Review of Cornwallis Workshops I to IX (1996 – 2004)

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Mat Brazier graduated from Cranfield University with an Honours degree in Aeronautical Engineering. After leaving university he joined DERA, now Dstl, and started work in the field of Operational Analysis. Initially working in support of UK attack helicopter upgrades and AH effectiveness after 2 years Mat moved to the Support to Operations group. Within this group he has provided OA support to numerous military headquarters including MND(SE) in Iraq and HQ ARRC in Germany, as well as providing the necessary training for analysts to deploy to operational theatres.

ABSTRACT

The Cornwallis Workshops began in 1996 and they have taken place yearly since then. A considerable body of knowledge in the general area of Peace Support Operations now exists as the Proceedings of the Workshops. In addition over 200 attendees have had experience of the Cornwallis concept. To help focus discussions at the tenth Cornwallis Workshop on the future direction of the Workshops a study was carried out to investigate the breadth of analyses of presented papers and to elicit opinions from attendees as to the usefulness of the Workshops.

INTRODUCTION

The aim of this investigation was to review the papers that have been presented at previous Cornwallis Workshops in order to inform the debate about the future direction of the Cornwallis forum. In addition a questionnaire was developed to gather opinions from attendees on the utility of Cornwallis and to garner ideas for improvements for the future.

METHODOLOGY

Analyses of the following topics were carried out:

- 1. Papers Presented: Number of Papers, Publisher, Topic.
- 2. <u>Attendance:</u> Profession, Nationality, Re-attendance.
- 3. <u>Questionnaires:</u> Method, Returns, Usefulness of Cornwallis, Possible Improvements

PAPERS PRESENTED

- 1. Review the number of papers presented and the influence of contemporary operations.
- 2. Review top authors.
- 3. Develop taxonomy for analysis of topic covered by paper.
- 4. Review topics of papers (over time).

The number of papers correlates well with the attendance numbers (see Figure 1) with two Peaks in 1999 and 2004. Interestingly there is no apparent relationship to operations

REPORTS BY CONTRIBUTOR

The single largest contributor has been George Mason University (22 Papers) — this is not altogether surprising as the University has a dedicated Department for Peace Support operations and the Chair of Cornwallis is the Professor in that Department (Figure 2). The next largest contributor have been the papers presented by a variety of authors from the UK Ministry of Defence agency — initially called DERA and more recently Dstl (20 Papers) — again not too surprising as the UK has had long experience in Peace Support Operations. The Canadian National Defense HQ has also contributed 11 papers. It should be recognised that a number of companies have been consistent supporters of Cornwallis presenting on a number

of occasions- for example Institute of Defence Analysis (US), Dornier (GE) and Systems Consultants Service Ltd. (UK).

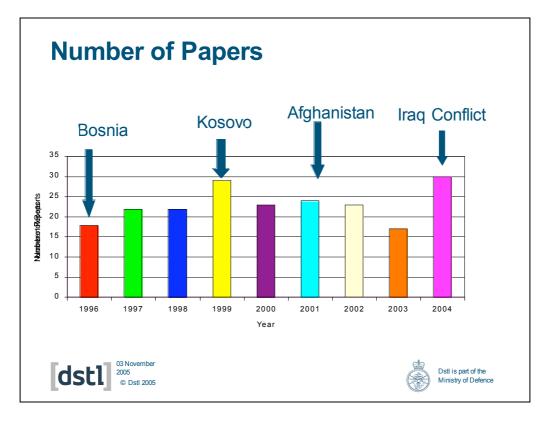


Figure 1: Number of papers by year.

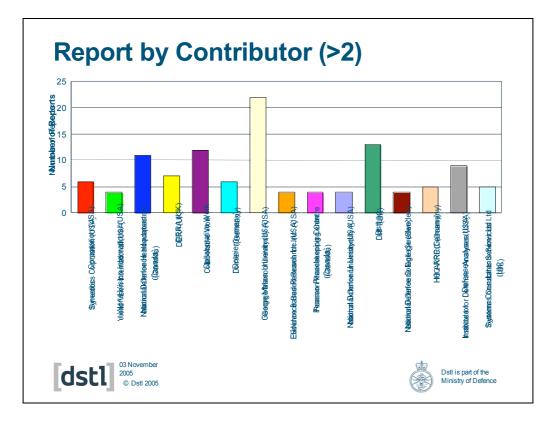


Figure 2: Reports by Contributor.

