



## British Dam Society Working Groups – an update

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### 1. Introduction

Following the launch of the British Dam Society (BDS) Strategy (Williamson 2016), the BDS Committee set up five Strategic Objective Working Groups (SOWGs) with the aim to make plans and progress towards delivering the five strategic objectives and the vision and values of the BDS. This article provides an update on the work of the SOWGs over the first six months and their plans for the coming year.

### 2. The BDS' strategy: its vision, values, and objectives

Underpinning the work of the SOWGs are the BDS' values to be diverse and inclusive, to enthuse the next generation of dam professionals, to be trusted, honest and ethical, and to be a modern-thinking, innovative and respected organisation.

Additionally, the ultimate goal of the SOWG's work is to achieve the BDS' strategic vision to be "a growing, inclusive and vibrant society; sharing knowledge and improving reservoir safety"; as well as to follow the BDS' Constitution (BDS 2014), with its goals to advance the education of the public and the profession and encourage improvements in the planning, design, construction, maintenance, operation and safety of dams, and to form the UK section of the International Commission on Large Dams (ICOLD).

### 3. Structure of the working groups

The five SOWGs have taken the titles of the five objectives described in the BDS Strategy:

1. Membership SOWG
2. Knowledge SOWG
3. Professionalism SOWG
4. Education SOWG
5. Informing opinion SOWG



The Committee Members assigned to each SOWG are as follows:

## **Membership SOWG**

*To increase and diversify membership of the BDS, Supervising Engineer & All Reservoirs Panels*

BDS Hon Technical Secretary & Group Leader:	Andrew Pepper
BDS Chairman:	Tracey Williamson
Website Support:	Andrew Thompson
BDS-YP Chair:	Patrick Maguire

## **Knowledge SOWG**

*To improve the quality and relevancy of our knowledge database*

Editorial Panel Chair and Group Leader:	Rachel Pether
Editor, Dams & Reservoirs Journal and Reservoirs Committee:	Anthea Peters
London Meetings:	John Chesterton
Research Safety Advisory Group and Immediate Past Chairman:	Andy Hughes
Website Support:	Chris Vyse

## **Professionalism SOWG**

*To improve knowledge dissemination and communications to our membership*

Technical Site Visits and Group Leader:	Brett Marshall
Website Manager:	Matthew Atyeo
Regional Meetings:	Duncan Scott
BDS Conference (2018) Organiser:	Rachel Davies
BDS-YP Events Champion:	David Steven
London Meeting Support:	Keith MacDonald

## **Education SOWG**

*To enthuse the next generation of dam professionals, engineers and technicians*

Colleges Liaison and Group Leader:	Paul Farnell
Schools Liaison:	Liz Rivers
Universities Liaison:	Catherine O'Sullivan
Competitions:	Lesley Dunne
BDS-YP Mentoring Champion:	Jordan Langbridge

## **Informing Opinion**

*To improve links and communications with external organisations, institutions and the public*

Media and Group Leader:	David Neeve
BDS Vice Chairman and ICE Water Panel:	Alan Warren
BDS-YP Social Media Champion:	Jeremy Fletcher



Over the past six months, the SOWGs have met to consider how they may accomplish a realistic and measurable improvement within the following year to demonstrate progress towards achieving the vision, values and objectives of the BDS.

Each SOWG has agreed a number of new specific initiatives to undertake this year, alongside the ongoing initiatives that the Committee has traditionally undertaken. These have been compiled into detailed action plans, including targets and measures of success, for each of the five strategic objectives. A summary of these plans are provided in the following sections.

**4. Membership SOWG plan**

*To increase and diversify membership of the BDS, and also the Supervising Engineer & All Reservoirs Panels*

<b>Membership SOWG initiative</b>	<b>Activities for the initiative</b>	<b>Indicative programme</b>	<b>Measures of success</b>
1. Widen the age profile in the BDS	The current “Young Engineering Forum” (YEF) to be renamed “Young Professionals” (YP) and therefore open up the initiative to a more diverse group within the industry (alongside initiatives 2 and 3 and the separate YP initiatives).	Agree change of name by end May 2017	100% increase in YP Membership by 2022
2. Improve the types and numbers of disciplines & grades within the BDS	Engage with disciplines and grades other than engineers such as Landscape Architects, Ecologists, Geologists, Hydrologists, Technicians and specialist contractors (for example, divers). By creating links with these disciplines, this would increase and diversify membership further.  Approach other publications from these disciplines to include articles on how that discipline features in dam engineering, and to advertise BDS activities and events (for example, call for papers, competitions and conferences) in these publications.  Invite other disciplines to write a paper within Dams and Reservoirs.	Contacts made by end Dec 2017  Articles/adverts to be published from 2018 onwards	20 new members per year commencing January 2018, with a target to achieve at least half this target in 2017
3. Increase the number of corporate memberships	Nine of key companies within the industry are currently not listed as Corporate Members. BDS Vice Chairman to contact each company.  Improve benefits to Corporate Members, e.g. logos on BDS website with links to members’ websites; rolling presentations identifying Corporate Members at evening meetings.	Contacts to be made before end Dec 2017 to allow billing from 2018	3 new corporate members per year commencing January 2018



