



## FOCUS ON SAICE NETWORKING

### 1 – The world according to SAICE

# Introduction

On behalf of its members SAICE continually liaises, networks and affiliates with groupings across a broad engineering and related playing field. However, the many bodies that the Institution interacts with, and the diversity of the associated acronyms, can become quite confusing at times. On the following pages we present most of these bodies in context for the sake of clarity and reference and to facilitate the development of an informed membership

THERE ARE MANY REASONS why SAICE interacts with related bodies. As the voice of the civil engineering profession in South Africa, the Institution has a responsibility not only to represent the interests of every one of its approximately 9 000 members, but also to promote the value that civil engineering adds to the economy and the smooth running of the country, and thereby to the daily lives of communities and individual citizens.

Explaining to our colleagues and fellow citizens what SAICE and the profession stand for is no simple task.

It involves hours and days and weeks, even years, of liaising, and of building trust and credibility, to create a network. Fortunately engineers are passionate about what they do, and this enthusiasm goes a long way towards getting the message across, but it nevertheless remains a complex task.

One could summarise the reasons why such interaction is so valuable:

- An understanding of the role of the civil engineering profession promotes informed decision-making at all levels of interaction. To mention but one example – informed decision-making facilitates effective service delivery at local government level.
- Knowledge and insight gained through interaction encourage appropriate membership groupings, and eventual professional registration for individuals, which have long-term positive effects for the engineering profession in particular, and for the country and its citizens in general.
- Meaningful interaction results in the integration of effort and the alignment of objectives, which in turn broaden the skills and knowledge base, facilitating capacity building, again with obvious benefits to the country as a whole.
- Interaction on an international level exposes the Institution to global thinking, while at the same time offering SAICE the opportunity to contribute to the global debate. It also ensures that our members are enabled to practise engineering across

a wide front, thereby gaining valuable experience that can be ploughed back into our own country and our own continent. What should also not be underestimated is that our African experience furnishes us with extremely valuable knowledge that we can share with and contribute towards other African countries and other developing countries elsewhere in the world. The value of our contribution, however, goes beyond developing countries and is highly appreciated in developed countries with similar problems and challenges.

The bodies that SAICE networks with can be grouped into:

- Statutory bodies and associated structures (see page 8)
- Discipline-specific bodies (see page 18)
- International bodies (see page 22).

There are overlaps in this method of grouping, but for the sake of clarity the various bodies will be discussed under these headings. Please also refer to the diagrams on pages 25 – 27 for a schematic presentation of most of these bodies.

This set of articles is a first attempt at describing and illustrating the scope of SAICE's network. We have gone to great lengths to ensure that the information presented here is as accurate as possible. However, should any inaccuracies have slipped through, we apologise for those. We intend updating the information and the format on an annual basis, and would therefore appreciate feedback from our readers. □

## 2 – The world according to SAICE

# Statutory bodies and associated structures

THE ENGINEERING profession approached government in the 1960s to request legislation to regulate the profession. The result was that the South African Council for Professional Engineers (SACPE) was established in 1969.

Although this structure served the profession very well, it became clear that the changing world and the changing political dispensation in South Africa would necessitate substantial modifications. In 1992 SAICE approached SACPE to suggest a way forward in the new democratic dispensation that would be coming about in 1994. The main thrust was to ensure that South African engineering education and professional status would be recognised in the world of the nineties.

The Institution of Civil Engineers UK (ICE) was extremely helpful, and a delegation visited South Africa to facilitate understanding of the international professional engineering world of that time. ICE indicated that they would be willing to sign reciprocity agreements with SACPE if South Africa would accept the standards and models that they were using in the UK.

SAICE took the lead in providing input, and by the year 2000 a brand-new, modern set of Acts was promulgated, which enabled South African built environment professionals to be compared to and compete with the best in the world.

In the process two new additions also came about. In the first place an overarching Council for the Built Environment was established, and in the second place a new profession saw the light, namely that of the Project Managers and the Construction Project Managers.

### **CBE – THE OVERARCHING STATUTORY COUNCIL**

The Council for the Built Environment (CBE) is the umbrella body for the six statutory councils for professionals discussed below. The Act according to which the CBE came into being (Act No 43 of 2000) mandates the Council to, among other things:

- ensure uniform implementation of mandated policy amongst the six councils that regulate the various built environment professions
- advise government on issues related to the built environment professions.

#### **CBE**

CBE, PO Box 915, Groenkloof, 0027  
T: 012 346 3985, F: 012 346 3986  
E: info@cbe.org.za, W: www.cbe.org.za  
121 Muckleneuk Street, Brooklyn, Pretoria

### **THE SIX STATUTORY COUNCILS FOR PROFESSIONALS**

The six statutory councils listed below were established through Acts of Parliament to regulate the various built environment professions. Generally speaking the main statutory function of each of these Councils is to protect the public by effectively controlling the education and practising standards of the particular profession that it represents. Hence these Councils all have Codes of Conduct that registered persons have to abide by.

In this article all six statutory councils are discussed, with emphasis on those that have particular significance for the civil engineering profession.

#### **ECSA (Engineering Council of South Africa)**

ECSA regulates the entire engineering profession including civil engineering, mechanical engineering, electrical engineering, industrial engineering and related engineering disciplines. For in-depth information on ECSA see the ECSA advertorial on pages 10 and 11. The current president of ECSA, Chris Campbell, is a long-standing member of SAICE and also one of our vice-presidents.

#### **ECSA**

ECSA, Private Bag X691, Bruma, 2026  
T: 011 607 9500, F: 011 622 9295  
E: engineer@ecsa.co.za, W: www.ecsa.co.za  
1<sup>st</sup> Floor Waterview Corner, Bruma Office Park, 2 Ernest Oppenheimer Ave, Bruma, Johannesburg

#### **SACPCMP (South African Council for the Project and Construction Management Professions)**

In order to protect public interest and advance construction and project management education, the SACPCMP provides professional certification, registration and regulation of project and construction management professionals. The SACPCMP was established by Section 2 of the Project and Construction Management Act of 2000 (Act No 48 of 2000).

The SACPCMP is mandated by this Act to, among others:

- keep a national register of registered professionals and candidates in Construction Management and Construction Project Management
- identify the type of project and construction work which may be performed by registered persons
- conduct accreditation visits to tertiary institutions that offer Construction Management and Construction Project Management
- consult with the South African Qualifications Authority (SAQA) and Voluntary Associations to determine competency standards for the purpose of registration
- investigate charges of improper conduct by registered persons.

#### **SACPCMP**

SACPCMP, PO Box 6286, Halfway House, 1685  
T: 011 318 3402/3/4, F: 011 318 3405  
E: contact@sacpcmp.co.za,  
W: www.sacpcmp.co.za  
B9 Gateway Park, corner New Rd & 6<sup>th</sup> Rd, Midrand

#### **SACAP (South African Council for the Architectural Profession)**

SACAP, established under the Architectural Profession Act 44 of 2000, is responsible for the regulation of the architectural profession, thereby protecting the public. It is the vision of SACAP to develop highly competent architectural professionals compliant with international best practice and serving the special needs of developing economies.

SACAP's mission is to ensure excellence in performance and service delivery and to foster collaborative relationships with role players in order to:

- be responsive to the needs of the public
- maintain a quality and sustainable skills base in the profession
- ensure good governance which results in a positive impact on built environment practice
- grow the information and knowledge hub
- promote transformation and diversity within the built environment.

Through the Act, SACAP is mandated to:

- keep and maintain a national register of professional and candidate categories of registration
- accredit higher learning institutions offering architectural qualifications
- investigate complaints and violations of the Code of Professional Conduct by registered persons
- facilitate renewal of registrations through Continuing Professional Development (CPD)
- provide professional fees guidelines
- identify the scope of work and competencies of each of the categories of registration.