PAPERS BY TOPIC

A brief literature review of possible taxonomies of technical papers was conducted. Two were considered in more detail- firstly the methodology used by Bathe et al to analyse the 20 years of papers presented at ISMOR (International Symposium of Military Operational Research) and secondly the methodology developed by Dean Hartley in the early days of Peace Support Operations. It was considered that neither of these taxonomies was particularly suitable for the present task. Instead a new taxonomy was developed utilising the categories from the early Cornwallis books and aspects of the Bathe and Hartley work. This has lead to a taxonomy whereby each paper may appear in more than one category (Figure 3). The categories identified are:

- Case Study.
- Decision-Making.
- Discussion notes.
- Domain Description.
- Exercise Support.
- Force Structure.
- Historical Analysis.
- Inter-Agency Co-ordination/Co-Operation.
- Methodology,
- Military Doctrine.
- NGO Policy.
- Operational Lessons Identified.
- Operational Task Analysis.
- Planning.
- Threat Assessment.
- Modelling, Tools and Techniques.
- Analysis.
- Operation Case Study.

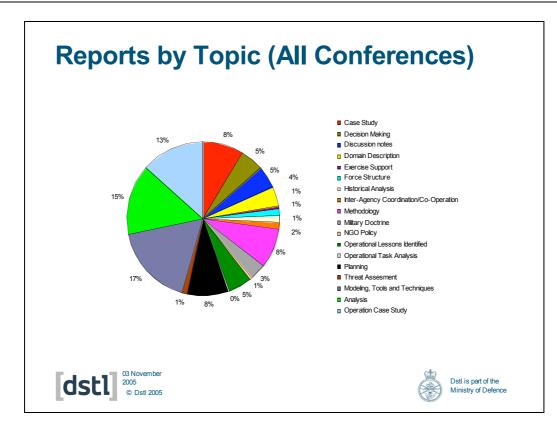


Figure 3: Reports by Topic (all Cornwallis Conferences).

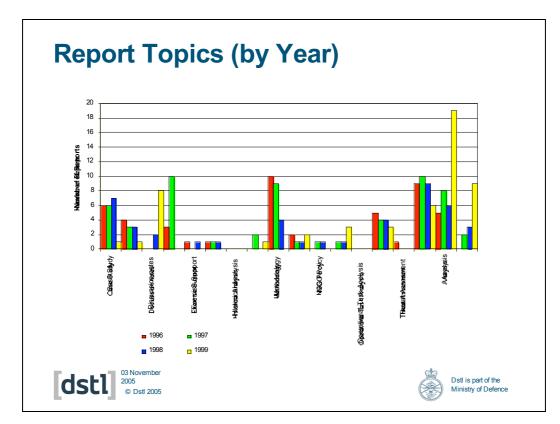


Figure 4: Report Topics (by year).

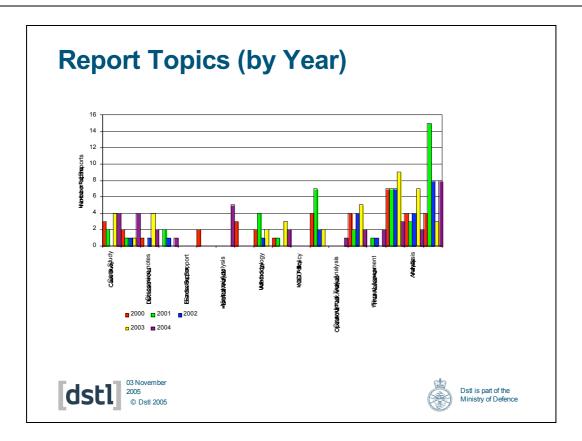


Figure 5: Report Topics (by year).

