



ExTAG/314 /CC  
April 2014

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

Circulated to: ExTAG – IECEx Testing and Assessment Group

**TITLE: Compilation of comments on ExTAG/313/CD - Draft ExTAG Decision  
Sheet - Specification of RTI**

---

**INTRODUCTION**

This document is a compilation of comments received, as well as observations, from the originator SP (SE) on **ExTAG/313/CD - Draft ExTAG Decision Sheet - Specification of RTI**.

We wish to advise that unless there are further comments within two weeks, the draft DS will be published without amendment.

Comments close by **2014 04 30**

On behalf of Mr. Gauthier

*Julien Gauthier*

**Julien Gauthier  
ExTAG Secretary**

|  |  |
|--|--|
| <p><b>Address:</b><br/>IECEX Secretariat<br/>Level 33 Australia Square<br/>264 George Street<br/>Sydney NSW 2000<br/>Australia<br/>Web: <a href="http://www.iecex.com">www.iecex.com</a></p> | <p><b>ExTAG Secretary<br/>Mr Julien Gauthier<br/>LCIE S.A.<br/>33 Avenue du General Leclerc<br/>92260 Fontenay-aux-Roses<br/>FRANCE<br/>Tel: +33 1 40 95 55 26<br/>Fax: +33 1 40 95 89 37<br/>Email : <a href="mailto:julien.gauthier@fr.bureauveritas.com">julien.gauthier@fr.bureauveritas.com</a></b></p> |
|--|--|

| Member Body/ Country                  | Clause/ Sub-clause | Paragraph Figure/ Table | Type of comment General/ technical/ editorial | COMMENTS  | Proposed change  | Observation  |
|---------------------------------------|--------------------|-------------------------|---|---|--|--|
| CESI<br>IT                            |                    |                         | T/G   | <p>NO- it is not acceptable to use the most favourable value of “RTI – mechanical impact” and “RTI – mechanical strength”, for a plastic material in the enclosure!</p> <p><b>RTI mechanical impact:</b> The mechanical impact RTI is associated with critical impact resistance, resilience and flexibility properties.</p> <p>Generally for the Ex equipment and for plastic materials is necessary to take in consideration the most stringent conditions due precisely from the requirements of the general rules and the testing required.</p> | We can consider only <u>RTI mechanical impact</u> as more significant value. | <p><b>Reject</b></p> <p>With the present text in the standard RTI mechanical strength <u>or</u> RTI mechanical impact should be acceptable specifications as an alternative to TI.</p> <p>According to comment from FMG (US) this reflects standardization actions</p> |
| DEKRA<br>Certificati<br>on B.V.<br>NL |                    |                         | General                                       | <b>Agree; no comments.</b>  |  | <b>Accept</b>  |
| Ex-<br>Agencija<br>HR                 |                    |                         |   | Ex-Agencija agree with the document   |  | <b>Accept</b>  |
| FME<br>GB                             |                    |                         |   | FME has no comments on ExTAG/313/CD   |  |  |

| Member Body/ Country | Clause/ Sub-clause | Paragraph Figure/ Table | Type of comment General/ technical/ editorial | COMMENTS   | Proposed change  | Observation  |
|----------------------|--------------------|-------------------------|---|--|--|--|
| FMG (US)             |                    |                         | General                                       | <p>FM Approvals LLC (FMG) supports the decision as it reflects the actions of TC31/WG22 when the change was made for 60079-0:2011.</p> <p>In 31/800A/CC the response to a comment on this section was:</p> <p>There are two properties that can be used.<br/> <b>RTI Mech Imp</b> – Mechanical impact RTI, associated with critical impact resistance, resilience, and flexibility properties<br/> <b>RTI Mech Str</b> – Mechanical strength (Mechanical without impact) RTI, associated with critical mechanical strength where impact resistance, resilience, and flexibility are not essential. Just using “mechanical” allows both to be considered.</p> | None   | Accept   |
| FTZU CZ              |                    |                         |   | We agree with the wording of drafts  |  | Accept   |
| ITS US               |                    |                         |   | ITS US has “No Comments”   |  | Accept   |
| NANIO/ CCVE RU       |                    |                         | General                                       | We support ExTAG/313/CD without any comments.  |  | Accept   |
| NANIO/ CCVE RU       |                    |                         | General                                       | According to thermal-aging program RTI is considered as RTI electrical, RTI mechanical impact, RTI mechanical strength. The  | Maybe it will be practical to add “RTI mechanical impact or mechanical strength” into section 7.1.2.2 d) IEC 60079-0 | Agree that the proposed change would clarify the required specification. |

| Member Body/ Country | Clause/ Sub-clause | Paragraph Figure/ Table | Type of comment General/ technical/ editorial | COMMENTS  | Proposed change  | Observation   |
|----------------------|--------------------|-------------------------|---|---|--|---|
|                      |                    |                         |   | requirements IEC 60079-0 are addressed to RTI mechanical. |  |   |
| NEPSI<br>CN          |                    |                         |   | Approved with no comments.                                |  | Accept  |
| QPS<br>CA            |                    |                         |   | QPS supports all three decisions sheets with no comments. |  | Accept  |
| TRaC<br>GB           |                    |                         |   | TRaC has reviewed and we have no significant comments.    |  | Accept  |
| TUR<br>DE            |                    |                         | General                                       | We support the document with following changes.           |  |   |
|                      |                    | Answer                  | editorial                                     | The answer did not give clear information.                | Rewrite like follows:<br><br>The value given as “RTI-mechanical strength” shall be used.   | <b>Rejected</b><br>RTI mechanical strength <u>or</u> RTI mechanical impact should be acceptable specifications as an alternative to TI  |
|                      |                    | Background              | editorial                                     | More detailed background should be provided.              | Replace by:<br>The main value is the TI. As an alternative the “RTI mechanical strength” can be used. The “RTI mechanical strength” is the comparable test to the “TI” test. | <b>Rejected</b><br>RTI mechanical strength <u>or</u> RTI mechanical impact should be acceptable specifications as an alternative to TI. |
| UL<br>US             |                    |                         |   | UL-USA supports the decision sheet                        |  | Accept  |

| Member Body/<br>Country | Clause/<br>Sub-<br>clause | Paragraph<br>Figure/<br>Table | Type of<br>comment<br>General/<br>technical/<br>editorial | COMMENTS   | Proposed change | Observation |
|-------------------------|---------------------------|-------------------------------|---|--|-----------------|-------------|
| UL/DEMKO<br>DK          |                           |                               |   | <p><u>Answer:</u><br/>Yes (as IEC 60079-0:2011 specify “RTI-mechanical” as an alternate to the similar “flexural strength” ).</p> <p><u>Background:</u><br/>Both specification of “RTI – mechanical” and flexure strength” relate to static or slow effects in plastic and has been considered acceptable for plastic materials in enclosures according to this standard. The “RTI – impact” relates to a sudden effect and mostly results in a lower RTI than for “RTI - mechanical”. In earlier editions of the standard, “RTI mechanical impact” was more severe than the TI based on “flexure strength</p> |                 | Accept      |