#### SACAP

SACAP, PO Box 408, Bruma, 2026

T: 011 417 0900, F: 011 417 0950/615 4819

E: registrar@sacapsa.com, W: www.sacapsa.com

1<sup>st</sup> Floor Lakeside Place,  
cnr Ernest Oppenheimer Ave and Queen Street,  
Bruma, Johannesburg

#### SACLAP (South African Council for the Landscape Architectural Profession)

- SACLAP evolved from the Board of Control for Landscape Architects which had functioned under the previous Council of Architects (now SACAP – see afore-mentioned). It performs functions similar to those of SACAP, but with a specific focus on landscape architectural professionals. Registering categories are: Professional Landscape Architects, Professional Landscape Technologists, Professional Landscape Technicians, and Professional Landscape Assistants.

#### SACLAP

SACLAP, PO Box 868, Ferndale, 2160

T: 011 789 1384, F: 011 789 2116

E: secretariat@sacdap.org.za, W: www.sacdap.org.za

1<sup>st</sup> Floor, Fern Isle Building,  
359 Pretoria Street, Randburg

#### SACQSP (South African Council for the Quantity Surveying Profession)

We are frequently asked what quantity surveyors do. According to their website they “are the financial consultants of the construction industry whose training and experience qualify them to advise on cost and contractual arrangements and to prepare contract documents.

They act in liaison with architects, consulting engineers and contractors to safeguard the client's interest.” The Council performs similar functions to those of the afore-mentioned councils, obviously with its focus on the quantity surveying profession.

#### SACQSP

SACQSP, PO Box 654, Halfway House, 1685

T: 011 312 2560/1, F: 011 312 2562

E: registrar@sacqsp.co.za, W: www.sacqsp.org.za

Unit B26, Block B, Lone Creek, Waterfall Office Park, Bekker St, Vorna Valley, Midrand

#### SACPVP (South African Council for the Property Valuers Profession)

The SACPVP registers persons operating in the property values profession according to the Property Values Profession Act of 2000. Generally speaking this Council's function and modus operandi are the same as those of the afore-mentioned five statutory councils. Registering categories are: Professional Valuers, Professional Associated Valuers, Single Residential Property Assessors, and Candidates.

#### SACPVP

SACPVP, PO Box 114, Menlyn, 0063

T: 012 348 8643/5, F: 012 348 7528

E: info@sacpvp.co.za, W: www.sacpvp.co.za

77 Kariba Street, Lynnwood Glen, Pretoria

#### Voluntary Associations

##### Associated with Statutory councils

Each of the afore-mentioned six statutory councils has jurisdiction over groupings of voluntary associations that fall within its frame of reference. Those voluntary associations with which SAICE has closest ties, and which are recognised by and fall under ECSA's jurisdiction, are listed below (for the sake of completeness we have included our own Institution in the list as well). Some of these associations are covered in more detail in the section dealing with discipline-specific bodies (page 18).

SAICE: South African Institution of Civil Engineering

SAIMechE:	South African Institution of Mechanical Engineering
SAIEE;	South African Institute of Electrical Engineers
IMESA:	Institution of Municipal Engineering of Southern Africa
CESA:	Consulting Engineers South Africa
SAFCEC:	South African Federation of Civil Engineering Contractors
IPET:	Institute of Professional Engineering Technologists
WISA:	Water Institute of Southern Africa
SAISC:	Southern African Institute of Steel Construction
CSSA:	Concrete Society of Southern Africa
SAIIE	Southern African Institute of Industrial Engineers
SAIMM	Southern African Institute of Mining and Metallurgy
ITC	Institute of Timber Construction
NSBE	National Society of Black Engineers
SAIAE	South African Institute of Agricultural Engineers
SAID	South African Institute of Draughting
SAIW	South African Institute of Welding

#### ASSOCIATED STATUTORY BODIES

The statutory bodies discussed below were also established through Acts of Parliament. These bodies regulate and guide various construction and related engineering activities. This list includes only some of the associated statutory bodies related closely to the civil engineering profession.

#### CIDB (Construction Industry Development Board)

The CIDB was established by Act No 38 of 2000 to provide leadership to stakeholders and to stimulate sustainable growth, reform and improvement of the construction sector for effective delivery and the industry's enhanced role in the country's economy.

The Board of the CIDB comprises private and public sector individuals appointed by the Minister of Public Works on the strength of their industry knowledge and expertise. Board members represent the following sectors:

- public and private sector clients
- public entities
- contractor and employer associations

- professions
- financial institutions
- materials suppliers
- organised labour
- academic institutions

Board members are non-executive and rely on the executive capacity of the CIDB to implement the Board's mandate, which include the following:

- the establishment of a national register of contractors and construction projects to systematically regulate, monitor and promote the performance of the construction industry for sustainable growth, delivery and empowerment
- the improvement of the uniform application of procurement policy throughout all spheres of government
- the improvement of performance and best practice by public and private sector clients, contractors and other participants in the construction delivery process
- the promotion of sustainable participation by the emerging sector.

#### ► CIDB

CIDB, PO Box 2107, Brooklyn Square, 0075

T: 012 482 7200, F: 012 349 8986

E: cidb@cidb.org.za, W: www.cidb.org.za

Block N&R, SABS Campus, 2 Dr Lategan Road, Groenkloof, Pretoria

#### **CETA (Construction Education and Training Authority)**

CETA, which was established through the Skills Development Act of 1998 to develop and improve the skills of the South African workforce, is accredited by the South African Qualifications Authority (SAQA). CETA's prime objective is to influence training and skills development in the construction sector by initiating skills development projects and learnerships which will empower construction workers with skills recognised by the National Qualifications Framework (NQF). CETA does not do any training itself, but accredits and monitors the delivery of training by accredited training providers. CETA also ensures that people who have acquired construction skills, but who do not have the necessary qualification, are included in the *Recognition of Prior Learning* assessment process.

#### CETA

CETA, PO Box 1955, Halfway House, 1685

T: 011 265 5900, F: 011 265 5925

W: www.ceta.org.za

1<sup>st</sup> Floor Building 5, Midrand Business Park, Old Pretoria Road, Midrand

#### **NHBRC (National Home Builders Registration Council)**

The NHBRC as we know it today came into being on 26 March 2001 through the Housing Consumer Protection Measures Act No 95 of 1998. Its main function is to protect the interests of housing consumers, and to regulate the home building industry. It does this by:

- monitoring quality standards in the home building industry
- providing assistance to housing consumers in circumstances where major structural defects occur and where homebuilders fail to meet their obligations in terms of the Act
- building the capacity of home builders through a national training programme with specific emphasis on the historically disadvantaged
- providing technical and management support to provincial housing departments and local authorities
- educating housing consumers and home builders alike about their rights and obligations
- growing and sustaining the warranty reserve.

#### NHBRC

NHBRC, PO Box 461, Randburg, 2125

T: 011 317 0074, F: 086 637 8792

W: www.nhbrc.org.za

10 Muswell Road South, Phase 4 Medscheme Bldg, Bryanston, Johannesburg

#### **RSR (Railway Safety Regulator)**

The RSR is an agency of the Department of Transport and was established through the National Railway Safety Regulator Act No 16 of 2002. This Act stipulates that railway operators are responsible for managing safety, while the RSR is responsible for overseeing safety. To this end the mandate of the RSR includes the following:

- promoting improved safety performance in the railway transport industry in order to promote the use of rail as a mode of transport
- developing regulations and standards as required
- concluding agreements of cooperation with state organs whose activities may impact on railway safety, in order to prevent duplication
- promoting the harmonising of the South African railway safety regime with the objectives and requirements of neighbouring countries, in particular

the members of the Southern African Development Community (SADC).

#### RSR

RSR, PO Box 655, Bruma, 2026

T: 011 417 0000, F: 011 417 0010

E: webmaster@rsr.org.za, W: www.rsr.org.za  
Ground Floor, West Wing, Waterview Corner, 2 Ernest Oppenheimer Ave, Bruma

#### **SABS (South African Bureau of Standards)**

SABS was established through the Standards Act No 24 of 1945. The Act has passed through many amendments, and SABS is currently governed by the Standards Act 8 of 2008 that took effect simultaneously with the NRCS Act (see below) on 1 September 2008. SABS is the national institution for the promotion and maintenance of standardisation and quality regarding commodities and the rendering of services.