Figure 3 clearly identifies the major topics covered: namely Modelling Tools and Techniques, Analysis and Operations Case Studies. These three categories make up 45% of all the papers presented. Considering the topics presented at each workshop leads to the conclusions that Methodology papers were significant for the first two years then they dropped off (Figures 4 and 5). There is a greater occurrence of Operation Case Studies since 1999. Examples of Modelling, Tools and Techniques have fairly consistent in all Workshops other than a surprising drop in numbers in 2004.

ANALYSIS OF WORKSHOP ATTENDEES

The yearly attendance has consistently been between 30 and 40 (Figure 6). This is due to a deliberate policy by the Program Committee to keep the Workshop at a level which allows a free flow of ideas and participation from all attendees – experiences from participants have shown that this is difficult to achieve in meetings of more that \sim 50. The exception to this is 2003 (Cornwallis VIII) when only 25 attended- almost certainly due to a number of regular participants being directly in Iraq operations.

Analysis of the profession of attendees sees a predominance of government (35%), contractors (26%) and academics (20) — this is not surprising given the domain from which Cornwallis has developed i.e. the military operational research community (Figure 7). Somewhat disappointing are the low numbers of International Organisations (2%) and Non Governmental Organisations (4%). The analysis of nationality of attendees clearly

demonstrates the large numbers of US (45%) and UK (24%) with other regular attendees from Canada, Sweden and Germany (Figure 8).

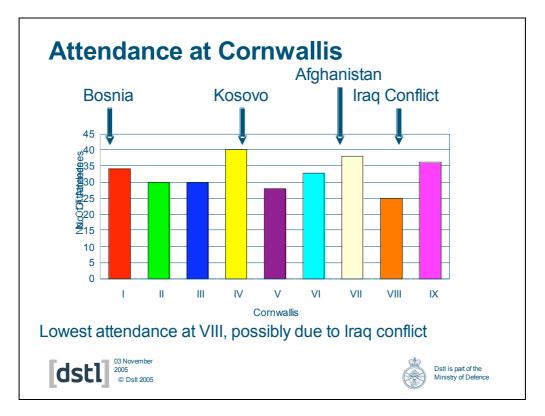


Figure 6: Attendance at Cornwallis by year.

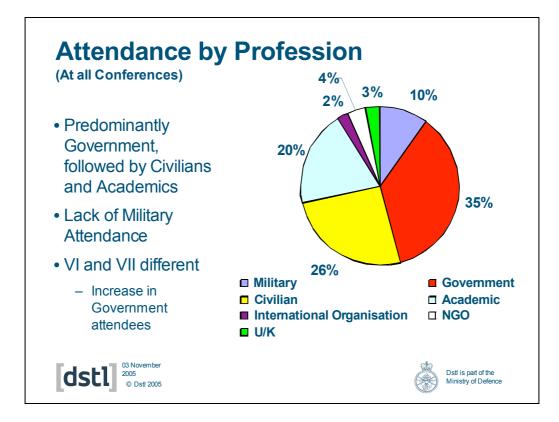


Figure 7: Attendance at Cornwallis by profession.

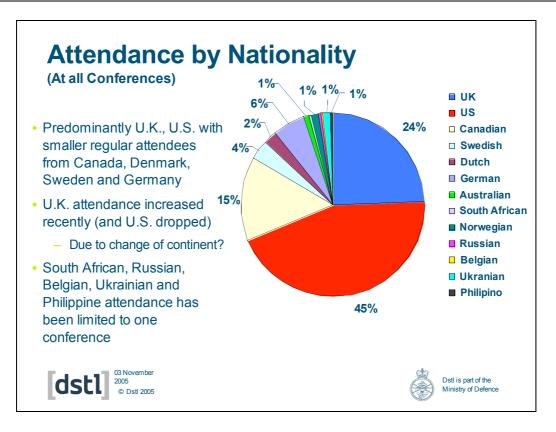


Figure 8: Attendance at Cornwallis by nationality.

