



# SANCOLD ANNUAL REPORT 2015

The year 2015 was devoted to the achievement of objectives set by SANCOLD and to the extension of various local and international initiatives. The 2015 Management Committee structure is given below.

## SANCOLD Management Committee 2015

No	Name	Organisation	Term * of Office	Remarks
1	B Mwaka	DWS (P&I)	2016	Reserved position. Re-appointed by DWS.
2	W Ramokopa	DWS (NWRI)	2017	Reserved position Appointed from 2015
3	E Vorster	SAICE	2015	Reserved position. Alternate T Tente
4	F van Vuuren	HESA	2017	Reserved position HESA re-nominated
5	D Badenhorst	AECOM	2015	Elected in 2012 for a 3-year term
6	A Bester	Hatch Goba	2015	Elected in 2012 for a 3-year term
7	Q Shaw	ARQ	2015	Elected in 2012 for a 3-year term
8	Ms M Blaeser	ARQ	2015	Elected in 2012 for a 3-year term <35 years
9	L Hattingh	Hattingh Anderson Assoc	2016	Elected in 2013 for a 3-year term
10	Ms M Trumpelmann	AECOM	2016	Elected in 2013 for a 3-year term <35 years
11	M Moshodi	DWS	2016	Chair of SANCOLD YEF- <i>ex officio</i>
12	D Cameron-Ellis	ARQ	2017	Elected in 2014 for a 3-year term
13	H-J Wright	Aurecon	2017	
14	J Smithers	UKZN	2015	Co-opted for NFSP
15	D Brink	Jones & Wagener	2015	Co-opted for tailings dams
16	CPR Roberts	-	Contract	Externally appointed Secretary.

\* The term of office is defined from the year following the November elections in the previous year. DWA (Department of Water Affairs) was changed to DWS (Department of Water and Sanitation) during May 2014.

The SANCOLD Management Committee decided after careful consideration to extend the term of office of the existing Committee to the end of 2016 ensure continuity and accountability for the forthcoming ICOLD Annual Meeting to be held in Johannesburg 2016. Other National Committees have followed a similar approach when hosting an ICOLD event. Elections will thus be held at the end of 2016.

The Management Committee set the following objectives for 2015:

### INTERNATIONAL ACTIVITIES

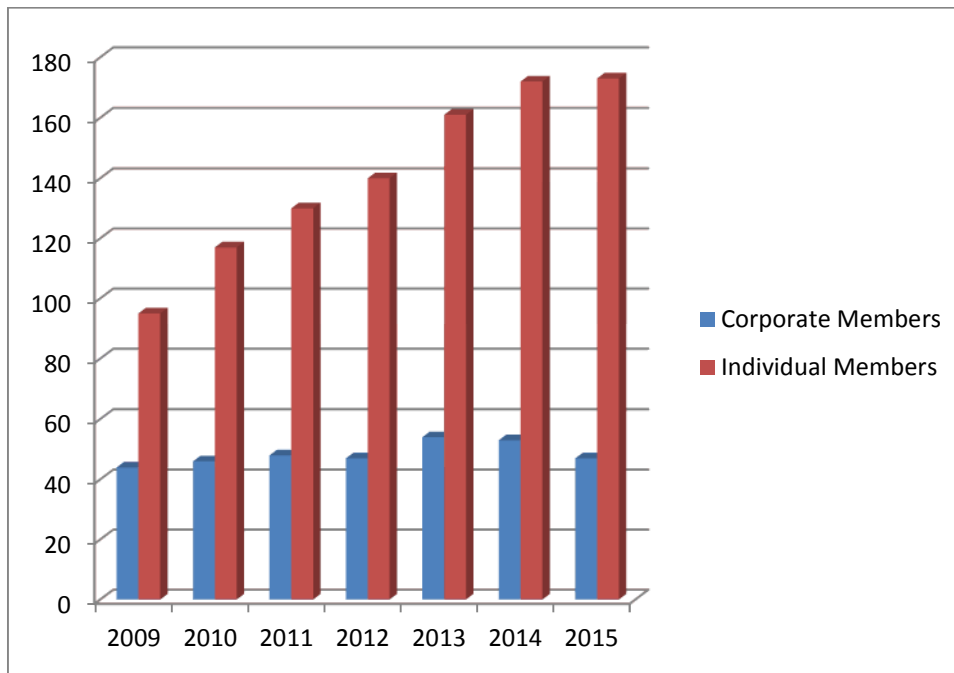
1. Meaningful participation in ICOLD activities and the forthcoming Annual Meeting and Congress 2015.
2. Organise the ICOLD Annual Meeting in 2016.
3. Preparation of the Publication on SA Dams for ICOLD 2016
4. Greater involvement in the region and African Regional Club.
5. Promote sponsorships, especially related to ICOLD 2016.
6. Strengthen the functioning of the SANCOLD working groups