The main functions of SABS, from an engineering perspective, include the following:

- facilitating the preparation of national standards (SANS, i.e. SA National Standards) through a consensus process within various specific technical committees made up of industry representatives and technical experts
- providing information on the national standards of other countries
- providing information on international standards.

SABS aligns its activities with seven different industry sectors (chemicals, electrotechnical, food and health, mechanical and materials, mining and minerals, services, and transportation), which each house the full range of SABS services, such as standards, testing and certification. Representatives from the different engineering disciplines serve on the various technical committees within these SABS industry sectors.

#### SABS

SABS, Private Bag X191, Pretoria, 0001

T: 012 428 7911, F: 012 344 1568

E: info@sabs.co.za, W: www.sabs.co.za

SABS Campus, 1 Dr Lategan Road, Groenkloof, Pretoria

#### **NRCS (National Regulator for Compulsory Specifications)**

The NRCS was established by the National Regulator for Compulsory Specifications Act No 5 of 2008, whereby the Regulatory Division of

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SABS and all regulatory functions of SABS were transferred to the NRCS. The NRCS is an autonomous institution of the DTI (Department of Trade and Industry) that administers technical regulations (compulsory specifications) based on national standards in the interests of human health, safety and protection of the environment. The regulated products include cement and treated structural timber, and a wide range of automotive, electrical and food products. NRCS also administers the Legal Metrology regulations governing measurements used in trade.

Sections 4 – 7 of the National Building Regulations and Building Standards Act (Act 103 of 1977) empower local authorities to administer the National Building Regulations. Building control officers are empowered and required to review and approve building plans and designs, including rational designs. The Act requires the Board and CEO of NRCS to perform a number of statutory functions, including advising the Minister regarding building regulations, inspections, the appointment of building control officers, and acting as secretariat to a Review Board that provides a dispute settlement service for the benefit of owners, developers and local authorities.

#### NRCS

NRCS, Private Bag X25, Brooklyn, 0075  
 T: 012 428 5000, F: 012 428 5199  
 E: nrccs@nrccs.org.za, W: www.nrccs.org.za  
 SABS Campus, 1 Dr Lategan Road,  
 Groenkloof, Pretoria

#### WRC (Water Research Commission)

The WRC operates in terms of the Water Research Act 34 of 1971. This Act mandates the WRC to, among other tasks:

- promote coordination, cooperation and communication in the area of water research and development
- stimulate and fund water research according to priority
- promote effective transfer of information and technology
- enhance knowledge and capacity building within the water sector.

#### WRC

WRC, Private Bag X03, Gezina, 0031  
 T: 012 330 0340, F: 012 331 2565  
 E: info@wrc.org.za, W: www.wrc.org.za  
 Marumati Building, cnr Frederika St & 18<sup>th</sup> Avenue,  
 Rietfontein, Pretoria

#### GOVERNMENT AND OTHER STRUCTURES ASSOCIATED WITH THE BUILT ENVIRONMENT

SAICE has a unique position in the sense that it represents individual members of the civil engineering profession whilst many other bodies represent a focused vocational or industry-specific sector and often have only company membership. This means that SAICE is seen mostly as an organisation that has a broad and independent constituency and can operate from a particular viewpoint and/or independent basis. This aspect is highly valued.

In order to promote the profession, create understanding and facilitate credible and trustworthy relationships and support systems, SAICE has since 1994 engaged extensively with government structures on a scale that has never been seen before in the long history of the Institution. Regular meetings with Ministers and Departments have been a feature of the SAICE annual calendar since the middle 1990s. SAICE liaises mainly with the following government departments:

- The Department of Public Works
- The Department of Cooperative Governance and Traditional Affairs (previously the Department of Provincial and Local Government)
- The Department of Transport
- The Department of Water Affairs
- The Department of Environmental Affairs
- The Department of Trade and Industry
- The Department of Human Settlements (previously the Department of Housing)

- The Department of Basic Education
- The Department of Higher Education and Training
- The Department of Science and Technology

SAICE representatives have also made meaningful presentations to the Portfolio Committees of a number of these government departments, not only to explain the contribution that the civil engineering profession can make, but also to alert the various Committees to the current state of conditions within those particular government sectors, as seen from an engineering perspective. SAICE's liaison with government departments is of extreme importance to the future of the profession and the country alike. We note with appreciation, for example, that the Department of Cooperative Governance and Traditional Affairs has recently embarked on a turn-around strategy (TAS), which will be implemented in 2010. Allyson Lawless represents SAICE in this initiative.

For the purposes of this article we will very briefly discuss only the Department of Public Works, as this department has direct bearing on many aspects of the built environment, and hence on the civil engineering profession.

#### DPW (Department of Public Works)

Broadly speaking the DPW's mandate is to be the custodian and manager of the national government's fixed assets for which legislation does not make another department or institution responsible. This includes the rendering and maintenance of built environment services.

In recognition of this mandate, as well as of the current poor state in which public assets are, the DPW developed the National Infrastructure Maintenance Strategy (NIMS), which has to ensure the adequate maintenance and operation of infrastructure, with the aim of sustained service delivery, growth and job creation. This approach in turn contributes to the goals of AsgiSA (Accelerated and shared growth initiative for South Africa) and the EPWP (Expanded Public Works Programme).

By way of a brief background - the aim of AsgiSA is to address unemployment and poverty in South Africa. Shortly after the launch of AsgiSA in 2006, JIPSA (Joint Initiative on Priority

Skills Acquisition) was established to address the scarce and critical skills needed to meet the AsgiSA objectives. The EPWP, on the other hand, provides relief to the poor and unemployed through temporary, but useful work, which has the added benefit of transferring of skills. The civil engineering profession is increasingly involved in particularly the EPWP.

The DPW also provides strategic direction for the development of the construction sector in partnership with its sector entities (see further down, as well as the CIDB already discussed above), and seeks to engage with institutions of higher learning to ensure a constant supply of suitably qualified built environment practitioners.

Readers are encouraged to visit the DPW website, as space limitations prohibit us to expand further on this department's importance to the civil engineering profession and the construction industry.

#### DPW

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T: 012 310 5900, F: 012 310 5182  
W: [publicworks.gov.za](http://publicworks.gov.za)  
6<sup>th</sup> Floor AVN Building, cnr Skinner & Andries St, Pretoria

#### Agrément South Africa

Agrément South Africa is an independent and internationally recognised technical assessment organisation. It was established in 1969 and operates under a ministerial delegation of authority from the Minister of Public Works. The organisation is managed by and located at the Council for Scientific and Industrial Research (CSIR) in Pretoria. The organisation establishes performance criteria and assesses the fitness-for-purpose of innovative and non-standard construction products and systems. Agrément certification, which lists uses and conditions where necessary, offers assurance to specifiers including engineers, regulators, financial institutions and end users of fitness-for-purpose and quality assurance, thereby facilitating the introduction of new products into the market. Certification is also deemed-to-satisfy the requirements of the National Building Regulations. The organisation is a founder member of the World

Federation of Technical Assessment Organizations.

#### Agrément South Africa

Agrément SA, PO Box 395, Pretoria, 0001  
T: 012 841 3708, F: 012 841 2539  
E: [agrement@csir.co.za](mailto:agrement@csir.co.za), W: [www.agrement.co.za](http://www.agrement.co.za)  
CSIR Building 2, Meiring Naudé Road, Brummeria, Pretoria

#### IDT (Independent Development Trust)

As one of the country's leading development agencies, the primary function of the IDT is to add value to the national development agenda of government. It does this through its business model that is grounded in the delivery of innovative and sustainable development programmes that will make a measurable difference to the levels of poverty and underdevelopment. The IDT works and interfaces with government and communities to alleviate and eradicate inter-generational poverty, provide social infrastructure, meet empowerment targets, create employment opportunities and build capacity in core areas. Generally the IDT works in rural areas, especially those characterised by high levels of poverty and unemployment. A key challenge, due to decades of under-development, remains the high levels of poverty, especially amongst women and the youth. The IDT has made a strategic shift to ensure that all development initiatives cater for women and their beneficiaries, and has women organisations as primary target groups.