Membership SOWG initiative	Activities for the initiative	Indicative programme	Measures of success
<p>4. Improve links with the ICE Reservoirs Committee</p>	<p>Offer to share and advertise any of the Reservoir Committee's current proposals to increase the diversity and numbers of Supervising Engineers (SE) and All Reservoir Panel Engineers (ARPE) using the BDS' Journal and website. BDS Committee Members currently serving on the Reservoirs Committee to propose the suggestion.</p> <p>Publish an article in the BDS Journal about how the Reservoirs Committee operates and how to get involved on the Committee. BDS Committee members currently serving on the Reservoirs Committee to develop this.</p>	<p>Formal letter to Reservoirs Committee sent by Sep 2017</p> <p>Article prepared for Dams and Reservoirs in Nov 2017</p>	<p>Improved links with and understanding of Reservoirs Committee.</p> <p>Article published in the D&amp;R.</p>
<p>5. Improve the gender profile of the BDS and Panels</p>	<p>In June 2014, the percentage of females in ICE overall was 15%. The ICE stated target was to increase this to 30% in the medium term and 40% in the long term, but neither of these time periods were specified. Currently the percentage of females in the BDS is 12%. It should be noted that this statistic rises to 18% for members less than 56 years old and 21% for members less than 46 years old. It is considered that as the diversity of the BDS membership is improved further (by these initiatives), this statistic will also improve over time. Improvement to the diversity of the BDS membership will eventually influence and be reflected within the numbers of SEs and APREs.</p>	<p>Dependant on other initiatives, especially 1, 2 and 3 above.</p> <p>Monitor and plot changes of the gender percentages on a six-monthly basis.</p>	<p>Match the ICE targets for increased diversity</p>
<p>6. Assist with training SEs and ARPEs</p>	<p>The BDS-YP is developing a 'mentor scheme' as part of their YP Action Plan, which will be encouraged further by the BDS Committee.</p> <p>Compile a published list of all SEs and ARPEs who are prepared to have potential applicants accompany them on inspections.</p>	<p>Prepare list by end Dec 2017</p>	<p>List published on the BDS website</p>



**5. Knowledge SOWG plan**

*To improve the quality and relevancy of our knowledge database*

Knowledge SOWG initiative	Activities for the initiative	Indicative programme	Measures of success
1. Improve the knowledge database on the BDS website	<p>Update and extend list of guidance documents referenced on the BDS website, and provide access to additional overseas guidance documents.</p> <p>Raise awareness that BDS members have access to ICOLD Bulletins.</p>	Both by end Dec 2017	<p>List updated.</p> <p>Membership aware of means to access ICOLD Bulletins</p>
2. Maintain the quality and timeliness of papers in the BDS Journal	<p>Return to four issues per year of Dams &amp; Reservoirs Journal for 2018.</p> <p>Improve the peer review process by agreeing and recording the annual editorial &amp; publication process and programme deadlines for all parties involved to follow. Editor to feedback on any issues at Committee meetings.</p> <p>Editorial Chair to lead on sourcing suitable papers according the requirements of the process programme.</p>	<p>Return to four issues per year for 2018</p> <p>Process and programme in place by Dec 2017</p>	<p>Four issues published in 2018</p> <p>All parties keep to the deadlines</p> <p>High quality, timely papers published</p>
3. Maintain the quality of BDS evening meetings	<p>Set criteria against which the programme of future presentations will be assessed to ensure diversity of content and presenters.</p> <p>Analyse and monitor feedback at each Committee Meeting.</p>	Develop criteria and commence reviews by Nov 2017	Positive feedback following events
4. Improve liaison with RSAG	<p>Appoint a permanent representative from the BDS Membership to sit on RSAG.</p> <p>BDS representative to feedback to the wider BDS membership on the activities of RSAG.</p> <p>Provide RSAG with feedback from the BDS membership.</p>	<p>Appoint representative to sit on RSAG by Nov 2017</p> <p>Feedback six-monthly</p>	Secure permanent position of a BDS representative on RSAG
5. Fund an Undergraduate Research Scholarship	<p>Liaise with RSAG regarding a relevant topic and obtain a scope. Arrange a suitable mentor and representatives from BDS and RSAG.</p> <p>Prepare a 'tender' and send to universities. Evaluate and agree preferred student. Award scholarship.</p> <p>Monitor and arrange reviews and feedback.</p>	<p>Scope and mentors agreed by end Sep 2017</p> <p>Information to Universities by end Nov 2017</p> <p>Tenders awarded by May 2018</p> <p>Work presented by end Dec 2018</p>	Successful award of scholarship and delivery of quality work in 2018



