



Strategic Business Plan

SABS Committee SABS/TC 065

EXPLOSION PREVENTION

April 2024

Committee members are invited to contact the secretary via the email address below, should they have any queries or proposed changes to this strategic business plan.

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Executive summary

- **Business environment**

This technical committee was established in May 1992 to provide, maintain and coordinate standards in the field of explosion prevention from both electrical and mechanical causes. The standards of this Technical Committee are used in any industry where explosive atmospheres of gas, vapour, mists and dusts may be present. Typical industries include oil and gas, chemical, plastics, grain, pharmaceutical, shipping, mining and coal industries.

The potential disastrous consequences of explosions, in terms of human life, the environment and the economy, require standards aimed at the prevention or reduction of such explosions. This makes adherence to safety standards imperative.

- **Benefits**

The SABS/TC 065 standards contribute to safer and more efficient operations in the industries concerned, and prevent loss of life and destruction to the environment. Major environmental problems can occur as a result of explosions rupturing vessels, for example, an explosion on a super tanker or an oil rig, and the resultant release of materials due to that explosion into the environment.

- **Priorities**

In general it is agreed that alignment with international standards is essential for the economy and international trade, and compatibility and interchangeability of commodities is of benefit to the end user. To this end available international standards are adopted to serve as reference documents for local standards

Improved safety in environments where explosive atmospheres may occur is of primary concern, but there is also need for uniform operational practices in these areas to promote free trade of the products used and to assist economic development.



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1 Introduction

The extension of formal planning to the SABS technical committees (SABS/TCs) is an important measure used to demonstrate in an objective manner the specific benefits which result from, or are expected from, the work of the TC.

These benefits can vary significantly between different fields in which committees are involved. They can be economic (for example, cost savings, reduced time-to-market, easier access to certain regional or international markets (or both), and lower sales prices), social (for example, improved safety for workers and the reduction of accidents), or they can be the improvement of environmental impact.

The aim is to align the SABS/TCs work programme with expressed business environment needs and trends and to allow SABS/TCs to prioritize among different projects, to identify the benefits expected from the availability of standards, and to ensure adequate resources for projects throughout their development.

2 Scope

Production and review of national standards in the field of explosion prevention in explosive atmospheres.

3 Objectives and strategies for achievement

3.1 Defined objectives of SABS/TC 065

The SABS/TC 065 will develop a package of standards that are used in any industry where explosive atmospheres of gas, vapour, mists, and dust may be present. These standards are divided into the following fields of specialisation:

1. Equipment (including non-electrical equipment) for explosive atmospheres including selection and certification.
2. Classification of Hazardous Areas
3. Installation and maintenance of equipment in hazardous areas
4. Repair overhaul and reclamation of equipment for hazardous areas

3.2 Identified strategies to achieve the SABS/TCs defined objectives

In general it is agreed that alignment with international standards is essential for the economy and international trade, and compatibility and interchangeability of commodities is of benefit to the end user. To this end available international standards are adopted, where appropriate, to serve as reference documents for local standards.

4 Structure

4.1 SABS/TC065/WG02 (SANS 868)

Maree D, Laubscher P, Matsobe T, Zwart H and Mouton T.



4.2 SABS/TC065/WG03 (SANS 10086)

Maree D, Koen BB, Kruger E, Laubscher P, Humphries R, Matsobe T, Zwart H, Mouton T, Meanwell P, Craukamp H, Rampersadh R/ Davids H, van Tonder B, Lung R, Liebenberg F, van Niekerk F, Barnard L, Segal J, van Wyk A, Pillay G and Cameron A.

4.3 SABS/TC065/WG04 (SANS 10089)

Maree D, Koen BB,, Matsobe T, Zwart H, Mouton T, Pillay G and Cameron A.

4.4 SABS/TC065/WG05 (SANS 10108)

Maree D, Du Toit F, Biffi M, Zwart H, Koen BB, Kruger E, Laubscher P, De Beer T, Matsobe T, Humphries R, Friend G, Mouton T, Cameron A, Pillay G, Meanwel P and Nelushi Z.