## LOCAL ACTIVITIES

7. Celebration activities for SANCOLD'S 50<sup>th</sup> Anniversary.
8. Attract additional corporate and individual members.
9. Strengthen the relationship with the DWS Management and Ministry.
10. Advertise a new scholarship for 2016.
11. Preparations for the development of an updated guideline on floods.
12. Preparations for the development of a guideline on risk analysis.
13. Development on a guideline for the application of geofabrics in embankment dams.
14. Preparations for the development of a publication on *Your Dam* which will focus on the operation and maintenance of small dam and owners of such dams.
15. Preparation of a publication on Ecological Water Reserve;
16. Preparation of a publication on "*Your Tailings Dam*";
17. Improvement in the dissemination and sales of SANCOLD and ICOLD publications.
18. Continued interaction with members particularly via the regular SANCOLD News and the website.
19. Promote the sale of advertisements on the website.
20. Preparations for the 2015 SANCOLD Annual Meeting which will be held in conjunction with a conference related to dams as well as a visit to a dam.
21. Arrangements for a Workshop on Dambreak Analysis.
22. Targeted marketing of SANCOLD.
23. Promotion of the SANCOLD Young Engineers' Forum;
24. Resolve issue of dam courses by others;

Individual membership (paid-up) increased significantly during the year but there were losses due to non-payment while Corporate Membership reduced slightly as follows:

Membership Group	2010	2011	2012	2013	2014	2015
Corporate	46	47	46	52	53	47
Individual	112	126	141	152	172	173



**Graphical presentation of membership numbers over time**

Members are requested to encourage colleagues and organisations to join SANCOLD. We hope that the forthcoming hosting of the ICOLD Annual Meeting in 2016 in South Africa will be an incentive for organisations and individuals to join SANCOLD.

SANCOLD focussed on a number of local matters during the year, the foremost being:

- Formation of SANCOLD Working Groups related to ICOLD Committees on which SANCOLD has representation;
- Relevant information to members and African National Committees via SANCOLD News and direct e-mailing;
- Publication of SANCOLD information in local and international journals.
- Calling for applications for a post-graduate scholarship in dam engineering for 2015. The scholarship was awarded to Frank Denys. Feedback to the membership given in SANCOLD News;
- Revamping the SANCOLD website. Separate pages for ICOLD 2016 and the SA Young Engineers' Forum have been added in addition to improved security features.
- The application to ECSA for SANCOLD to become a Voluntary Association of ECSA was approved at the end of 2014. This holds various benefits to members in respect of ECSA fee reduction and CPD credits as SANCOLD can now do its own accreditation.



***Prof Will Alexander receiving the SANCOLD Award from Danie***

- Organisation of the 2015 SANCOLD Annual Event. We are particularly honoured that the ICOLD Honorary President Dr Theo van Robbroeck from South Africa will deliver Keynote Addresses. The attendance promises to be a record one for the Cape and we have estimated that 220 delegates will attend;
- Progress with the preparations of the National Flood Studies Programme which has been submitted to the Water Research Commission and the Director General of the Department of Water and Sanitation for consideration;
- SANCOLD Guideline on Risk Analysis: SANCOLD wishes to update the previous work on risk analysis approach towards the safety of dams. The approach is that the WRC would have a comprehensive Project on the topic. SANCOLD Member Louis Hattingh is leading the initiative. Implementation somewhat retarded due to activities associated with ICOLD 2016.
- SANCOLD Publication on *Your Dam*: The Dam Safety Office (DSO) has a 1990 publication entitled *Your Dam*. This publication has several frequently asked questions which a small dam owner would typically ask. The proposal is to review

