



SANCOLD ANNUAL REPORT 2016

OVERVIEW 2016

The year 2016 was devoted to the achievement of objectives set by SANCOLD and to the extension of various local and international initiatives. The main focus was the organisation of ICOLD 2016 in Johannesburg. This event was highly successful with about 1100 attendees. No separate SANCOLD Annual Event was organised during the year because of ICOLD 2016.

1. SANCOLD MANAGEMENT COMMITTEE

The 2016 Management Committee structure is given below and it was the same as that in 2015 for continuity purposes because of the importance of ICOLD 2016.

SANCOLD Management Committee 2016

No	Name	Organisation	Term * of Office	Remarks
1	B Mwaka	DWS (P&I)	2016	Reserved position. Re-appointed by DWS.
2	W Ramokopa	DWS (NWR)	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	2016	Co-opted for NFSP
15	D Brink	Jones & Wagener	2016	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 ICOLD Annual Meeting 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 nomination process has started at the time of compilation of this report.

2. OBJECTIVES FOR 2016

The Management Committee set the following objectives for 2016:

International Activities

1. Meaningful participation in ICOLD activities.
2. Organise the ICOLD Annual Meeting in 2016 in Johannesburg.
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

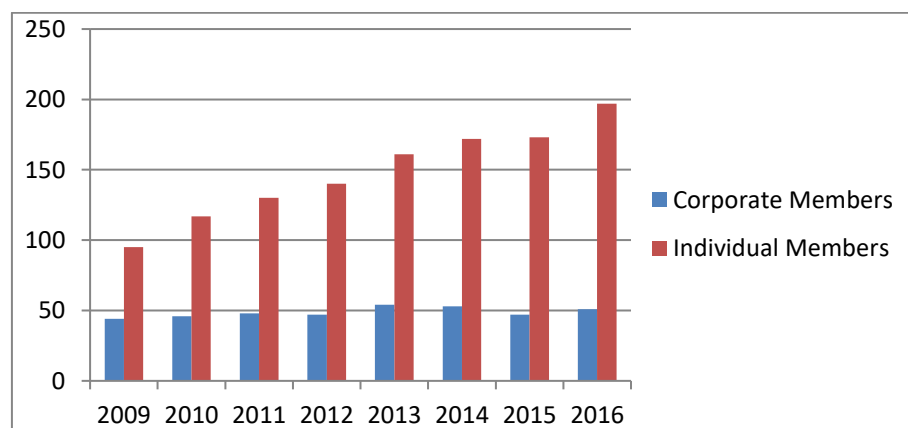
7. Attract additional corporate and individual members.
8. Strengthen the relationship with the DWS Management and Ministry.
9. Advertise a new scholarship for 2017.
10. Preparations for the development of a guideline on floods.
11. Preparations for the development of a guideline on risk analysis.
12. Development on a guideline for the application of geofabrics in embankment dams.
13. 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.
14. Preparation of a publication on Ecological Water Reserve;
15. Preparation of a publication on "*Your Tailings Dam*";
16. Improvement in the dissemination of SANCOLD and ICOLD publications.
17. Continued interaction with members particularly via the regular SANCOLD News and the website.
18. Promote the sale of advertisements on the website.
19. Targeted marketing of SANCOLD.
20. Promotion of the SANCOLD Young Engineers' Forum;
21. Identify and prepare for SANCOLD 2017 Annual Event.
22. Arrangement of workshops

The extent to which these objectives were accomplished is discussed in the paragraphs below.

3. MEMBERSHIP MATTERS

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

Membership Group	2010	2011	2012	2013	2014	2015	2016
Corporate	46	47	46	52	53	47	51
Individual	112	126	141	152	172	173	197



Graphical presentation of membership numbers over time

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

A problem is currently being experienced with e-mail communications with members as it appears as if some members are not receiving the SANCOLD e-mails and notices. Members are requested to ensure that their internet service providers and their systems do not classify e-mails from SANCOLD as “suspicious” or junk mail.

4. SANCOLD LOCAL ACTIVITIES

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 sent to members and African National Committees via SANCOLD News and direct e-mailing;
- Publication of SANCOLD information in local and international journals. SANCOLD is moving towards a similar policy as that of ICOLD in respect of free downloading of its publications for members;
- Consideration of revised guidelines for the SANCOLD scholarship which will link it to SANCOLD priorities;
- 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 ICOLD 2016 photographs and Symposium and Workshop Proceedings/Presentations are being added;
- 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;
- Preparations for the SANCOLD 2017 Annual Conference. The announcement will go out soon;
- 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. Workshops were held in January and November 2016;
- 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. Limited progress made during the year;

- 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. A Workshop on Geofabrics was organised by Kelvin Legge during ICOLD 2016 which adds to the knowledge base;
- Guideline on Ecological Water Reserve: A Workshop on the topic was organised during ICOLD 2016 which will provide useful inputs to finalise the publication;
- The publication on SA Dams was produced in electronic form for ICOLD 2016 with the assistance of Lani van Vuuren of the Water Research Commission. Michelle Blaeser and her team of authors are commended for an excellent publication;
- The various SANCOLD Working Groups for SANCOLD Guidelines and Publications are given below.