4.5 SABS/TC065/WG06 (ARP 0108)

Disbanded

4.6 SABS/TC 065/WG07 (SANS 96)

Disbanded

4.7 SABS/TC065/WG08 (SANS 1489)

Nelushi Z, Bezuidenhout A, Leon Van Der Vyver, Harding D, Marks D, T Mouton, Pillay G, Minaar D, Meanwell P, van Dyk, H, Henk Zwart, Dlamini M, Venter J and Segal J.

4.8 SABS/TC065/WG09 (SANS 1515)

De Beer MJ (**convenor**), Alberts C, De Bruyn, Hassett J, Mosterd J, Von Gruenewaldt M, Zwart H, Van Eeden EP, Taitz R, De Lange D, Lebona T, Mouton T, Maass J, Taitz R, De Lange D, Lebona T, Du Toit F, Van Resnburg R, McCleod M, Van der Berg T, Slabbert W, Lotter M, Kinnear E, Biffi M, Maree D, Visser D and Ernest van E.

4.9 SABS/TC065/WG11 (SANS 1438 and SANS 10282)

Meanwell P, Zwart H, Donovan Y, Gerber C, Visser D, Chabadi V, Masamba L, Raymond Nel, Biffi M and Gavin O'Connor.

4.10 SANS/TC065/WG??12 (SANS 808)

Meanwell P, Maree D, Kruger E, Breedt S, Zeelie R, Orsmond T, Matsobe T, Cameron A, Lackinger N, Nelushi Z, Gibson M,, Du Toit F,, Venter J and Zwart H, .

Note Conveners may be contacted via the secretary of the TC



5 Business environment

5.1 Dynamics of the business environment

The role players of this technical committee include government departments, regulators, industries, associations, testing facilities, manufactures, industries, etc.

The standards of this Technical Committee are used in any industry where explosive atmospheres of gas, vapour, mists and dusts may be present. Typical industries include oil and gas, chemical, petrochemical, grain, mining and coal industries, as well as distribution and consumers of flammable products

The standards produced cover the life-cycle of equipment through design, manufacture, installation, maintenance and repair. There are also standards dedicated to installations such as those on area classification and inspection.

Improved safety in environments where explosive atmospheres may occur is of primary concern, but there is also need for uniform operational practices in these areas to promote free trade of the products used and to assist economic development.

Risk management has taken on a greater emphasis in the business environment and is an underlying principle in many occupational health and safety regulatory requirements.

The standards developed by SABS/TC065 are used by designers, manufacturers, installers, maintenance and repair personnel, equipment users, regulators, standards bodies, accreditation bodies, certifiers and testing bodies. Formal liaisons with IEC Committees have been put in place, to avoid duplication and contradiction, and to ensure that good cooperation is achieved.

5.2 Quantitative indicators of the business environment

Most of the standards developed by this committee are used by industries including mines as well as the testing laboratories to ensure compliance and also as guidelines for designing, manufacturing and maintenance of products. Other institutions are using these standards for training purposes in order to enhance health and safety environment.

Since most of these documents are regulated, the requirements are mandatory.

6 Benefits expected from the work of the TC

- South Africa is a global partner hence the technical committee tracks work done internationally and keeps watch of the trends in standardisation related to explosive atmospheres.
- Safety aspects of equipment used in explosive atmospheres will remain the priority of the technical committee.
- The technical committee will review standards after every five years period.



- Identify experts that may serve on the working groups.
- Give a mandate to South African representatives at the international level.
- Identify the need for the development of standards specifically on explosion prevention environment.
- Identify gaps from the industries and try to solve such by introducing safety measure requirements in the development of standards in order to enable protection of workers.
- To identify positions at IEC and regional level (MTs, WGs or Project team convenorship, committee chairperson) that could be suitable to explosive prevention and take a lead.