this publication and issue it as a SANCOLD document which could include other questions like how do you join SANCOLD etc. The DSO will then distribute the publication to dam owners. In short this is a win-win situation for the Dam Safety Office and SANCOLD. It was agreed that SANCOLD would develop this document as a new publication as it also provides a marketing opportunity for the organisation. Management Committee Member, Kelvin Legge, is leading the initiative. *Your Dam* information booklet has identified the need to amend the guidance given to reflect a wider range of owner questions and responses to amended legislation as at June 2015 (this should encompass environmental, water and mineral legislation). SANCOLD members are invited to contribute questions posed by owners that require response in the new digital format.

- SANCOLD Guideline on the Application of Geotextiles in Embankment Dams: SANCOLD will produce a document on Geotextiles for Embankment Dams and ICOLD may then adopt it as a Bulletin. The first draft document is complete. Inputs have been received from a range of South African experts. Mr Kelvin Legge is leading the initiative and made a presentation on the topic at SANCOLD 2014 as well as at the ICOLD Congress in 2015. The revision of Bulletin 55 addressing the use of geotextiles in dams has been accepted in principle by the Technical Committee on Embankment Dams at its meeting in Stavanger, Norway, with a request to include further guidance on determining durability and to include case studies from around the world.
- The various SANCOLD Working Groups for SANCOLD Guidelines and Publications are given below.

### **SANCOLD Working Groups for SANCOLD Guidelines and Publications**

<b>Guideline/Publication</b>	<b>Convenor</b>	<b>SANCOLD Working Group</b>
Guideline on Floods	Jeff Smithers	Andre' Gorgens Jaco Gericke Verno Jonker
Guideline on Risk Analysis	Louis Hattingh	Ivor Segers Chris Oosthuizen Andre' Bester Pilate Moyo Moses Motaung Gerald de Jager Louis Kirsten
Geotextiles for Dams	Kelvin Legge	Prof Fannin Eduard Vorster +Local experts
<i>Your Dam</i> Publication	Kelvin Legge	Leo van den Berg Jan Nortje
<i>Your Tailings Dam</i>	Danie Brink	
Guideline on Ecological Water Reserve	Gerald de Jager	Ms Hermien Pieterse Dr Patsy Scherman
SA Dams for ICOLD 2016	Michelle Blaeser	Authors to be identified

A Young Engineers' Forum in ICOLD was formed in Lucerne in 2012. SANCOLD agreed that SANCOLD should form a similar Forum in South Africa and once operational would liaise with the ICOLD Forum. Mr Motebele Moshodi is the current Chairperson. Currently we have about 50 members of the Forum. It is pleasing to report that the Young Engineers have participated actively in the SANCOLD Conference 2015 and are presenting 24 papers compared to 18 last year. A valuable prize (sponsored by ARQ) is being presented for the best paper and presentation by a Young Engineer.

The other main activity of SANCOLD relates to international matters. SANCOLD represents South Africa on the International Commission on Large Dams (ICOLD). We have representation on 15 of ICOLD's 25 Technical Committees. These Committees are a key activity of ICOLD and require much dedicated effort on the part of the participants. South African Working Groups have been formed for most of these Committees and the names of the current participants are reflected in the tabulation below.

