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

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

**Title: Document for discussion at the 2018 ExTAG Cannes meeting – Construction requirements for flameproof enclosures with an internal source of release (containment system)**

**INTRODUCTION**

This document, *ExTAG/523/CD Draft ExTAG Decision Sheet – Construction requirements for flameproof enclosures with an internal source of release (containment system)* has been prepared by FMG,US, and is listed for discussion during the 2018 ExTAG Cannes Meeting.

***Julien Gauthier***

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**ExTAG Secretary**

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| **Address:****IECEx Secretariat** **Level 33 Australia Square****264 George Street** **Sydney NSW 2000****Australia****Web:** [**www.iecex.com**](file://C:\Users\christine.kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\christine.kane\AppData\Local\Microsoft\Windows\christine.kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Content.Outlook\AppData\Local\Users\horn02\AppData\Local\christine.kane\AppData\Local\Microsoft\christine.kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\Christine.Kane\AppData\Local\Microsoft\Windows\Temporary%20Internet%20Files\AppData\Local\jugauthier\AppData\Local\Temp\notesC9812B\www.iecex.com) | **ExTAG Secretary****Mr Julien Gauthier****LCIE S.A.****33 Avenue du General Leclerc****92260 Fontenay-aux-Roses****FRANCE** **Tel: +33 1 40 95 55 26****Fax: +33 1 40 95 89 37****Email :** **julien.gauthier@fr.bureauveritas.com** |

**IECEx / ExTAG DECISIONS**

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| **Standard:** IEC 60079-1:2014 (Ed 7) | **Clauses:** Annex G | Draft Decision Sheet:  |
| **Subject:**Construction requirements for flameproof enclosures with an internal source of release (containment system)**Status of document:** **Draft** | **Key words:*** Containment system
 | **Date: 2018-08-06****Originator of proposal:** FM Approvals LLC (FMG)**TC/SC involved:** IEC/TC 31 |
| **Question**: Can the tests given in G.4 of IEC 60079-1, Ed 7, be omitted if the containment system inside flameproof enclosure complies with the burst pressure test in 5.2.5 of IEC TS 60079-40 followed by the Helium leak tests in 4.1.3.2 of IEC 60079-26?**Answer (proposed)**: Yes. IEC 60079-0 allows tests to be omitted when they are considered to be unnecessary. A containment system that meets the design requirements of G.3 along with the pressure test in 5.2.5 of IEC TS 60079-40 followed by the Helium leak tests in 4.1.3.2 of IEC 60079-26 would provide appropriate justification for the tests of G.4 to be omitted. If non-metallic materials other than glass or ceramic are used to effect the sealing of the containment system, it is noted that thermal endurance preconditioning is also required prior to the burst pressure and Helium leak tests. |