#### IDT

IDT, PO Box 73000, Lynnwood Ridge, 0043  
T: 012 845 2000, F: 012 348 0894  
W: [www.idt.org.za](http://www.idt.org.za)  
Glenwood Office Park, cnr Oberon & Sprite St, Faerie Glen, Pretoria, 0043

#### DBSA (Development Bank of Southern Africa)

The DBSA works closely with different levels of government, parastatals and public enterprises to assist with the financing, implementing and supporting of projects that aim to overcome backlogs in infrastructure delivery and human resources, thereby improving the quality of life of the people of any particular region. In this regard the DBSA targets municipalities who need assistance with not only financing, but also with the actual delivering of infrastructure. For example, the ENERGYS programme (Engineers Now

Ensuring Roll-out by Growing Young Skills), initiated and managed by SAICE's Allyson Lawless under the auspices of the SAICE Section 21 Company, is now being funded by the DBSA's Siyenza Manje programme. In this instance the programme aims to facilitate the transfer of skills to young engineering graduates and students busy with their experiential learning, under the guidance of retired engineers. In the process graduates and students gain a wealth of knowledge through exposure to latest and existing technology. An invaluable 'by-product' of this capacity building programme is the unblocking of bottlenecks in local government service delivery.

#### DBSA

DBSA, PO Box 1234, Halfway House, 1685  
T: 011 313 3911, F: 011 313 3086  
W: [www.dbsa.org](http://www.dbsa.org)  
Headway Hill, 1258 Lever Road, Midrand

#### SANRAL (South African National Roads Agency Limited)

SANRAL is registered in terms of the Companies Act as an independent statutory company, belonging to the South African government and represented by the Minister of Transport. SANRAL's mandate is to maintain, develop and manage the national road network of South Africa. Prime examples of SANRAL's execution of this mandate is the Maputo Development Corridor, and currently also the extensive Gauteng Freeway Improvement Project. The CEO of SANRAL, Nazir Alli, is a civil engineer and a Fellow of SAICE.

#### SANRAL

SANRAL, PO Box 415, Pretoria, 0001  
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E: [info@nra.co.za](mailto:info@nra.co.za), W: [www.sanral.co.za](http://www.sanral.co.za)  
Ditsela Place, 1204 Park Street, Hatfield, Pretoria

#### CREDITS

We acknowledge with appreciation that some of the information in this article was taken from the websites of the various bodies discussed. Please see the contact details underneath each body for the relevant website address. We also acknowledge with thanks the assistance received from senior staff members of these bodies.

#### NOTE

Please also refer to the diagrams on pages 25 – 27 for a graphic illustration of the SAICE network.

## 3 – The world according to SAICE

# Discipline-specific bodies

Networking with discipline-specific bodies is like ventilating a room – fresh ideas, shared concerns, and mutual appreciation all make for more comfortable and informed living within our professional space. In this article we will concentrate on a number of discipline-specific bodies that SAICE liaises with, including some of the discipline-specific voluntary associations that were listed on page 9

### SAICE (South African Institution of Civil Engineering)

WE PLACE OURSELVES in this group of bodies for the sake of completeness, and also for the benefit of those readers who are not familiar with our Institution and would like to read about us in context. SAICE, whose forerunner was established in 1903, represents the civil engineering profession in South Africa, and is a voluntary association with approximately 9 000 members. The Institution provides technical leadership in support and enhancement of poverty alleviation, sustainable development, and the development and maintenance of infrastructure. Its specialist divisions include water engineering, transportation engineering, railway and harbour engineering, geotechnical engineering, structural engineering, environmental engineering, information technology, and project and construction management. SAICE has a worldwide liaison network and links with many international bodies. The Africa Engineers Forum, which was established by SAICE, currently commands a high level of credibility and respect across the globe.

SAICE also distributes the GCC 2004 (General Conditions of Contract), the ECS (Engineering Contract Strategies), and acts as agent for books from Thomas Telford and ASCE (American Society of Civil Engineers).

#### SAICE

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E: [civilinfo@saice.org.za](mailto:civilinfo@saice.org.za), W: [www.civils.org.za](http://www.civils.org.za)

Building 19, Thornhill Office Park, Bekker Street, Vorna Valley, Midrand

### SAIMechE (South African Institution of Mechanical Engineering)

SAIMechE, whose forerunner was established in 1892, represents mechanical engineering in South Africa, covering fields such as energy generation, process engineering, automobile engineering, machinery, mining, and so forth.

#### SAIMechE

SAIMechE, PO Box 511, Bruma, 2026

T: 011 615 5660, F: 011 388 5356

E: [info@saimeche.org.za](mailto:info@saimeche.org.za), W: [www.saimeche.org.za](http://www.saimeche.org.za)

Office Suite 6, Ground Floor, Lakeside Two, Bruma Lake Office Park, 3 Ernest Oppenheimer Ave, Bruma, Johannesburg

### SAIEE (South African Institute of Electrical Engineers)

SAIEE, celebrating its centenary this year, represents all aspects of electrical engineering in South Africa, such as telecommunications, power infrastructural services, electronics, measurement and control, mining, and related sub-disciplines.

#### SAIEE

SAIEE, PO Box 751253, Gardenview, 2047

T: 011 487 3003, F: 011 487 3002

E: [info@saiee.org.za](mailto:info@saiee.org.za), W: [www.saiee.org.za](http://www.saiee.org.za)

Innes House, 18a Gill Street, Observatory, Johannesburg

### SAIA (South African Institute of Architects)

SAIA is a voluntary association whose members use their professional skills to enhance the design and development of the built environment, and also, through their professional skills, support the conservation of the natural environment.

#### SAIA

SAIA, Private Bag X10063, Randburg, 2125

T: 011 782 1315, F: 011 782 8771

E: [admin@saia.org.za](mailto:admin@saia.org.za), W: [www.saia.org.za](http://www.saia.org.za)

Bouhof (Ground Floor), 31 Robin Hood Road, Robindale, Randburg

### CESA (Consulting Engineers South Africa)

CESA (previously known as SAACE, i.e the South African Association of Consulting Engineers) represents consulting engineering firms of all disciplines, and is also a member of the International Federation of Consulting Engineering (FIDIC). CESA promotes the interests of its members and their clients by the following activities, among others:

- publishing documents relevant to the profession
- acting as agent for FIDIC publications
- providing advisory notes and guidelines on professional practice matters
- providing a peer review and quality management programme
- organising seminars, workshops and conventions
- organising and publishing a *Directory of Firms*

#### CESA

CESA, PO Box 68482, Bryanston, Johannesburg, 2021

T: 011 463 2022, F: 011 463 7383

E: [general@cesa.co.za](mailto:general@cesa.co.za), W: [www.cesa.co.za](http://www.cesa.co.za)

Fulham House, Hampton Park North, 20 Georgjan Crescent, Bryanston, Johannesburg

### IPET (Institute of Professional Engineering Technologists)

IPET grew out of SAARET which was formed in September 1981. SAARET first stood for the South African Association of Registrable Engineers and Technologists, but later changed

to the South African Association of Registrable Engineering Technologists. As the association developed into a learned society, and also to be in line with changes resulting from the Engineering Profession of South Africa Act of 1990, SAARET changed its name to the current IPET in August 1994. As a recognised voluntary association IPET serves the interests of professional engineering technologists in all engineering disciplines. SAICE has around 380 technologist members, most of whom are also members of IPET. To date two of these members have served as SAICE presidents (2003 and 2008).

#### IPET

IPET, PO Box 1824, Randburg, 2125  
T: 011 787 9706, F: 011 787 9706  
E: [engineer@netactive.co.za](mailto:engineer@netactive.co.za), W: [www.ipet.co.za](http://www.ipet.co.za)

#### SAFCEC (South African Federation of Civil Engineering Contractors)

SAFCEC uses its various areas of expertise to promote quality civil engineering construction. The Federation's legal and economic expertise, for example, ensures that members not only remain informed about matters such as procurement, industrial relations, and contractual obligations, but also stay abreast with legislative developments affecting the civil engineering construction environment. SAFCEC's ability to provide economic and market forecasts is extremely valuable to civil engineering contractors.