**6. Professionalism SOWG plan**

*To improve knowledge dissemination and communications to our membership*

Professionalism SOWG initiative	Activities for the initiative	Indicative programme	Measures of success
<p>1. Increase the use of the BDS Website and social media</p>	<p>Consider including a 'project portal' on the BDS website to provide information on current dam projects.</p> <p>Consider including a 'discussion forum' area on the BDS website for members to exchange ideas and views.</p> <p>Survey members to find out how they want to be contacted and what information they want to see.</p> <p>Work with the YP Social Media Champion to progress the use of LinkedIn for sharing and discussing information, projects and issues.</p>	<p>Proposals for the 'portal' and 'forum' to be presented by end Dec 2018</p> <p>Survey to be prepared by end Oct 2018</p> <p>New pages on website by end Jul 2018 if appropriate</p>	<p>Feedback received and implemented as relevant</p> <p>Good use of new pages on the website if implemented</p>
<p>2. Improve the management of the BDS Website</p>	<p>New website to provide BDS with the ability to manage the content on each page of the BDS website.</p> <p>New management protocol to share this role. Each SOWG will have responsibility to update and regularly review content of the webpages assigned to them.</p> <p>Peer review process to be implemented to sign off new content or changes to website pages. Executive Committee to review and approve changes.</p> <p>Plot and analyse 'hits' for each webpage and feedback at Committee Meetings.</p>	<p>New website and protocols in place by end Jan 2018</p> <p>Feedback on website use at each Committee Meeting.</p>	<p>Positive feedback received on the professional appearance and increasing 'hits' / use of the website.</p>
<p>3. Improve attendance at BDS technical meetings</p>	<p>Fund a trial for a regional local hub meeting with an expert in attendance.</p> <p>Monitor and plot attendance in London, in the 'hub' and online and feedback at Committee Meetings. Focus resources where numbers increase.</p> <p>Seek opinion for running a workshop prior to a technical evening meeting to discuss other topics.</p> <p>Consider moving the committee meeting and technical meetings to other regions; and consider timings and durations of these meetings.</p> <p>Consider collaborating with other professional bodies, organisations, sectors and private owners to hold other events / meetings.</p>	<p>Trial 'local hub' meeting undertaken by end Nov 2017</p> <p>Baseline of attendance recorded by Jan 2018</p> <p>Proposal for other three initiatives presented by end Dec 2017</p>	<p>Attendance increased by 10% from Jan to Dec 2018</p>



<b>Professionalism SOWG initiative</b>	<b>Activities for the initiative</b>	<b>Indicative programme</b>	<b>Measures of success</b>
4. Improve attendance at SE/IE Forums and BDS Conferences	Review feedback from Forums/Conferences and present suggested improvements for the next event organisers.	Improvement suggestions from the SE Forum 2017 presented by end Oct 2017 Improvement suggestions from the 2018 Conference presented by end Jan 2019	Increased attendance by 10% each year
5. Improve BDS branding	Review BDS logos in current circulation and produce standard logo(s) to be used. Produce proforma templates for all BDS communications and publicity.	Agreed logo in place by end Oct 2017 Templates in place by end Apr 2018	Only the standard logo and templates used

**7. Education SOWG plan**

*To enthuse the next generation of dam professionals, engineers and technicians*

<b>Education SOWG initiative</b>	<b>Activities for the initiative</b>	<b>Indicative programme</b>	<b>Measures of success</b>
1. Increase the use of BDS teaching resources in schools	Improve materials available through development of science-based materials for KS3/KS4/A-levels. Improve access via BDS website. Identify other organisations that are used by teachers / schools and provide them with our materials, e.g. Tomorrow's Engineers website. Promote through ICE website / events. Monitor use on TES, BDS and Geographical Association sites. Download 'hit' figures from other organisations' websites. Survey teachers on their use of the materials. Consider expanding to college based materials (HND, etc).	New teaching materials available for marketing by end Nov 2017 Marketing and promotion by end Jan 2018 Survey completed by end Oct 2018 Proposal for new college materials by Nov 2018	Positive response from marketing campaign Agreement from other sites to promote our materials Good hit figures Positive survey feedback