SANCOLD Working Groups for SANCOLD Guidelines and Publications

Guideline/Publication	Convenor	SANCOLD Working Group
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 identified

5. SANCOLD YOUNG ENGINEER'S FORUM

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 of DWS is the current Chairperson and also serves on the ICOLD Forum. Currently we have about 50 members of the Forum. The rationalisation of the YEF and its governance is being refined and an election of office-bearers will be held soon. South Africa's Ms Sonel Reynolds was awarded as ICOLD 2016 best presenter.

6. INTERNATIONAL ACTIVITIES

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 16 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 & SANCOLD Working Groups 2016

No	Committee Name	Term	SA Representative	SANCOLD Working Group
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 Delpport
E	Committee on Embankment Dams	2014-2017	D Badenhorst	H Elges Tyler Bains Johan Beukes K Legge (Geofabrics) Jan Brink Werner Delpport
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 ³	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 ⁴	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 ¹	PD Pyke	L Moloï 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

S	Flood Evaluation and Dam Safety	2015-2018	Prof Jeff Smithers	Vacant-SANCOLD Members please apply to the Secretary
W	Ad hoc Committee on the Selection of Dam Type	2015-2018	Vacant	Vacant-SANCOLD Members please apply to the Secretary
Z	Committee on Capacity Building and Dams	2014-2017	K Wall ²	

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 to members 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 and other members are encouraged to make use of this excellent knowledge-base.

7. HOSTING OF ICOLD 2016 IN JOHANNESBURG



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.

In general the 2016 event was very successful as described in the words of the ICOLD Secretary General to us:

***“I would like to thank you again and again for the really strong efforts you deployed, with your team, for the great success of our ICOLD ANNUAL MEETING 2016.*”**

This event in Joburg will remain as one of the best ICOLD events recently organized and will contribute to perpetuate the reputation of quality that ICOLD has built across the years.”

ICOLD 2016 was attended by 1074 delegates from all over the world. Some 77 countries were represented of which 24 were from Africa. 264 delegates and accompanying persons attended from South Africa.

ICOLD 2016 went off very smoothly and based on the many feedbacks that we received it was the best organised ICOLD meeting ever! The decision to appoint the PCO for two SANCOLD Conferences prior to ICOLD 2016 paid dividends in setting up systems and in making the necessary preparations. The Local Organising Committee played a significant role prior to and during the event. The system of portfolio responsibilities worked well and our thanks are extended to these persons for the many hours they devoted to the matter.

Registration numbers are most important and are directly linked to the financial success of an event. The fees were based on a break-even scenario of 700 paying delegates. In general the actual registrations closely followed the projections. This has resulted in a very modest surplus which will be used to further the interests of dam engineering in Southern Africa.

The General Assembly is shown in the following Photograph:



84th ICOLD General Assembly

Congratulations are extended to Sonel Reynolds for the ICOLD YEF award for the best presentation and to Paul Roberts for the award of ICOLD Honorary Membership.



Sonel Reynolds



Paul Roberts with ICOLD President Anton Schleiss (Left) and the ICOLD Secretary General Michel de Vivo (Right)

The organisation of the 84th ICOLD Annual Meeting can be viewed as a Project. The many years of detailed preparation by the LOC and PCO paid dividends in that an excellent event eventuated. There were some problems, but these did not detract from the overall success of the meeting. My appreciation goes to all including the Department of Water and Sanitation, all sponsors, but to all SANCOLD members who were involved in the organisation of the event for the sterling work.

8. AFRICAN REGIONAL CLUB

The African Regional Club is organised by the ICOLD Vice President for Africa Dr Ahmed Chraibi of Morocco. For the first time in its existence, simultaneous English-French interpretation was provided in Johannesburg which greatly improved communications.

9. FINANCIAL MATTERS

SANCOLD's finances are sound for the current level of activity. The audit for the current year is much more extensive than past years because of ICOLD 2016 and has still to commence. Members will be supplied with feedback once this has been completed. A modest surplus has however been obtained. This surplus will be used for growing dam engineering in South Africa.

10. CONCLUSION

- This year has been a very active one and we estimate that so far we have reached over 90% of the set targets.
- SANCOLD Individual membership now 200.
- ICOLD 2016 was a great success with many compliments received. Special word of thanks to Dr Paul Roberts, the Local Organising Committee members, Department of Water and Sanitation and all SANCOLD members contributing for all their efforts in organising the very successful 2016 event.
- Recommendation: 2017 to be devoted to effective planning for even greater involvement to reach goals.
- To all SANCOLD members, thank you for your support during 7 years in the chair.
- My best wishes to SANCOLD members and the new chair taking SANCOLD to the next important step for developing dam engineering in South Africa, Africa and the World.

BBBadenhand.

**Chairperson: SANCOLD
November 2016**