#### SAFCEC

SAFCEC, PO Box 644, Bedfordview, 2008  
T: 011 409 0900, F: 011 450 1715  
E: [admin@safcec.org.za](mailto:admin@safcec.org.za), W: [www.safcec.org.za](http://www.safcec.org.za)  
3<sup>rd</sup> Floor, SAFCEC Construction Centre, 12 Skeen Boulevard, Bedfordview

#### MBSA (Master Builders South Africa)

The MBSA is a national organisation speaking on behalf of its members, which are the various Master Builder Associations and Affiliate members. The MBSA operates as a federation of registered employer organisations, representing contractors and employers in the building industry. It is also the sole distributor of the JBCC (Joint Building Contracts Committee) procurement documents.

#### MBSA

MBSA, PO Box 1619, Halfway House, 1685  
T: 011 205 9000, F: 011 315 1644  
E: [info@mbsa.org.za](mailto:info@mbsa.org.za), W: [www.mbsa.org.za](http://www.mbsa.org.za)  
CMA Office and Conference Park, 234 Alexandra Avenue, Midrand

#### C&CI (Cement and Concrete Institute)

The C&CI is a technical marketing organisation that aims to grow the market for all forms of concrete by providing services (technical, educational, regulatory, research and marketing) to potential and existing users and decision-makers in the built environment in southern Africa. Members of the C&CI fall into three categories – producers of cementitious materials (Producer Members), the concrete industry (Associate Members), and built environment professionals (Built Environment Professional Members). The Institute provides high-quality, independent, professional services to private as well as public sector clients, and through their

availability for consultation by telephone, e-mail, at their own or their clients' offices, on construction sites anywhere in southern Africa or through their free advisory service.

#### C&CI

C&CI, PO Box 168, Halfway House, 1685  
T: 011 315 0300, F: 011 315 0584  
E: [info@cnci.org.za](mailto:info@cnci.org.za), W: [www.org.za](http://www.org.za)  
Block D, Lone Creek, Waterfall Office Park, Bekker Street, Vorna Valley, Midrand

#### CMA (Concrete Manufacturers Association)

The CMA represents the precast concrete industry and focuses on growing the market for precast concrete. Products include precast concrete masonry, concrete block paving, concrete roof tiles, concrete retaining blocks, precast floor slabs, and concrete pipes and culverts. The Association initiates and applies standards in close cooperation with SANS. It also develops new products and services in collaboration with its members. The CMA's main focus is on ensuring that its members' products are applied correctly. A CMA mark guarantees quality.

#### CMA

CMA, PO Box 168, Halfway House, 1685  
T: 011 805 6742, F: 086 524 9216  
E: [main.cma@gmail.com](mailto:main.cma@gmail.com), W: [www.cma.org.za](http://www.cma.org.za)  
Block D, Lone Creek, Waterfall Office Park, Bekker Street, Vorna Valley, Midrand

#### CSSA (Concrete Society of Southern Africa)

The CSSA, a Voluntary Association recognised by ECSA, promotes excellence and innovation in the use of concrete and related products and services. The Association also provides a forum for networking and technology transfer between its members and international affiliates. It hosts the well-known Fulton Awards every second year to award excellence in concrete construction.

#### CSSA

CSSA, PO Box 75364, Lynnwood Ridge, Pretoria, 0040  
T: 012 348 5305, F: 012 348 6944  
E: [admin@concretesociety.co.za](mailto:admin@concretesociety.co.za), W: [www.concretesociety.co.za](http://www.concretesociety.co.za)  
Suite 301, The Hillside, 318 The Hillside Street, Lynnwood, Pretoria

#### WISA (Water Institute of Southern Africa)

WISA keeps its members informed about the latest national and international developments in water technology and research, and provides a forum for the exchange of information and views to improve water resource management in South Africa.

#### WISA

WISA, PO Box 6011, Halfway House, 1685  
T: 011 805 3537, F: 011 315 1258  
E: [wisa@wisa.org.za](mailto:wisa@wisa.org.za), W: [www.wisa.org.za](http://www.wisa.org.za)  
1<sup>st</sup> Floor Building 5, Constantia Park, 546 16<sup>th</sup> Road, Randjespark Ext 7, Midrand

#### SANCOT (South African National Committee on Tunnelling)

SANCOT is an interest group within the South African Institute of Mining and Metallurgy (SAIMM). Members of the Committee collate information on both civil and mining tunnelling. SANCOT was originally established as a result of the extensive infrastructure developments during the late 1960s, such as the Orange River Project and the Hex River Valley Tunnel. SANCOT was also a

founding member of the International Tunnelling Association. Due to the decrease in tunnelling in South Africa from around 2003, SANCOT reformed first into a committee of the SAIMM, and later into the current interest group within the SAIMM.

#### SANCOT

SANCOT, c/o SAIMM, PO Box 61127, Marshalltown, 2107  
T: 011 834 1273/7, F: 011 838 5923  
E: julie@saimm.co.za, W: www.saimm.co.za/links/sancot  
5<sup>th</sup> Floor, Chamber of Mines Bldg, 5 Hollard Street,  
cnr Sauer & Marshall, Johannesburg

#### SAISC (Southern African Institute of Steel Construction)

The main aim of the SAISC is to promote the use of steel in construction, thereby contributing to the development of the steel construction industry in South Africa. The SAISC has been in existence for longer than 50 years, during which time it not only promoted the use of steel, but also contributed significantly to education and training.

#### SAISC

SAISC, PO Box 291724, Melville, 2109  
T: 011 726 6111, F: 011 482 9644  
E: info@saisc.co.za, W: www.saisc.co.za  
1<sup>st</sup> Floor Block C, 43 Empire Road, Parktown West, Johannesburg

#### IMESA (Institute of Municipal Engineering of Southern Africa)

IMESA is a voluntary association of engineering professionals and associates who aim to better the quality of life of all citizens through infrastructure engineering excellence at local government level. IMESA also advises municipal councils on municipal engineering matters and serves the broader community through representation on various bodies where it provides input from the municipal engineer's perspective.

#### IMESA

IMESA, PO Box 2190, Westville, 3630  
T: 031 266 3263, F: 031 266 5094  
E: imesa@webstorm.co.za, W: www.imesa.org.za  
29 Maryvale Road, Westville, KwaZulu-Natal

#### SABITA (Southern African Bitumen Association)

SABITA is a non-profit organisation that represents producers and applicators of bituminous products, consulting engineers and educational institutions. SABITA promotes best practice in the use and application of bituminous materials, as well as in worker safety and environmental conservation. The Association has an education and training role, and also liaises with government on the value of road provision and preservation.

#### SABITA

SABITA, Postnet Suite 56, Private Bag X21, Howard Place, 7450  
T: 021 531 2718, F: 021 531 2606  
E: info@sabita.co.za, W: www.sabita.co.za  
5 Lonsdale, Lonsdale Way, Pinelands, Cape Town

#### SARF (South African Road Federation)

SARF is dedicated to the promotion of the road industry in South Africa. It facilitates the distribution of expertise throughout the diverse disciplines within the transportation sector. Via its liaison

with the International Road Federation, SARF makes latest developments on this front known to the local industry. Policies are therefore developed and promoted in every aspect of road transport infrastructure and management, including attention to environmental issues.

#### SARF

SARF, PO Box 31577, Braamfontein, 2017  
T: 011 403 5603/4, F: 011 403 7736  
E: info@sarf.org.za, W: www.sarf.org.za  
3<sup>rd</sup> Floor Forum 2, Braam Park, 33 Hoofd Street, Braamfontein, Johannesburg

#### NSTF (National Science and Technology Forum)

The NSTF is the stakeholder body for all science, engineering, technology and innovation (SETI) organisations in South Africa. The Forum organises the annual NSTF Awards, and plays a powerful consultative and lobbying role in SETI policy matters, while also implementing the National Youth Service Programme on behalf of the Department of Science and Technology. The NSTF is supported by the Department of Science and Technology, and the Minister acts as mentor and patron of the NSTF. SAICE plays a major role in the NSTF subgroup SETAG (Scientific, Engineering and Technological Societies and Allied Professions Group of South Africa) and the SAICE Executive Director recently chaired this group for two years. SAICE's Outreach Officer currently advises NSTF on communication issues.