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Education SOWG initiative	Activities for the initiative	Indicative programme	Measures of success
<p>2. Increase engagement with Arkwright Scholarship students / schools</p>	<p>Contact Arkwright Students' schools for feedback on how the funding was used.</p> <p>Promote the Student Competition; our teaching resources; and offer to provide a presentation on dams to these schools.</p> <p>Obtain feedback from the mentors and students. Gauge how the mentoring has influenced the student's likely direction in terms of prospective career.</p> <p>Consider initiating a 'challenge project'.</p> <p>Promote the scheme through the Journal and website and spread the positive message about companies that get involved in the mentoring.</p> <p>Use Twitter and other social media to promote the scheme.</p> <p>Promote and discuss at the 2018 Conference.</p> <p>Establish a database of willing mentors in the administrator section of the website.</p> <p>Start planning for new Scholarships in 2019.</p>	<p>Feedback received by end May 2018</p> <p>Proposal for the 'challenge project' presented by end Feb 2018</p> <p>Articles prepared for the journal and website by end Aug 2018</p> <p>Database prepared by end Oct 2018</p> <p>Proposal to be presented for 2019</p> <p>Scholarships by end Jul 2018</p>	<p>Positive feedback from schools, mentors and students.</p> <p>Students advise the mentoring has influenced their career direction in any form of engineering.</p> <p>Take up of offers and competitions</p> <p>Articles published in the Journal and online</p> <p>Database completed</p>
<p>3. Increase the engagement of college / university students with BDS activities</p>	<p>Review the value of the Student Paper Competition following the 2017 competition and consider alternatives if unsuccessful.</p> <p>Consider running a "Best Dissertation" Competition in 2018.</p> <p>Increase the visibility of the BDS at select college/university events to promote the BDS and Dam Engineering.</p>	<p>Feedback on success of the competition any proposed changes by end Jan 2018</p> <p>Exhibition material, flyer and identify events by end Dec 2017</p>	<p>Increased entrants in the Student Competition. Minimum of 5 entries in 2017</p> <p>Attend two events in 2018</p>
<p>4. Increase the awareness of dam engineering in universities and colleges</p>	<p>Compile a list of BDS members, willing to present to universities and colleges.</p> <p>Determine a list of universities and colleges running civil engineering degree and HND courses with a suitable academic contact.</p> <p>Compile a presentation on dam engineering. This presentation to be used by the presenter to make it relevant to the locality and audience.</p> <p>E-mail selected universities/colleges offering an hour presentation on dam engineering.</p>	<p>List of presenters and universities by end Dec 2017</p> <p>Contacts made by end Jan 2018</p> <p>Presentation prepared by end Jan 2018</p> <p>Arrange presentations by end Mar 2018</p>	<p>Increased numbers of presentations given to universities and colleges – 5 in 2018.</p> <p>Good feedback received on the presentations</p>





Education SOWG initiative	Activities for the initiative	Indicative programme	Measures of success
	<p>Compile a list of interested universities/colleges so that BDS is able to focus other efforts (competitions etc.)</p> <p>Obtain feedback on how presentations were received and record this in the database.</p>	Offer the wider initiatives and ask for feedback following the presentations.	Increased participation in student competitions as above.

**8. Informing opinion SOWG plan**

*To improve links and communications with external organisations, institutions and the public*

