

[dstl] **Operational Analysis
Support to OP HERRICK**

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I am not part of the SCIAD team at LWC but am the principal analyst in Dstl's Support to Operations Group.

I've been asked to talk to you today because I've just returned from five months in Afghanistan supporting 16Bde.

Agenda

- Background to my Deployment
- Analysis to support 16 Bde (Apr-Sep 06)
 - Ongoing tasks
 - One-off tasks
 - Examples
 - SIGACTS
 - MOE
 - Polling



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This is what I'm going to cover in the next 15 minutes.

Background

- Defence Science & Technology Laboratory (DSTL) is an agency of the UK Ministry of Defence
- Support to Operations Group (S2O) has 17 years experience of supporting operations
 - Embedded analysts deployed in operational HQs
 - Gulf War (1990), Bosnia, Kosovo, Afghanistan, Iraq, Bahrain



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On ops staff work long hours and can suffer from lack of sleep.
Does not predict ... If it could ...

Background

- UK Operational Analysts are Ministry of Defence civil servants employed by Dstl, an Agency of the MOD
- S2O has embedded teams of analysts at HQ ARRC, PJHQ and the Land, Air and Maritime Warfare Centres
- Supplemented by a pool of trained, volunteer, augmentees
- In support of operations, analysts typically deploy as part of a team of 2-4 for a period of 3-4 months



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Background

- Chief Analyst deployed on 30th April
- 2nd Analyst deployed 8th September (originally planned for end July)
- Supporting HQ UK Task Force (in Kandahar) and Provincial Reconstruction Team (PRT) (in Lashkar Gah)
- Returned to UK 19th September
- Replacement Chief Analyst deployed at end September



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When I arrived in theatre the TF HQ was in KAF and the PRT+CIMIC,IO,etc in LKG.

The TF HQ moved to LKG and then moved back (in stages)

130km from LKG-KAF (45 min flying time) although usually via Bastion (often entailing overnight stop)

Analysis Tasks - continuing

- Trend analysis of significant actions (SIGACTs)
- Development of measures of effectiveness (MoE)
 - Assessment of Afghan National Army (ANA) and Afghan National Police (ANP) capability
 - Monitoring progress of quick-impact projects (QIPs)
 - Measurement of the level of 'security'
- Analysis of Polling results
 - Conducted by Afghans on behalf of *i to i Research*, commissioned by DTIO
- Design of patrol report and questionnaire



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There were a number of continuing OA tasks undertaken and I will talk a little more about each of these in turn.

SIGACTs Type/method of attack, increasing/decreasing numbers, time of day/day of week, target type. Overlap with J2 – liaise.

MOE Seen as Main Task for OA measuring campaign progress
many strands

Polling Many of the MOE are about attitudes and responses of the Afghan people. Polling is the best way of obtaining data for these.

The above three form a 'Holy Trinity'

UK Joint Plan for Helmand – Governance, Development, Security, CN

Analysis Tasks - other

- Development of a spreadsheet tool for assessing logistic risk
- Design & production of a simple J2 database providing bespoke search facilities
- Baseline assessment of the level of corruption within the ANP
- Analysis of aircraft force protection at KAF (via reachback)

- Various *ad hoc* tasks



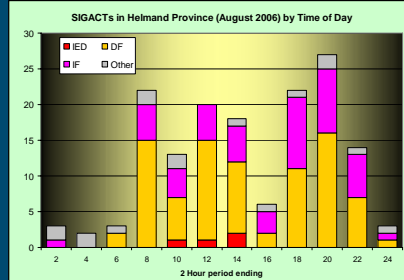
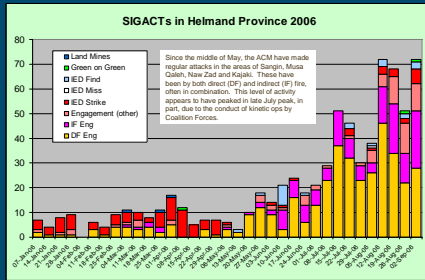
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Whilst a secondary role, all the analysts have varying degrees of expertise in It and can offer advice and assistance with spreadsheet and database design and with data capture and handling.

SIGACTs



- Results were provided to:
 - Staff branches within HQ (J2, J3, J3/5, CIMIC, IO)
 - Subunit HQ (3 Para)
 - Higher formation HQs (COMBRITFOR, LWC, PJHQ, RC(S), CJTF-76, ISAF)
 - British Embassy (SDU), DfID, FCO
 - Estonian and Danish commanders

Trends in these two graphs are fairly obvious...

MOE

| | | | | |
|---|-------------------------------|--------------------------------|--------------------------------|-------------------------------|
| 2.3.2. Insurgent ability to operate degraded. | | | | |
| Increased UKTF – Afg shuras. | < 1 per 3 months per district | < 1 per week per district | < 1 per week | 1 or more per week |
| Reduction in large scale Taliban attacks within the Lozenze and reported activity (planning and preparing for attacks). | >7 per 3 months | 2-7 per 3 months | 1-2 per 3 months | <1 per 3 months |
| Reduction in Taliban DF, IF and IED attacks within the Lozenze and reported activity (planning and preparing for attacks). | >7 in last month | 2-7 in last month | 1-2 in last month | 0 in last month |
| Reduction in large scale Taliban attacks in Helmand and reported activity (planning and preparing for attacks). | >10 per month | 3-10 per month | 1-3 per month | <1 per month |
| Reduction in Taliban DF, IF and IED attacks in Helmand and reported activity (planning and preparing for attacks). | >10 per week in last month | 3-10 per week in last month | 1-3 per week in last month | <1 per week in last month |
| Increased OGD freedom to operate. | OGD operating in <2 Districts | OGD operating in 2-5 Districts | OGD operating in 5-9 Districts | OGD operating in >9 Districts |