#### NSTF

NSTF Secretariat, PO Box 9823, Pretoria, 0001  
T: 012 841 3987, F: 012 841 3025  
E: nstf@scientia.co.za, W: www.nstf.org.za  
Room S-140, Building 33, CSIR Campus,  
Meiring Naude Road, Brummeria, Pretoria

#### SAPI (South African Planning Institute)

SAPI promotes the art and science of sustainable local, regional and national human and physical development planning, and the theory and practice relating to this. Professional planners, also sometimes referred to as community, regional or city planners, promote the best use of land for residential, commercial, institutional and recreational purposes. SAICE currently provides secretarial and administrative services for SAPI.

#### SAPI

SAPI, Private Bag X200, Halfway House, 1685  
T: 011 805 5947, F: 011 805 5971  
E: sapi@worldonline.co.za, W: www.sapi.org.za  
Building 19, Thornhill Office Park, Bekker Street, Vorna Valley, Midrand

#### CREDITS

We acknowledge with appreciation that some of the information in this article was taken from the websites of the various bodies discussed. Please see the contact details underneath each body for the relevant website address. We also acknowledge with thanks the assistance received from senior staff members or office bearers of these bodies.

#### NOTE

Please also refer to the diagrams on pages 25 – 27 for a graphic illustration of the SAICE network.

## 4 - The world according to SAICE

# International bodies

SAICE's networking on an international level took off during the ASCE (American Society of Civil Engineering) convention in 1994 in Atlanta when a SAICE delegation was invited to attend the annual ASCE International Round Table. During that visit SAICE's President at the time, Brian Bruce, and Executive Director Dawie Botha not only had the opportunity to network with engineering institutions from across the world, but for the first time ever they met African colleagues, particularly those from Ghana and Zimbabwe. They returned inspired and eager to start an African Round Table, similar to the ASCE model. From this idea sprung the Africa Engineers Forum as it is known today. During subsequent years ASCE and SAICE have liaised on various matters and have developed a strong and fruitful relationship that benefits both institutions. Other relationships with other international engineering bodies followed, to the extent that SAICE is today not only contributing meaningfully to the world engineering scene, but receiving visitors from overseas on a regular basis, all to the benefit of SAICE's 9 000 members. In addition those first steps into the global engineering village created the platform for a strong African voice and led to SAICE being utilised by a number of organisations and initiatives to roll out internationally funded programmes on behalf of AEF, as well as to the benefit of the Southern African Development Community (SADC)

### **WFEO (World Federation of Engineering Organisations)**

THIS MULTI-DISCIPLINARY engineering organisation was established in 1968 and was formed under the auspices of the United Nations Educational, Scientific and Cultural Organisation (UNESCO). A close relationship still exists. It currently represents engineering organisations from approximately 90 nations, and as such close to 15 million engineers. Over the past 10 years the WFEO has gained considerable acceptance and status, thereby facilitating a strong and united voice for engineering. It promotes communication and cooperation, develops internationally agreed policies, and promotes interaction with the United Nations. It plays a major role in issues concerning sustainability and anti-corruption, and a series of committees have been addressing issues such as Education and Training, the Environment, Information Technology, Energy, Capacity Building and Technology.

SAICE's Executive Director has been a member of the Capacity Building Committee of WFEO since its inception, and is a co-author on a guideline book and compendium of programmes for capacity building. SAICE's 2001 President, Dr Kevin Wall, has recently agreed to be the editor of this publication, which will be printed in South Africa after completion, and

launched in Buenos Aires in October 2010 at the World Engineering Congress and WFEO General Assembly. It is noteworthy that many of the principles and features developed for the AEF Protocol were in turn used by the Capacity Building Committee to develop the guideline.

The WFEO membership includes so-called National members in terms of which ECSA represents the South African engineering profession, International members that represent regional engineering groups, and lastly, Associate members like the AEF, which have no voting rights. The previous WFEO President, Barry Grear, recently visited South Africa.

SAICE Vice-President Tom Mckune, and Oliver Rowe, were trained as trainers in a WFEO anti-corruption initiative - training in South Africa is envisaged for 2010.

#### WFEO

WFEO Information Office, B.P. 88,  
Montplaisir 1073, Tunis, Tunisia  
T: 216 71 282 071, F: 216 71 282 071  
E: wfefo@planet.tn, W: www.wfefo.org  
Maison de l'UNESCO 1, rue Miollis F-75732,  
Paris Cedex 15, France

#### UNESCO (United Nations Educational, Scientific and Cultural Organisation)

UNESCO was founded on 16 November 1945 and, in addition to dealing with the issues described in its name, sees itself as striving towards a higher purpose, namely "building peace in the minds of men". After World War II this goal was obviously of great importance. UNESCO currently promotes cooperation among its 193 member nations by mainly focusing on respect, values and the dignity of each civilisation and culture. The organisation is actively pursuing the Millennium Development Goals by means of its strategic activities.

SAICE has been contracted several times by UNESCO to execute programmes in the form of AEF workshops aimed at issues like "Engineers and the Alleviation of Poverty". The latest initiative concerns a feasibility study to ascertain whether a mini NUMBERS-and-NEEDS study would be appropriate for selected African countries, following the example of the SAICE Numbers and Needs developed by Allyson Lawless and her team. This initiative has the support in principle of the South African Minister of Science and Technology. Tony Marjoram, who manages the engineering section of UNESCO, has played a major role in facilitating inter-

action with SAICE and the AEF. Prof Brian Figaji of South Africa has, in addition, been playing an important and valuable role in the Executive Board in the Paris office.

#### UNESCO

UNESCO, 1 Rue Miollis,  
75732 Paris Cedex 15, France  
T: 33 1 4568 1000, F: 33 1 4567 1690  
E: bpi@unesco.org, W: www.unesco.org

#### CEC (Commonwealth Engineers' Council)

The CEC promotes cooperation among the engineering organisations situated in the former British colonies. It has recently been transformed into a virtual organisation that is facilitated by the provision of a secretariat by the ICE. The current President, Tom Foulkes of ICE, recently took over from Tony Ridley who has had a long relationship with South Africa and had played a substantial support role to assist the AEF to gain membership of the WFEO. Neil Bailey manages the secretariat. ECSA is the South African member of the CEC and SAICE is interacting with the CEC on a regular basis.

#### CEC

CEC, One Great George Street,  
London SW1P 3AA, United Kingdom  
T: 44 20 7665 2156, F: 44 20 7223 1806  
E: bridget.tracey@ice.org.uk,  
W: www.ice.org.uk/cec

#### WCCE (World Council of Civil Engineers)

The WCCE was established in 2005. Prof Jose Medem, who is a former WFEO President, was one of the first presidents of the WCCE, and has visited South Africa on several occasions, building a strong relationship with SAICE. The civil engineering profession represents over 50% of engineering professionals and plays a vital role in delivering essential services world-wide. The WCCE goal therefore is to address issues specifically related to civil engineering on a global scale. At a meeting in Zambia two years ago the Africa Engineers Forum was invited to become a member of this organisation.

#### WCCE

WCCE, Colegio de Ingenieros de Caminos,  
Canales y Puertos (CICCP), C/ Almagro 42  
28010 Madrid, Spain  
T: 34 91 308 1988, F: 34 91 319 1531  
E: 17jfs@ciccp.es OR wcce.ciccp.es,  
W: www.wcce.net

#### FIDIC (International Federation of Consulting Engineers)

The members of FIDIC comprise consulting engineering organisations from various countries. FIDIC plays a leading role in addressing sustainability, organising anti-corruption campaigns, setting standards in consulting engineering, and interacting with the World Bank and other funding organisations and structures regarding procurement issues.