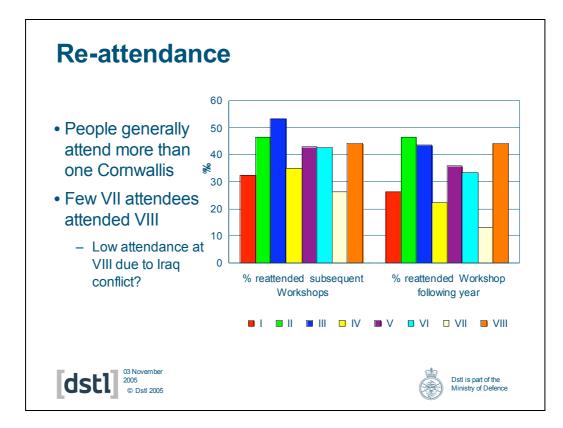


Figure 9: Re-attendance at Cornwallis.

A simple analysis of attendees shows that a reasonably high proportion (approximately 30-40%) attends more than one conference (Figure 9) One interesting feature was the low reattendance from Cornwallis 2002 (VII) to Cornwallis 2003 (VIII) again perhaps due to the Iraq conflict.

QUESTIONNAIRES

A simple questionnaire was produced to elicit opinions on a range of topics about Cornwallis. It is at Annex A. It was envisaged that the questionnaire would be self explanatory and take no more that 30 minutes to complete. It was emailed to all attendees at previous Workshops. It became clear that many email addressees would be out of date – in these instances Program Committee members were asked to pass on the questionnaires to those whose address had changed. The initial response was very poor- with only 28 out of 205 being received. However an additional 13 were received during Cornwallis X. Thus the Confidence Level (from all returns) was estimated as being at the 70% confidence level that results are within +/- 10%. Possible reasons for the poor return rate could be (primarily) — out of date contact details (email addresses), the high workload of attendees, or simply a lack of interest!

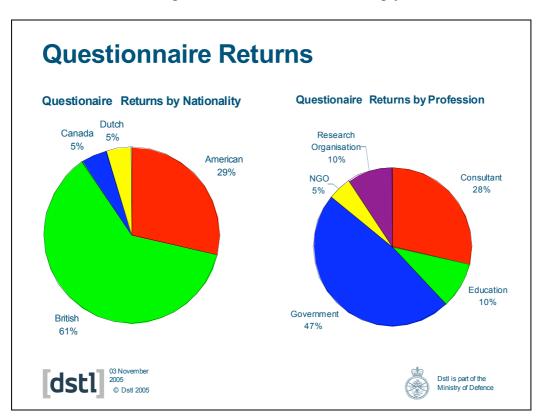


Figure 10: Questionnaire returns by nationality and profession

It was not surprising to see that the majority of returns came from UK and US attendees as there have been the predominant nations but in total only 6 nations were represented. Again most returns were from the government, education and contractor domains (Figure 10). Whilst it was felt that the work of Cornwallis aided the ability to conduct work in Peace Support Operations only a few papers were directly used (Figure 11).

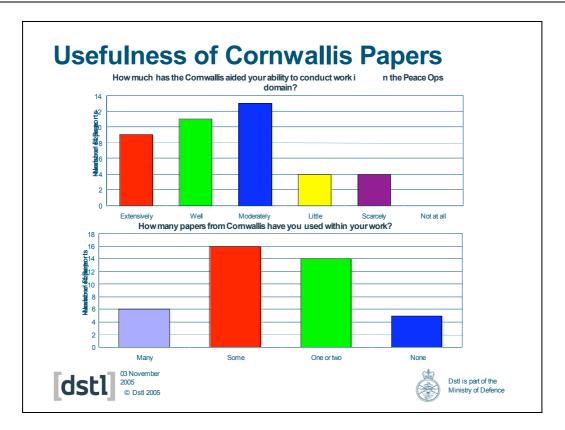


Figure 11: Usefulness of Cornwallis papers.

