionally been left out of the standard. | Withdraw the draft Decision Sheet. | **Not Accepted****Comments provided and Proposed change are identical to the previous comments which were addressed by the previously issued 602/CD. Discussion at ExTAG is suggested.** |
| **TIIS****JP** |  |  | **general** | We agree with the idea that all materials relating to maintaining the type of protection should be identified in Technical documents for ExTR as described in 4.1.5 in OD 017.However, we have concerns about the word “control”. It could lead misunderstanding or misinterpretation by CBs or manufacturers.We think it is better the DS should deal with IEC 60079-15 part only, separating ISO/IEC 80079-34 part from this DS. | **We propose to modify question and answer as follows.****Question:****Are all parts of the Sealed Device relating to maintaining the type of protection to be identified in the Technical documents?****Answer:****All parts which prevent the entry of the external atmosphere into the sealed device shall be identified in Technical documents as they are relating to maintaining the type of protection.****Further, ... (keep the 2nd paragraph of Answer)** | **Accepted in part****In the Question “controlled” was replaced with “identified in the technical documentation”.** **In the Answer “controlled” was replaced with “identified in the technical documentation.”** |