#### FIDIC

FIDIC, Box 311, CH-1215 Geneva 15, Switzerland  
T: 41 22 799 4900, F: 41 22 799 4901  
E: fidic@fidic.org, W: www.fidic.org  
World Trade Center 2, Geneva Airport,  
29 Route de Pré-Bois, Cointrin,  
CH-1215 Geneva 15, Switzerland

#### ICE (Institution of Civil Engineers)

ICE was established in 1818 and as such set the norm for learned societies in engineering. It currently has 80 000 members around the world. Since the early nineties ICE and SAICE have been cooperating on many issues. The most important achievement to date has been that ICE facilitated international reciprocity agreements between itself, ECSA and SAICE, in terms of which South African civil engineering qualifications and professional status are recognised. ICE also facilitated the entry of ECSA into various international accords, including the Washington Accord and the Engineers Mobility Forum. Learned society activities between ICE and SAICE are currently managed by means of an agreement of cooperation. Regular meetings between the two institutions form part of their annual activities, and on several occasions the Brunel lecture has been presented in South Africa.

#### ICE

ICE, One Great George Street, Westminster,  
London, SW1P 3AA, United Kingdom  
T: 44 20 7222 7722  
E: secretariat@ice.org.uk, W: www.ice.org.uk

#### IStructE (Institution of Structural Engineers)

IStructE was originally established in 1908 as the Concrete Institute. Its focus is primarily on structural engineering and public safety within the built environment. It has 23 000 members in 105 countries around the world. SAICE and IStructE cooperate by means of an agreement, and through the Joint Structural Division of SAICE. In addition, courtesy visits to the

IstructE management in London by the SAICE Executive Director take place on an annual basis.

#### IstructE

IstructE, 11 Upper Belgrave Street, London SW1X 8BH, United Kingdom  
T: 44 20 7235 4535, F: 44 20 7235 4294  
E: mail@istructe.org, W: www.istructe.org

#### ASCE (American Society of Civil Engineers)

ASCE was founded in 1852 and currently has a membership of 144 000. It is a typical learned society for civil engineering professionals. In 1994 ASCE was the first international organisation to offer SAICE an agreement of cooperation. Its International Round Table (IRT) has over the years provided SAICE with a valuable platform for communication and networking.

SAICE's Executive Director has been attending these IRTs over a period of 15 years and participated in several initiatives, including the ASCE Vision 2025 strategic planning exercise. For the last two years he was also one of three country representatives invited to present responses to the annual "white paper" that forms the main focus of the meeting. Currently a number of initiatives between SAICE and ASCE, like ExCEED (Excellence in Civil Engineering Education), are either under discussion or envisaged. In 2008 the highlight of the ASCE Presidential visit to SAICE was the ASCE International Landmark Award for the Woodhead Dam on Table Mountain.

#### ASCE

ASCE, 1801 Alexander Bell Drive, Reston, Virginia, AV 20191, United States of America  
T: 703 295 6300 / 800 548 2723 toll free,  
F: 703 295 6222  
E: pnatale@asce.org, W: www.asce.org

#### AEF (Africa Engineers Forum)

At the time that South Africa was emerging from its isolation in 1994, SAICE was invited to sign an agreement of cooperation with ASCE, and following on that, the SAICE delegation attended the ASCE International Round Table (IRT) where they met a number of colleagues from Africa for the first time ever.

The IRT model appealed to the SAICE delegation who, on their return to South Africa, requested the SAICE Executive Committee to establish a similar structure, and so the Africa Engineers Forum was born.

SAICE "designed" this Forum as a loose alliance, and during an event in Cape Town the first signatories, i.e. the Ghana and Zimbabwe engineering institutions, came on board. From 2000 onwards things developed slowly but surely through a series of meetings during which a Protocol was developed. This Protocol has proved to be a pioneering document that currently forms the basis of many initiatives, as was mentioned elsewhere in this article. The main aim of this framework is to facilitate sustainable engineering, which is a prerequisite for sustainability in Africa in particular, and to build and maintain indigenous engineering capacity in Africa, with specific focus on the SADC.

#### AEF

AEF c/o SAICE, Private Bag X200, Halfway House, 1685, South Africa  
T: 27 11 805 5947, F: 27 11 805 5971  
E: civilinfo@saice.org.za, W: civils.org.za  
Building 19, Thornhill Office Park, Bekker Street, Vorna Valley, Midrand, Johannesburg, South Africa

#### EAP (Engineers Against Poverty)

EAP is a specialist NGO working in the field of engineering and development. SAICE signed a cooperation agreement with the EAP. Regular interaction therefore takes place between SAICE and EAP, and EAP takes part in a number of joint ventures where SAICE is represented. Petter Mathews has been involved in these ventures and attended AEF workshops in South Africa.

#### EAP

2<sup>nd</sup> Floor Weston House, 246 High Holborn, London WC1V 7EX, United Kingdom  
T: 44 20 3206 0485, F: 44 20 3206 0490  
E: t.nyoka@engineersagainstpoverity.org  
W: www.engineersagainstpoverity.org

#### RedR International & RedR Southern Africa

RedR was established in the UK in 1980 and its name refers to its mission, which essentially is to maintain a Register of Engineers for Disaster Relief and to provide training in this field. A local chapter has been established in South Africa and currently closer links between SAICE and RedR South Africa are being explored.

#### RedR International & RedR Southern Africa

RedR International, Lower Beer, Uplowman, Tiverton EX16 7PF, United Kingdom  
T: 44 1884 821 239  
E: redr.international@redr.org

RedR Southern Africa, PO Box 198, Rondebosch, 7701, Cape Town  
T: 27 11 997 9013, F: 27 11 997 9001  
E: info@redr.org.za, W: www.redr.org.za

#### RAE (Royal Academy of Engineering)

The Royal Academy of Engineering was established in 1976. On their website the RAE states that, "As Britain's national academy for engineering, we bring together the country's most eminent engineers from all disciplines to promote excellence in the science, art and practice of engineering. Our strategic priorities are to enhance the UK's engineering capabilities; to celebrate excellence and inspire the next generation; and to lead debate by guiding informed thinking and influencing public policy".

The RAE has strong links with the organised professions, including ICE. About two years ago the RAE contacted SAICE after they had been made aware of the AEF and SAICE's role in Africa. This contact resulted in a number of meetings and ultimately an understanding that the RAE would like to assist and facilitate the growth of the professional engineering societies in Africa, focusing in particular on the AEF as a vehicle to execute this programme. They have succeeded in finding funds in the form of donations in the UK to start this initiative, and have requested SAICE to provide local secretariat and administrative services.

It is envisaged that the launch of this Africa-UK partnership will take place in London in March 2010. Simultaneously the first project of this RAE initiative will kick off in Pretoria in the form of an exploratory workshop for delegates from the Africa Engineers Forum signatory countries.