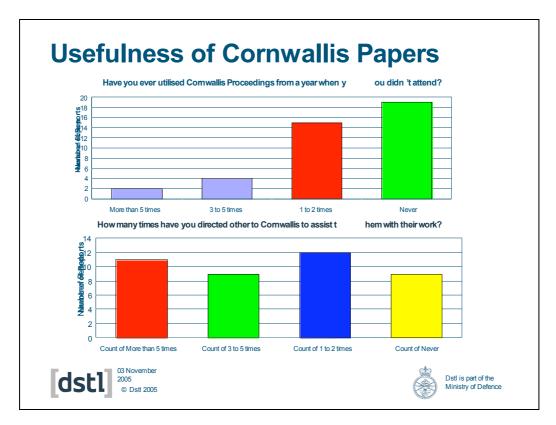


Figure 12: Usefulness of Cornwallis papers.

The majority of attendees did not make much use of papers from the years they did not attend. This could simply be that they did not have a copy of any proceedings other than the

year(s) they attended — as the Proceedings are sent on to all attendees of a specific year (Figure 12). A reasonably high proportion of people directed colleagues to the Cornwallis Proceedings –at least once!

THE UTILITY OF CORNWALLIS

The questionnaire asked a series of questions to ascertain what aspects of the Cornwallis Workshop were seen to be most useful or important (Figures 13 and 14). In particular the activities at Cornwallis can be divided into the following main elements:

- Networking with other domain experts.
- Papers presented.
- Key notes speaker presentation/interaction.
- Syndicates/Discussion.
- Presenting own papers and peer review.

The usefulness of each element and how well it is and facilitated was then assessed

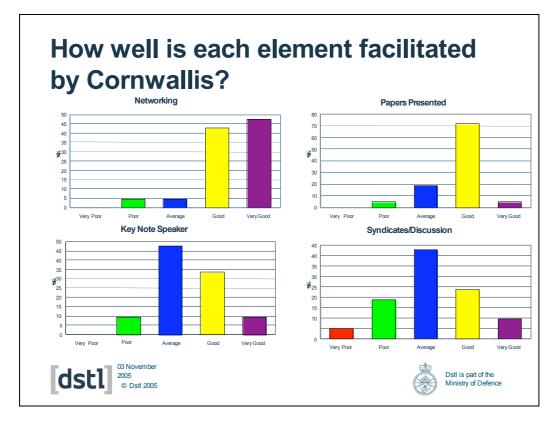


Figure 13: How well is each element facilitated by Cornwallis?

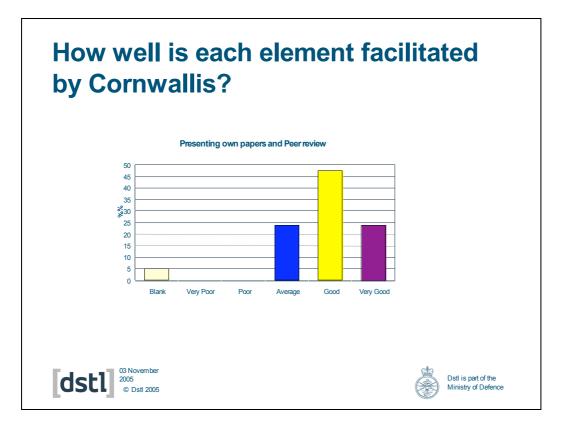


Figure 14: How well is each element facilitated by Cornwallis?

In general the analysis shows that the most useful part of Cornwallis was networking with other domain experts. It was something of a surprise that the least useful was the syndicates/discussion sessions as there has been a conscious push at recent Workshops to dedicate more time on this aspect as attendees wished more time for reflection on current interesting challenges. In part it is seen that perhaps not sufficient time and effort has been set aside to set up the proper conditions to engender good discussions- this being borne out of the results that it is shown that the syndicate sessions are seen to be poorly facilitated at the Workshops.

FUTURE INTENT OF RESPONDEES

The questionnaire elicited the following comments:

- 48% intend to introduce others to Cornwallis.
- 71% intend to attend future Cornwallis Workshops.
- 71% intend to present papers at future Cornwallis workshops.
- 100% feel that there is benefit in further Cornwallis workshops. However this enthusiasm must be tempered by the fact that only approximately 20% of all attendees responded – hence they may feel there is no benefit, hence lack of response?