Informing opinion initiative	Activities for the initiative	Indicative programme	Measures of success
1. Improve and increase the use of Social Media	<p>Work with the BDS Webmaster to incorporate automatic links in the new website, so that Twitter and LinkedIn updates are added to the BDS website. Use RSS feeds in the new website to automatically disseminate web page updates to subscribers.</p> <p>Look into other social media platforms, group them to formulate the pros and cons and present a proposal to the Committee.</p> <p>Prepare a proposal with the aim to increase the usage of Twitter during the 2018 Conference for both people at, and away from, the conference. Encourage live questioning from the audience using social media on the subject discussed on stage.</p> <p>Promote the BDS Movie.</p>	<p>Links and feeds included on the website by end Dec 2017</p> <p>Proposal prepared for use of other social media by end Dec 2017</p> <p>Proposal prepared for the Conference by Feb 2018</p>	<p>200 followers on Twitter and 200 members on LinkedIn by end of Dec 2018</p> <p>500 views of the BDS Movie by end 2017 and 1000 by end 2018</p>
2. Improve the education of the public on dam safety with positive messages	<p>Support the Dolgarrog Dam memorial improvement work and explore opportunities to help current proposals to develop a visitor centre at the site. Review whether BDS should invest in the site for the longer term.</p> <p>Prepare a proposal for a short film ('2025: 100 years on Dolgarrog') on the clean-up, visitor experience, dam design/build, disaster photos and why this shouldn't happen again with the aim to share it with dam visitor centres, museums and put on social media.</p> <p>Review topics for a public evening meeting similar to the Dale Dyke talks.</p> <p>Develop a slide pack for universities, schools and public meetings on 'what would we do without dams', and how successful legislation has been in preventing failures.</p>	<p>Proposal for funding on Dolgarrog submitted by Oct 2017</p> <p>Proposal for funding a short film by Oct 2017</p> <p>Review topics for a public meeting by Dec 2017</p> <p>Develop a slide pack by Apr 2018</p>	Improved public perception of the role of BDS/ICE in keeping dams safe



Informing opinion initiative	Activities for the initiative	Indicative programme	Measures of success
<p>3. Improve our influence and engagement with ICOLD</p>	<p>Promote and circulate ICOLD Technical Committee vacancies for UK Representatives more widely to BDS Members that have the resources to fully represent the UK and BDS at ICOLD conferences.</p> <p>Review the ICOLD Informing Opinion Bulletin and align the 2018/19 SOWG DAP with this.</p> <p>Engage with the ICOLD YEF and influence their action plans.</p> <p>Review what ANCOLD are doing in relation to research and other initiatives and feedback on good ideas to take forward.</p>	<p>Promotion of vacancies by Apr 2018</p> <p>Review Bulletin by Dec 2017</p> <p>Review YP Plans by Dec 2017</p> <p>Review of ANCOLD by Apr 2018</p>	<p>All relevant ICOLD Committees represented</p> <p>Increase in attendance at ICOLD 2018</p> <p>Increased interaction with other ICOLD Committees</p>
<p>4. Improve our links with Government organisations</p>	<p>Arrange regular calls and meetings with Defra, SEPA, NRW, EA and NI DoI.</p> <p>Use BDS website links to disseminate information from government organisations, e.g. EA Bulletin for Supervising Engineers on Statements.</p> <p>Consider what the BDS should get involved in, e.g. work on providing evidence for small raised reservoirs to be regulated, and explore new avenues for influencing policy. Submit a proposal to the Committee on this.</p>	<p>First meeting arranged by Dec 2017</p> <p>Proposal submitted by Dec 2017</p>	<p>Closer ties with government agencies to increase our influence</p>
<p>5. Improve engagement with other professional institutions, expert panels and learned societies</p>	<p>Attend the ICE meetings for the Associated Special Knowledge Societies and feedback on ideas and potential initiatives to the BDS Committee and incorporate in the 2018/2019 SOWG DAP.</p> <p>Attend Water Panel meetings and feedback to the BDS Committee.</p> <p>Liaise with and assist the Membership SOWG with the initiative to publish D&amp;R articles in other journals. Liaise with the Editorial Panel of D&amp;R to generate authors.</p> <p>Establish if there are 'dams' groups in other institutions such as within the Institution of Mechanical Engineers. Offer to present to these groups and/or at other professional institutions conferences and events.</p>	<p>Initiatives incorporated in the DAP by Mar 2018</p> <p>Water Panel Report at each Committee Meeting</p> <p>Ideas for papers by Apr 2018 and one paper published by Oct 2018</p> <p>Presentation undertaken by Apr 2018</p>	<p>Ideas incorporated in the BDS DAPs from other societies</p> <p>One paper published in another journal</p> <p>One presentation undertaken at another institution</p>



## **9. Conclusion**

This article describes the detailed action plans that have been developed by members of the BDS Committee in the five SOWGs for each of the five strategic objectives.

Progress on the initiatives within each of the plans will be reported periodically on the BDS website and in the Chairman's Annual Report.

Your feedback, comments and ideas on these plans would be welcome at any time. Contact details for the SOWG Group Leaders can be found on the BDS website.

The intention is that these plans will be reviewed and refreshed annually, to ensure the BDS is working towards its goal to be a growing, inclusive and vibrant society; sharing knowledge and improving reservoir safety.

## **Acknowledgements**

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