



Every two months, Dr. Martin Thedens, Chair of IEC TC 31 “Equipment for explosive atmospheres”, offers his perspective on the latest developments in the world of standards.

**A**t the end of October 2024, there was a very successful two-week meeting of IEC TC 31 “Equipment for Explosive Atmospheres” in the United Kingdom.

Up to five groups met every day in London (thanks to BSI) and Maidenhead (thanks to FM Approvals) following the plenary meetings of the Technical Committee and our three Subcommittees, which took place as part of the 88th IEC General Meeting 2024 in Edinburgh.

Most of the plenary's decisions are of a more formal nature, such as:

- Update of the Work Programme
- Reappointment of Convenors
- Review of stability dates
- Start of the review process of standards
- Confirmation of the ongoing work for ad-hoc groups such as:
  - o ahG 58 – “ec” Ex Equipment enclosures)
  - o ahG 60 – AI tools for the application of Ex standards
  - o ahG 61 – Robotics (including drones)
- Cooperation with IECEx including the Joint Advisory Group JAG 50 – Standards coordination with IECEx
- Coordination of H2 activities within IEC and ISO including our new Joint Advisory Group JAG 59 – Hydrogen Advisory Group (a joint group with ISO TC 197 “Hydrogen technologies” and especially SC 1 “Hydrogen at scale and horizontal energy systems”).

A highlight can be seen on the dashboard of

# A harmonized solution for IEC and ISO technical documents

TC 31 ([www.iec.ch/tc31](http://www.iec.ch/tc31)). ACOS, the Advisory Committee on Safety of the IEC, has approved our Horizontal function on safety, which is given as follows: “Safety of equipment and installations for the protection from explosions where there is a hazard due to the possible presence of explosive atmospheres of gases, vapors, mists or combustible dusts”. The aim of ACOS and the different safety functions is: to deal with safety matters which are not specific to one single TC of the IEC. The task is to guide and coordinate IEC work on safety matters in order to ensure consistency in IEC safety standards. Our responsible group WG 54 “Reference point for TC 31 standards as a basic safety publication” will prepare the first edition of IEC 60079-101 “Explosive atmosphere – Part 101: Principles of explosion protection”.

The discussions within the technical meetings were extremely result-oriented and with many good contributions – thanks also to the many technical experts from all over the world. Such critical discussions on improving our standards are more likely to be held in personal conversations (face-to-face).

A (personal) highlight was the first use of the IEC Online Standard Development (OSD) tool, as part of the processing of the CD (Committee Draft) for the 2nd edition of IEC 60079-33 “Explosive atmosphere – Part 33: Special Protection Ex s”. And I can tell you that OSD is a great tool.

OSD (see [www.iec.ch/online-standards-development](http://www.iec.ch/online-standards-development)) is a full International Standards development process in one platform based on XML. It's a harmonized solution for the IEC and ISO community to write, review and comment on technical documents. It facilitates collaborative work in complete transparency, which is a key element of writing standards, and it facilitates the commenting and comment resolution. All players are involved in

this online process:

- National technical experts for drafting comments
- National Committees for the approval and vote of the NC comments
- IEC Secretariat for supporting the IEC technical groups
- IEC technical experts for drafting the text and resolving the comments

OSD is the foundation for new value-added products (such as the Commented Versions, CMV) and services for the future. It's the first step to create machine-readable standards. The IEC technical experts can focus on the content, as all elements of a standard are structured semantically, and it has a simplified authoring interface. It will be used for all major categories of IEC publication starting from 2025.

For us as standard writers, the OSD is a very helpful tool. Will this change the possibility for you to have input into our standards? No! The NC mirror committees have to work on the OSD platform. You can send your input to your NC in the “old” style, by letter or mail – whatever your national rules are. Be aware, we need your input!

The next two-week meeting session will take place at the end of March/beginning of April 2025 in Calgary, Canada with our technical group meetings, the meeting of the CAG, and the TC 31 Chair Advisory Group. ■

Dr. Martin Thedens is the Chair of IEC TC 31 “Equipment for explosive atmospheres”, as well as Head of PTB-Department 3.6 “Explosion Protection in Sensor Technology and Instrumentation”, Head of Sector 1 “Explosion Protection and Shooting Devices” of PTB's Conformity Assessment Body, Chair of DKE K241 “Explosion Protected Electrical Equipment” (DE mirror to IEC TC 31), and the Immediate Past Chair of ExNBG (official group of the European Commission for the ATEX Notified Bodies).