### **SA representatives on ICOLD Committees and SANCOLD Working Groups 2015**

<b>No</b>	<b>Committee Name</b>	<b>Term</b>	<b>SA Representative</b>	<b>SANCOLD Working Group</b>
C	Committee on Hydraulics	2013-2017	Henry-John Wright	
D	Committee on Concrete Dams	2015-2018	Q Shaw	J Kroon H-J Wright A Botha D Ochan Werner Delpont
E	Committee on Embankment Dams	2014-2017	D Badenhorst	H Elges Tyler Bains Johan Beukes K Legge (Geofabrics) Jan Brink Werner Delpont
F	Committee on Engineering Activities Associated with the Planning Process for Water Resources Projects	2014-2017	L Mabuda	Menard Mugumo Jannie van der Mescht
H	Committee on Dam Safety	2015-2018	I Segers	Dr C Oosthuizen L Hattingh L van den Berg Bongani Sibanda Alan Kockott Bandula Kendaragama
I	Committee on Public Safety Around Dams <sup>3</sup>	2013-2016	Ms Zandile Mathe	Vacant-SANCOLD Members please apply to the Secretary
K	Committee on integrated operation of hydropower stations and reservoirs	2015-2019	L Furstenburg <sup>4</sup>	Janus Basson John Sawyer
L	Committee on Tailings Dams	2014-2017	Duncan Grant-Stuart	Andrew Copeland John Wates Steve Dorman Bone Makgekgenene Danie Brink
M	Committee on Operation, Maintenance and Rehabilitation of Dams	2015-2018 <sup>1</sup>	PD Pyke	L Moloji Rep of Umgeni Water
O	Committee on the Register of Dams & Documentation	2014-2017	Mr Bertrand Collet	Leo vd Berg from the Dam Safety Office (DSO).
P	Committee on Cemented Materials Dams	2013-2017	David Cameron-Ellis	Vacant-SANCOLD Members please apply to the Secretary
Q	Committee on Dam Surveillance	2015-2018	Dr C Oosthuizen	A Botha DJ Hagen L Hattingh
R	Committee on Multi-purpose Dams and Reservoirs	2013-2016	Dr Beason Mwaka	Dr Nezar Eldidy Vacant-SANCOLD Members please apply to the Secretary
W	Ad hoc Committee on the Selection of Dam Type	2015-2018	A Chemaly	Vacant-SANCOLD Members please apply to the Secretary
Z	Committee on Capacity Building and Dams	2014-2017	K Wall <sup>2</sup>	

Representation cannot be changed In the case of an **ad hoc committee**. SANCOLD Working Group members make inputs into the ICOLD Committee via the SANCOLD Representative.

1. Reappointed Committee to complete the work of the previous Committee.
2. Corresponding Member
3. SANCOLD applying for membership. Approval by GA in 2014

ICOLD changed its policy in regard to the sale of their publications (Bulletins) and the Executive Meeting in 2010 decided to make them free in electronic form in order to increase dissemination of the information via the National Committees. Draft Bulletins are made available at an earlier stage to enhance distribution. We have received the access code for free downloading and members should approach the SANCOLD Secretary for the access code. This will enable you to register your own direct access to the ICOLD website. Several SANCOLD members have made use of this facility.

South Africa was a prominent participant during the ICOLD Annual Meeting in Stavanger, Norway in 2015. Some of the main highlights are:

- The event was fairly well organised. An attendance of about 1 200 delegates and accompanying persons from 62 countries was achieved. The South African delegation numbered 23.
- South Africa featured in many events.
- The SANCOLD Power Point presentation on ICOLD 2016 by the SANCOLD Chairperson was well received as was the Welcome Invitation by our Zulu Warrior Zuko Vanyaza.
- SANCOLD Chairperson Danie Badenhorst had the singular honour of chairing the Congress Session for Q99 which dealt with *Upgrading and Re-Engineering of Existing Dams*;
- Two SANCOLD members (Kelvin Legge and Louis Hattingh) who were authors of Congress Papers were requested to make verbal presentations for Questions 98 and 97 respectively;
- Dr Jeff Smithers was approved as member for Committee on Flood Evaluation and Dam Safety;
- South Africa had a stand in the exhibition area to promote ICOLD 2016



**South Africa's delegation at the General Assembly: Danie Badenhorst (front), Dr Quentin Shaw (Rear)**



***Chairperson Danie Badenhorst presenting South Africa's report on the hosting of ICOLD 2016***



***Zulu Warrior Zuko Vanyaza delivering the invitation to attend ICOLD 2016***



**SANCOLD Stand: L to R: PCO Gugu Buthelezi, Zuko Vanyaza, Paul Roberts and Janet Roberts**



**Professional Conference Organisers Tanya Angell-Schau and Gugu Buthulezi at the South African stand**





***Danie Badenhorst, Chairperson of Q99 and the other Panel members***



***Kelvin Legge (assisted by Henry-John Wright) delivering his presentation for Q98***



***Louis Hattingh making a strong point during his presentation in Q97***



***South African dinner in Stavanger  
(We could only afford pizza!)***



### **Logo for ICOLD 2016**

The South African National Committee (SANCOLD) made public its intention to bid (in 2013) for the hosting of the ICOLD (International Commission on Large Dams) Annual Meeting in South Africa in 2016. The International Commission on Large Dams (ICOLD) is a non-governmental organisation that provides a forum for exchange of knowledge and experience in dam engineering, construction and operation at the international level. The Organisation leads the profession in ensuring that dams are built safely, efficiently, economically and without detrimental effects for the environment. ICOLD has 96 member countries and holds an Annual Meeting each year in a different country. A Congress is also held every three years. South Africa hosted the following ICOLD events:

