



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

To: Members of the IECEx Management Committee, ExMC

**Title: AU Comments regarding Action Item 42 detailed in ExMC/1632/R -** Proposed handling of Scope extensions to include Amendment 1 of IEC 60079-6 Ed 4

# **Introduction**

This document contains a Proposal from AU for handling of Scope extensions to include Amendment 1 of IEC 60079-6 Ed 4 and arises from Action item 42 as raised during the 2019 ExMC Dubai meeting, re ExMC/1632/R Status of Action Items.

While provided to the IECEx Secretariat early September 2020, this document was inadvertently omitted from the 2020 ExMC Agenda.

This document is therefore issued as a tabled document (Green paper document) for discussion under Other Business, agenda item 17, ExMC/1614A/DA.

In considering this document, the Secretariat reminds members of the procedure for dealing with scope extensions to cover updated editions to Standards as per ExMC/271D/Inf.

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SUBJECT: AU response to ExMC Decision 2019-51

**Dear Chris** 

The AU Member Body submits the following to ExMC for consideration under item 3.2.1 Report on Actions arising from the 2019 ExMC Meeting and ExMC/1632/R item 42.

# Background

With the introduction of Amendment 1 to IEC 60079-6 Ed 4 'Explosive atmospheres - Part 6: Equipment protection by liquid immersion "o"' a significant scope change has been introduced.

"... Additionally, for Level of Protection "oc", Annex D applies Where the rated voltage exceeds 15 kV AC RMS or DC and up to 245 kV AC RMS or DC. introduces voltage levels that have not previously envisaged with EEHA. ... "

It is unusual for an Amendment to a Standard to make such a significant change to the scope. In the adoption of amendments to standards it has been the IECEx practice to include an amendment in the scope of the ExCB or ExTL without any specific requirement for an application for a scope extension. This does not appear to work in this case as nothing is in place to verify the ExCBs or ExTLs have the resources to jump from a maximum of 15kV to 245kV.

This raises a number of questions including:

- Who has the capability to assess such equipment and what is the mechanism for acceptance?
- What EHV standards need to be used?
- How will Annex D.3 be applied?

#### Action

Whether the amendment is already included in the scope of the ExCB or ExTL or whether an application for a scope extension is received the following applies:

The ExCB & ExTL must submit information to the Secretariat clearly identifying they have the competence, resources and procedures to deal with testing and



certification of equipment with these higher voltages. This will be subject to a review by an assessor (who has recent knowledge of the operation).

The ExCB & ExTL shall not process any application until this review has been completed.

Additional considerations.

The criteria for the assessor conducting the review may be needed particularly in how to deal with Appendix D.3 which states:

### D.3 Additional considerations

In the application of this equipment it is recommended that the following items are considered:

- Short circuit fault levels at the connection point in the hazardous area should be assessed
- Circulating currents are not considered in this Annex D and should be taken into account during the initial hazard assessment
- High voltage installation rules referred in IEC 61936-1 are recommended to be used in addition to IEC 60079-14.

Input from ExAG could be provided to ensure consistency in application or even determine the criteria for acceptance. This could also be referred to ExMC-WG2 with the possibility to include additional information in the TCD.

Yours sincerely

Steve Keeling
JIAC Secretariat

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