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

**Title: Draft ExTAG Decision Sheet –** **Applicability of IEC 60079-15, especially regarding LED light sources**

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

**INTRODUCTION**

This document, ExTAG/696/CD, *Draft ExTAG Decision Sheet –* *Applicability of IEC 60079-15, especially regarding LED light sources* has been prepared by Dr Martin Thedens, PTB, DE, and is issued for consideration by ExTAG.

In accordance with OD 035 this document is issued for a six week comment period.

Please submit comments on this new Draft DS using the comments table, a separate document, by –

**2023 01 02**

to

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**ExTAG Secretariat**

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**COLLECTION OF IECEx / ExTAG DECISION**

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| **Standard:**  IEC 60079-7:2015  (Edition 5.0)  IEC 60079-15:2010 (Edition 4.0) | **Clause: 5.3.2.5** | **Draft Decision Sheet: ExTAG/696/CD** |
| **Subject:**  Applicability of IEC 60079-15, especially regarding LED light sources  **Status of document:**  **Draft** | **Key words:**   * Light-emitting diode * LED * Luminaire | **Date: 2022 11 21**  **Originator of original proposals:**  **Date: 2022**  **Originator of this text**  Dr Martin Thedens, PTB  **TC/SC involved:**  IEC/TC 31 MT 60079-7  IEC/TC 31 MT 60079-15 |
| **Background**  Internationally, ExCB’s apply IEC 60079-15 Edition 4 for issuing an approval for LED luminaires.  **Question:**  Can IEC 60079-15 Edition 4 be applied to LED luminaires with the EPL Gc?  **Answer:**  No.  In IEC 60079-7, Edition 5 (2015), the following is listed in the table "The significance of the differences between IEC Standard, IEC 60079-7 Edition 5 (2015) (for "ec") and IEC 60079-15, Edition 4 (2010) (for "nA"):  Extension Clause 5.3.2.5: Inclusion of LED as light source  Applying requirements in IEC 60079-15, Edition 4 (2010) for LED luminaires cannot be freely interpreted and corresponding certificates cannot be issued as the LED requirements were added in IEC 60079-7, Edition 5 (2015) for the first time.  Until the publication of IEC 60079-7, Edition 5 (2015), it was not possible to certify LED technology for explosive atmospheres with IEC 60079-15. With IEC 60079-7, Edition 5, the IEC TC 31 MT60079-7 has created this possibility for the first time for Type of Protection "ec" only (not for “nA”). | | |