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Talk through: Objective

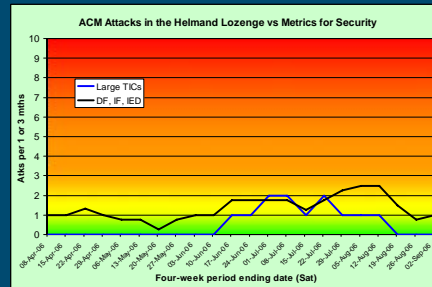
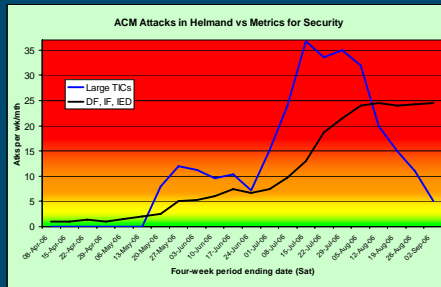
Metrics

Threshold values

Traffic lights

Measure of Security

- MOEs are defined (here no. of attacks of particular types over a given period)
- Threshold values are agreed for each traffic light colour
- Results are graphed against a traffic light background showing trends and recent direction of movement as well as the current value.



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Polling Analysis

- Polling was conducted in face-to-face interviews by Afghan nationals on behalf of *i to i Research*, commissioned by DTIO.
- Results are based upon 300 respondents in Helmand Province which, assuming a population of 850,000, gives a 90% confidence limit with 5% margin of error, for the province as a whole.
(i.e. if you repeated the survey twenty times, then nineteen times out of the twenty you would expect the results to be within 5% of those obtained – as long as the sample is representative)
- Results of polls tend to be optimistic. It is the trends rather than the actual numbers which are important.
- Comparison with other polls/focus groups to confirm/challenge findings.



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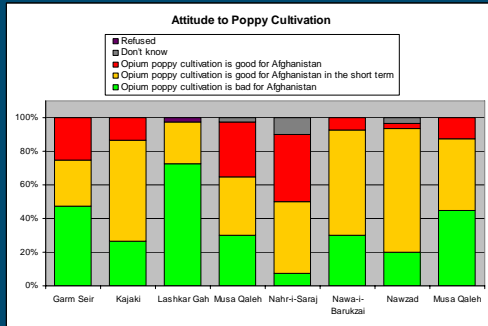
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Three monthly starting in June 2005. Now two monthly.
Typically takes 6 weeks to get the results.
Afghanistan-wide so not focussed on issues in Helmand.
Bowl of soup – too much salt.
Positive Afghan attitude.

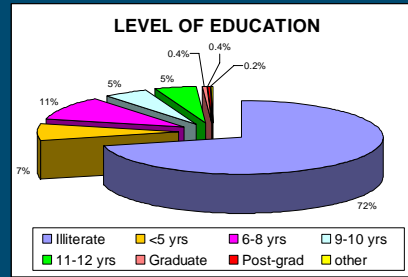
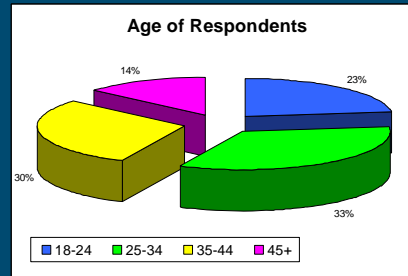
Psyops/TAA consultation – add context and credibility

Polling Analysis 2

50% of respondents are male and 50% female.



Ethnic Pashtuns account for 95% of the Helmand respondents.



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Variation between districts within the province.

Different attitudes and responses – feed down to troops on ground

Every soldier on patrol sends a message!

Logistic Risk Tool

USER Instructions:

The asset or stock item which is reported as constraining the availability may be just the first of several. If the user adjusts the availability of that item (or is prepared to take risk and lower the requirement for a COA) then further asset(s) may be reported as constraints.

Check Asset Availability

Assets sufficient for

| | | |
|---------------------------|------------|---|
| COA 0 become available on | 04/05/2006 | Constrained by Pax |
| COA 1 become available on | 01/05/2006 | Constrained by Pax |
| COA 2 become available on | 02/05/2006 | Constrained by Pax |
| COA 3 become available on | 03/05/2006 | Constrained by Pax |
| COA 4 become available on | | Insufficient assets by end of date range! (Pers Wpns) |

Check Stock Availability

Logistic stocks sufficient for

| | | |
|---------------------------|------------|---|
| COA 0 become available on | 03/05/2006 | Constrained by ULGAS |
| COA 1 become available on | 01/05/2006 | Constrained by 5.56 |
| COA 2 become available on | | Insufficient stocks by end of date range! (ULGAS) |
| COA 3 become available on | 03/05/2006 | Constrained by ULGAS |
| COA 4 become available on | | Insufficient stocks by end of date range! (Hexi) |

- Demands for assets/ stocks are defined for a number of courses of action (COA)
- Expected arrival in theatre over time for each asset or stock item is defined.
- Results are calculated for each COA in the form of when sufficient assets/ stocks are available to make that COA possible.
- The constraining item is indicated allowing the commander to take risk against particular items.



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Development of a front-end for an existing spreadsheet.

Issues & Lessons Identified

- HQ split over two locations (Kandahar and Lashkar Gah)
 - Moved twice
 - Travel difficult
 - IT & Comms
- Single analyst
- Deployed for Peace Support ops ... Conducted Warfighting
- C2
 - UK Plan for Helmand
 - Bde & Div HQs
 - Taliban / Governor of Helmand



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Questions?

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