



Every two months, SGS Baseefa Technical Manager Ron Sinclair MBE gives his perspective on the latest developments in the world of standards.

**T**here is often confusion surrounding the initial statement in the Essential Health and Safety Requirements (EHSRs) of the ATEX Directive and the equivalent UK legislation. The precise wording is “Preliminary observation A - Technological knowledge, which can change rapidly, must be taken into account as far as possible and be utilized immediately”.

The explanatory text in the ATEX Guidelines goes on to say: “Preliminary observation “A” is often referred to as requiring conformity with the “state of the art”. Although the generalised text of the EHSRs does not change, the European harmonised standards interpreting the EHSRs are subject to a continuous process of revision to take into account developments in technology and further developments in knowledge about explosion protection.”

Therefore, a standard listed as “Harmonised” for ATEX (or “Designated” for the UK equivalent) is always, at the date of harmonisation, considered to represent the state of the art for the particular set of requirements.

It is recognised that, when a new edition of a standard is published, none of the changes between editions may have relevance to a particular product. In this case, compliance with the earlier edition can still be considered as “state of the art”. The manufacturer can therefore claim that a certificate issued to the earlier edition confirms compliance with the EHSRs for that specific product, and record the justification in the Declaration of Conformity.

## “State of the art”

Both the IEC standards committee TC31, and the parallel Cenelec standards committee TC31, have eased the problem for such manufacturers over the past ten years or so. In the IEC version of the standard, the information is presented as part of the foreword. In the EN version, it will usually appear as part of the European specific annex ZY. In my article two months ago, I gave some specific data on this, relating to the publication of the new edition of IEC 60079-11.

The information is presented as a table listing all significant changes (i.e., those having technical significance, rather than a simple editorial improvement).

Some are marked as Category A, where the change is considered insignificant for products certified to the previous edition. Those marked Category B are regarded as “extensions” to the standard, permitting new ways of doing things, or giving information for types of products previously considered out of scope. For both A and B categories, the changes are not sufficient to require re-consideration of products certified to the earlier edition.

However, every Category C change is accompanied by a brief description as to the effect of the change on existing products. Therefore, the manufacturer of a product certified to the earlier edition must consider each of these Category C changes in turn and decide on the implications for compliance with the EHSRs in order to use pre-existing certification as continued justification for placing the product on the market in the EU or the UK.

EU Notified Bodies and UK Approved Bodies also use the listed Category 3 changes in their assessment when issuing revised certificates to take into account a new edition of a standard.

ATEX EU-Type Examination Certificates, and UKEX UK-Type Examination Certificates, are issued to confirm conformity with the EHSRs rather than conformity with the standards. The standards are only a means to an end, to avoid the manufacturer having to justify compliance with the EHSRs from scratch.

How does this work, the other way round, when a new edition of the standard has been published, but not yet harmonised? A few years ago, we were used to the European Commission listing a standard as harmonised within a few months of publication. However, partly due to the problems with the contracts for the HAS consultants (who approve a standard for harmonisation on behalf of the commission), some harmonisations have been extensively delayed, sometimes for several years.

This is where the confusion arises and leads to some customers for certified products requiring that the product must be certified to the harmonised standard, rather than the current standard.

When you read “Technological knowledge, which can change rapidly, must be taken into account as far as possible and be utilized immediately”, it is clear that the directive actually requires you to consider later editions of standards, beyond that which is harmonised.

You can, of course, still obtain certification to the harmonised version, but that is merely building in obsolescence. Be guided by your certification body and take advantage of that key phrase in the directive. Always work to the “state of the art”. ■

### About the author

SGS Baseefa’s Technical Manager Ron Sinclair MBE will continue to attend the European Notified Bodies Group for ATEX (ExNBG), although representing SGS Fimko, their partner EU Notified Body, now that the UK bodies are excluded, as well as attending the equivalent UK Approved Bodies Group in the UK. He has recently retired as Chair of the IECEx Service Facility Certification Committee and as a member of the IECEx Executive. He is chair of the UK Standards Committee operating in this area for electrical equipment, and recently retired as chair of the European committee.