- 1978 Annual Meeting in Cape Town;
- 1994 Annual Meeting and Congress in Durban.

Typically some 600 to 1000 delegates attend the Annual Meeting plus 200 to 300 Accompanying Persons. See the ICOLD website [www.icold-cigb.net](http://www.icold-cigb.net)

The week-long ICOLD Annual Meeting consists of the following elements:

- Various meetings of ICOLD Committees and the General Assembly;
- One-day Technical Tours;
- A one-day Symposium;
- Technical Workshops;
- Technical Exhibition;
- Local touristic tours;
- Cultural and social events.

Pre- and Post-Meeting Study Tours (each with a duration of 3 to 5 days) are also to be arranged in South Africa and neighbouring countries.

SANCOLD is already far advanced with planning for the event and will keep the Membership informed of progress. The ICOLD Annual Meeting will be held in Sandton, Johannesburg, from 15 to 20 May 2016. The hosting of the ICOLD Annual Meeting in 2016 offers many benefits to SANCOLD Members such as international exposure and commercial activities with many of the international delegates. We are pleased to report that the South African Cabinet has supported the initiative and that a substantial funding grant will be provided via the Department of Water and Sanitation.

During 2015 a lot of work has been undertaken in respect of the organisation of the Event and the major activities were:

- Meetings of the Local Organising Committee;
- Meetings with the Professional Conference Organiser (PCO);
- Refinement of the meeting programme;
- Selection of study tours;
- Selection of Symposium and Workshop theme and sub-topics;
- Selection of meeting venues and hotels;
- Meeting and with the ICOLD Secretary-General in Norway;
- Budget and programme development;
- Creation of the ICOLD 2016 website [www.icold2016.org](http://www.icold2016.org) which is now live.

We are fortunate in that the PCO (Event Dynamics) of Sandton is the same PCO as for the SANCOLD Conferences 2014 and 2015. This has enabled us to test various systems and fine-tune them for ICOLD 2016. It has also added towards a sound team for the organisation of the Events.

The African Regional Club with Prof Gerrit Basson as Chairperson is going from strength to strength. It met in Stavanger where some 28 persons attended. The ARC website is <http://academic.sun.ac.za/icold-africa>. The website has been developed by Prof Basson. It can also be accessed via the ICOLD website. The new Vice President for Africa Dr Ahmed Chraibi of Morocco will now take over the chair of the ARC.



***African Regional Club meeting in Stavanger: Vice President Gerrit Basson handed over a certificate to outgoing ICOLD President Adama Nombre***

SANCOLD's finances are sound for the current level of activity, but will require supplementation probably via sponsorships for the hosting the ICOLD Annual Meeting. Steps are being taken in this regard. The audited financial statements for 2014 will be presented and discussed at the SANCOLD Annual Meeting in 2015 in addition to the budget for 2016. SANCOLD is busy amending its Constitution in order to ensure compliance with tax exemption under the amended section 308 of the Income Tax Act.

This year has been a very active one and we estimate that so far we have again reached over 90% of the set targets. We look forward to the coming year when we prepare and for ICOLD 2016. It will involve much effort and involvement of the broader membership. We stand to gain many benefits from hosting such an event and I know that we can rely on you for such support and involvement.

Appreciation is expressed to the members of the SANCOLD Management Committee for their support during the year. Thanks are also added to my SANCOLD Colleagues for all of their inputs into this organisation. Special word of thanks to Dr Paul Roberts and the Local Organising Committee members for all their efforts in organising our forthcoming 2016 event which I know will be of a high international standard and highly successful.

*BBBadenhand.*

**Chairperson: SANCOLD  
September 2015**