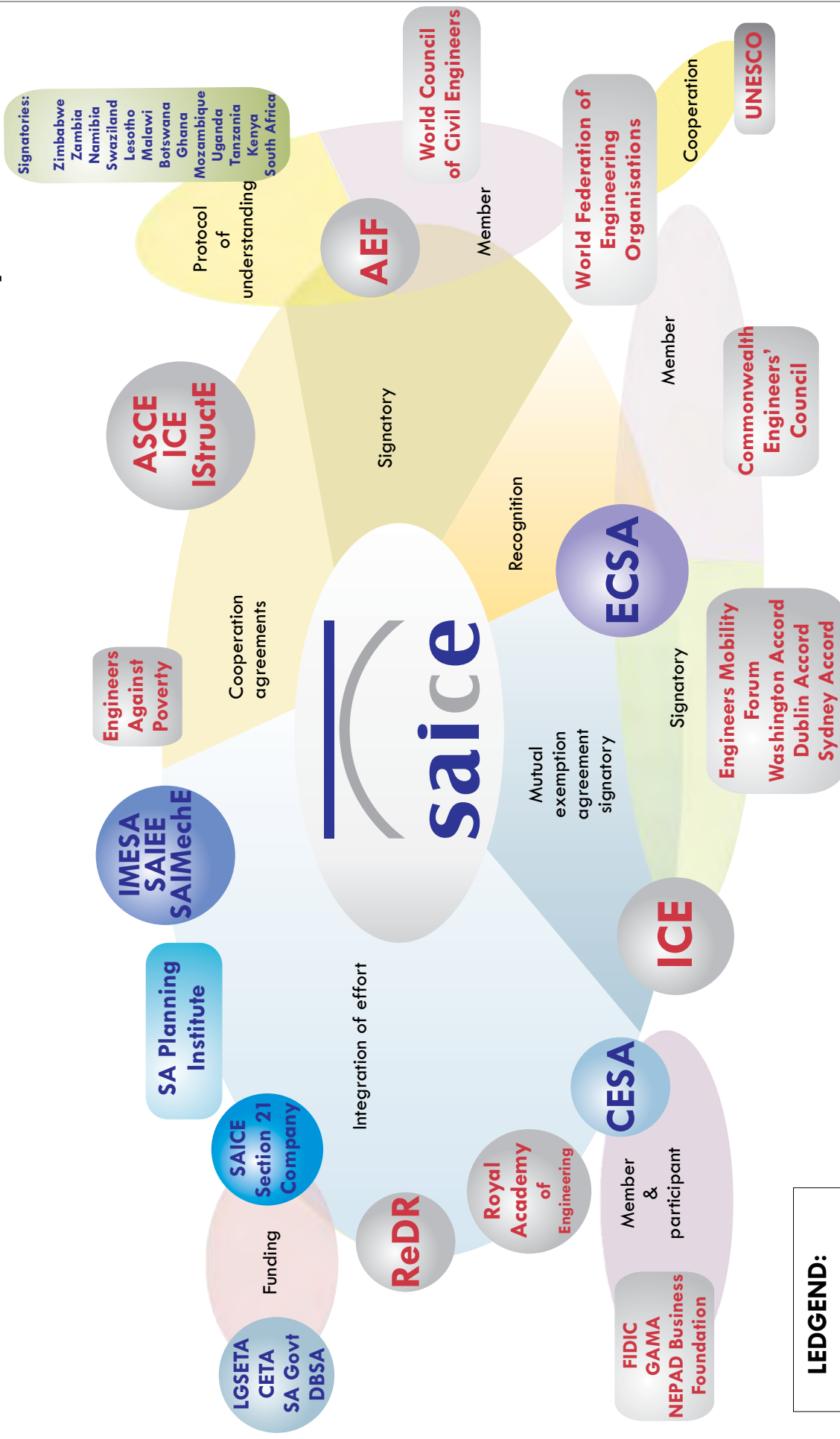
#### RAE

Royal Academy of Engineering, 3 Carlton House Terrace, London, SW1Y 5DG, United Kingdom  
T: 44 20 7766 0600, F: 44 20 7930 1549  
W: www.raeng.org.uk

#### CREDITS

We acknowledge with appreciation that some of the information in this article was taken from the websites of the various bodies discussed. Please see the contact details underneath each body for the relevant website address. □

# SAICE national and international network and activity



1 SAICE national and international network and activity

2

## Statutory councils for the built environment



Act of 2000



3

## Associated statutory bodies



4

### Civil engineering-specific organisations



5

### Multi-disciplinary engineering and associated bodies



2 The six statutory councils for the built environment that fall under the overarching Council for the Built Environment

3 Associated statutory bodies  
 4 Civil engineering-specific organisations within the built environment that form part of SAICE's network

5 Multi-disciplinary engineering and associated bodies within the built environment that form part of SAICE's network

# Acronyms and abbreviations relevant to the engineering environment

ACPM	Association of Construction Project Managers
ACSA	Airports Company South Africa
AEF	Africa Engineers Forum
ASCE	American Society of Civil Engineers
AsgiSA	Accelerated and shared growth initiative for South Africa
BBBEE	Broad-Based Black Economic Empowerment
BCEA	Basic Conditions of Employment Act
BEE	Black Economic Empowerment
CAD	Computer Aided Drawing
C&CI	Cement and Concrete Institute
CBE	Council for the Built Environment
CEC	Commonwealth Engineers' Council
CESA	Consulting Engineers South Africa
CETA	Construction Education and Training Authority
CHE	Council on Higher Education
CIDB	Construction Industry Development Board
CIETS	Construction Industry Education and Training Services
CIOB	Chartered Institute of Building
CMA	Concrete Manufacturers Association
CMIP	Consolidated Municipal Infrastructure Programme
CPD	Continuing Professional Development

CSIR	Council for Scientific and Industrial Research
CSSA	Concrete Society of Southern Africa
DBSA	Development Bank of Southern Africa
DEA	Department of Environmental Affairs
DoE	Department of Education
DoT	Department of Transport
	Department of Provincial and Local Government (now the Department of Cooperative Governance and Traditional Affairs)
DPLG	
DPW	Department of Public Works
DST	Department of Science and Technology
DTI	Department of Trade and Industry
DWA	Department of Water Affairs
EAP	Engineers Against Poverty
ECSA	Engineering Council of South Africa
EMF	Engineers Mobility Forum
ENERGYS	Engineers Now Ensuring Rollout by Growing Young Skills
EPWP	Expanded Public Works Programme
ESKOM	Electricity Supply Commission
ETQA	Education and Training Quality Assurance
FET	Further Education and Training
FIDIC	International Federation of Consulting Engineers
GCC	Government Certificate of Competence
GIS	Geographic Information Systems
HEQC	Higher Education Quality Committee
HSRC	Human Sciences Research Council
IAM	Infrastructure Asset Management
ICE	Institution of Civil Engineers
IDoEW	Identification of Engineering Work
IDP	Integrated Development Plan
IDT	Independent Development Trust
IDZ	Industrial Development Zone
IMESA	Institute of Municipal Engineering of Southern Africa
IPET	Institute of Professional Engineering Technologists
IStructE	Institution of Structural Engineers
ITC	Institute of Timber Construction
ITS	Intelligent Transport Systems
JIPSA	Joint Initiative for Priority Skills Acquisition
JRA	Johannesburg Road Agency
LGSETA	Local Government Sector Education and Training Authority
MBSA	Master Builders South Africa
MDG	Millennium Development Goals
MIG	Municipal Infrastructure Grant
MIIU	Municipal Infrastructure Investment Unit
NABCAT	National Black Contractors and Allied Trades Forum
NEPAD	New Partnership for Africa's Development
NGO	Non-Governmental Organisation
NHBRC	National Home Builders Registration Council
NPA	National Ports Authority

NQF	National Qualifications Framework
NRCS	National Regulator for Compulsory Specifications
NSBE	National Society of Black Engineers
NSFAS	National Student Financial Aid Scheme
O&M	Operations and Maintenance
OHS	Occupational Health and Safety
PMSA	Project Management South Africa
PPP	Public Private Partnership
R&D	Research and Development
RDP	Reconstruction and Development Programme
RedR	International & RedR Southern Africa
RSR	Railway Safety Regulator
SABITA	Southern African Bitumen Association
SABS	South African Bureau of Standards
SABTACO	South African Black Technical and Allied Careers Organisation
SACAP	South African Council for the Architectural Profession
SACLAP	South African Council for the Landscape Architectural Profession
SACPCMP	South African Council for the Project and Construction Management Professions
SACPVP	South African Council for the Property Valuers Profession
SACQSP	South African Council for the Quantity Surveying Profession
SAFCEC	South African Federation of Civil Engineering Contractors
SAIA	South African Institute of Architects

SAIAE	South African Institute of Agricultural Engineers
SAICE	South African Institution of Civil Engineering
SAID	South African Institute of Draughting
SAIEE	South African Institute of Electrical Engineers
SAIIE	Southern African Institute of Industrial Engineers
SAIMechE	South African Institution of Mechanical Engineering
SAIMM	Southern African Institute of Mining and Metallurgy
SAISC	Southern African Institute of Steel Construction
SAIW	South African Institute of Welding
SALGA	South African Local Government Association
SANCOT	South African National Committee on Tunnelling
SANRAL	South African National Roads Agency Limited
SAQA	South African Qualifications Authority
SARF	South African Road Federation
SARTSM	South African Road Traffic Signs Manual
SAWIC	South African Women in Construction
SET	Science, Engineering and Technology
SETA	Sector Education and Training Authority
SMMEs	Small, Medium and Micro Enterprises
UNESCO	United Nations Educational, Scientific and Cultural Organisation
WCCE	World Council of Civil Engineers
WFEO	World Federation of Engineering Organisations
WISA	Water Institute of Southern Africa
WRC	Water Research Commission