7 Membership

7.1 P and O Membership

Individuals who are appointed by the committee to serve as conveners of working groups or technical officers of international committees and South African delegates to international committees are invited to attend meetings to provide feedback.

7.2 Analysis of member participation

Considering the diversity of this technical committee, the attendance has been satisfactory. Industry associations' attendance is less than 60% for the past three years.

Generally the meetings are well attended.

8 Liaisons

1. International liaison

IEC TC 31 – Equipment for explosive atmospheres (P – member)

Mirror Committee: Chairman: P Meanwell and Nelushi Z (Delegate to international meetings)

Members: BB Koen, D Maree, T Matsobe, Z Nelushi, J van Niekerk, A Nkosi, Zeelie R and Orsmond T.

[IEC_WORKPROGRAMME_TC31](#)

[IEC_P-PUBS_TC31](#)

IEC SC 31G - Intrinsically-safe apparatus (O - member)

Mirror Committee: Chairman: P Meanwell and Nelushi Z (Delegate to international meetings)

Members: BB Koen, D Maree, Z Nelushi, D Visser, R Humphries and A Nkosi.

[IEC_WORKPROGRAMME_SC31G](#)

[IEC_P-PUBS_SC31G](#)

IEC SC 31J - Classification of hazardous areas and installation requirements (O – member)



Mirror Committee: Chairman: P Meanwell and Nelushi Z (Delegate to international meetings)

Members: W de Villiers, BB Koen, D Maree, Z Nelushi, F Du Toit and A Nkosi.

[IEC_WORKPROGRAMME_SC31J](#)

[IEC_P-PUBS_SC31J](#)

IEC SC31M -Non-electrical equipment and protective systems for explosive atmospheres (P – member)

Mirror Committee: Chairman: P Meanwell and Nelushi Z (Delegate to international meetings)

Members: D Maree, Z Nelushi, Zeelie R and Orsmond T.

[IEC_WORKPROGRAMME_SC31M](#)

[IEC_P-PUBS_SC31M](#)

IEC TC 70 - Degrees of protection by enclosures – (O-member)

Mirror Committee: Chairman: P Meanwell and Nelushi Z (Delegate to international meetings)

Members: IT Mabena, D Maree, J van Niekerk, F Du Toit, Z Nelushi, SAFA, BB Koen and D Young,

[IEC_P-PUBS_TC70](#)

2 National Liaison

SABS/TC 165; *Industrial Process Measurement, Control and Automation* – Liaison Officer - Gary Friend was nominated to serve as a liaison officer.

SABS/TC 067/SC 06; *Electricity Distribution Systems and Components –Installations* Liaison officers - Rowan and Max Koen (specifically to SANS 10142-1 on hazardous location requirements and test report).

This section gives an overview of publications of the SABS/TC.

NOTE The published standards list is in PDF-format which requires Adobe Acrobat Reader for viewing.

9.1 [Published standards](#)

9.2 [Standards to be reaffirmed.](#)

9.3 [Standards to be withdrawn \(None\)](#)

10 [Programme of work.](#)

This section gives an overview of existing and planned standardization projects of the SABS/TC.

NOTE The programme of work list is in PDF-format which requires Adobe Acrobat Reader for viewing.

Available on request

11 [Factors affecting completion/implementation of program of work](#)



Explosive equipment/ apparatus is one of the fastest developing technologies in the field of science, mining and engineering. South Africa is making significant progress in the development of technology and expertise in this area. The pool of technical expertise is not as vast as in other areas, hence the completion of the program of work on time is sometimes hampered.

12 Emerging needs

- **Reclamation of threaded holes**

13 Abbreviations

CA	committee administrator or secretary
PM	programme manager
SABS	South African Bureau of Standards
SAC	standards approval committee
SANS	South African National Standard
SBP	strategic business plan
SW	standards writer
TC	technical committee
TL	team leader
WG	working group