POTENTIAL IMPROVEMENTS

- 94% think new/younger participants be encouraged.
- 94% think wider participation from other nations be encouraged.
- 100% think wider participation from non-military organisations be encouraged.
- 82% think different venues should be used.
- 100% think the duration should NOT be changed.
- 21% think the scope should be broadened.
- 11% think that the frequency should be changed.

OTHER COMMENTS

A number of other comments and suggestions were made by respondents. In no priority order these were:

- There was a general negative view of syndicates.
- In keeping with other organisations a Cornwallis website should be developed,
- To widen the possible attendance base a more formal affiliation with other bodies (e.g. MORS) should be considered.
- A Charter for the Cornwallis Group should be developed.
- A small number of Cornwallis papers should be submitted to academic journals,
- To raise awareness of the Workshops free copies of Cornwallis Proceedings to OGDs, NGOs, DFID, Military doctrine cells.
- Investigate a high profile sponsor (such as UK MOD Chief Scientific Adviser or equivalent.).
- Investigate whether the UN or NATO could host a Cornwallis meeting.

SUMMARY

This brief analysis of the first nine Cornwallis meetings has shown:

- Cornwallis is thriving.
- People still wish to attend.
- People still intend to present papers.
- The main utility of Cornwallis is networking and peer review.
- Presented papers are well utilised and developed further,
- However, there is little sharing of further developments.
- There is a clear dominance of US, UK, and Canadian attendees.
- Cornwallis should consider affiliation with other analysis organisations.

ACKNOWLEDGMENTS

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ANNEX A: CORNWALLIS WORKSHOP REVIEW QUESTIONNAIRE

- 1. To which degree has attending The Cornwallis Group aided your ability to conduct your work in the Peace Operations domain?
- 2. To which degree has attending The Cornwallis Group aided your ability to conduct your work in the Peace Operations domain?
- 3. How many papers from previous Cornwallis Workshops have you utilised to assist you in any work you have undertake?
- 4. How many of the methods, ideas, or case studies etc that have been presented at Cornwallis have you developed further?
- 5. If you selected answers one or two, some or many to question 3. Has this further work been shared with the Cornwallis Group?
- 6. If yes to question 4, when did this happen?
- 7. Have you ever sought out and utilised a Cornwallis Workshop Proceedings from a year when you didn't attend the Workshop?

- 8. How many times have directed others to the Cornwallis Proceedings to assist them with their work?
- 9. In your experience rank the following elements of Cornwallis Workshops in order of importance and usefulness from 1 to 5.
- 10. Indicate how well you think each of these elements is facilitated by the Cornwallis Workshops on the scale below marking an X against each element in the appropriate box:
 - Very Good (5) Networking with other domain experts
 - Good (4) Papers presented
 - Average (3) Key notes speaker presentation/interaction
 - Poor (2) -Syndicates/Discussion
 - Very Poor (1) Presenting own papers and peer review
- 11. Have you introduced other members to Cornwallis? If yes why?
- 12. If yes to question 10 did they have the same background as you?
- 13. If no to question 11, please complete the details of those people below.
 - Profession
 - Area
 - Nationality
- 14. Is it your intention to attend future Cornwallis Workshops?
- 15. Is it your intention to present papers at future Cornwallis Workshops?
- 16. Do you feel that there is benefit in further Cornwallis Workshops?
- 17. How could Cornwallis Group be improved? Answer the following sub questions and specify ideas of how the improvement could be made where required.
 - a) Should new/younger participants be encouraged?
 - b) Should wider participation from other nations be encouraged?
 - c) Should wider participation from non-military organisations be encouraged?
 - d) Should different venues from participating nations be used?
 - e) Should the duration be changed?
 - f) Should the scope be broadened?
 - g) Should the frequency be changed?
 - h) Any other comments on improvements to Cornwallis?
- 18. How might The Cornwallis Group promote the good work it produces to the wider community?

- 19. What would be your ideal balance between presented papers and syndicate discussion groups at The Cornwallis Workshop?
- 20. Any other comments about history or future direction of Cornwallis?