

DSAC & Dstl after the Science Capability Review

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What is DSAC?

- The Defence Scientific Advisory Council (DSAC) is an NDPB sponsored by the MoD, appointed by and reporting to the Secretary of State for Defence (usually delegated to Minister of State for Defence Procurement)
- DSAC provides authoritative, independent, informed, impartial and timely advice on all (non-nuclear) matters of concern to the Department in the fields of Science, Technology, Engineering, Analysis and Mathematics (STEAM)
- Established 1st April 1969 following a Defence White Paper but antecedents go back to 1940 Advisory Council on Scientific Research and Technical Development.
- Membership: 9-12 independent members including a Chair and Vice Chair (appointment for 3 years renewable)
- Members not chosen for a specific expertise (though balance is sought), but rather as expert “generous generalists”

What DSAC Does:

DSAC provides advice as required by the MoD or where Council determines an issue to be of importance to the department, This advice covers, but is not limited to the following:

- a) Challenge and logical analysis of topics of importance to the department
- b) Advice on the balance, strength and appropriateness of the Department's investment in research and development and the Department's wider STEAM activities
- c) Support to strengthen MoD's ability to identify and manage risk across its business
- d) Advice and support on MoD business where scientific principles are or should be applied
- e) Advice and support to the Department in identifying:
 - STEAM risk, emerging threats and opportunities
 - alternative ways of achieving military capability benefit
 - emerging innovation opportunities, critical technologies and capabilities

How DSAC Operates:

- Council meets four times a year and holds an annual 2 day Workshop once a year
- DSAC may stand up a number of Working Groups to address specific questions or issues raised by MoD Sponsors or where DSAC identifies a need for a specific issue to be considered. Working Groups are short lived addressing a specific topic and stand down on completion of their task
- Working Groups are chaired by a DSAC independent member reporting to Council unless otherwise directed. Its members are drawn from the ISTA register or with the agreement of Council from elsewhere
- Secretarial and other support to Working Groups are the responsibility of the sponsor

Additional Resources:

- DSAC maintains an Independent Scientific and Technical Advise (ISTA) Register of independent (non-MoD) experts who may be called upon to support DSAC or wider MoD
- Each independent Council member oversees one, or more, of the areas of expertise covered by ISTA. DSAC reviews the ISTA Register and these areas annually
- There is a partnership/mentoring scheme with senior staff across MoD

Current Council Membership:

Chairman

Prof David Delpy

University College London

Deputy Chairman

Prof Peter Johnson

University of Bath

Members

Mr John Ames

Independent Consultant

Dr Louise Bennett

Independent Consultant

Prof Paul Cannon

University of Birmingham

Prof Peter Fryer

University of Birmingham

Prof Julian Jones

Heriot-Watt University

Mrs Judith Rawle

Corda, BAE Systems

Dr Martyn Thomas

Independent Consultant

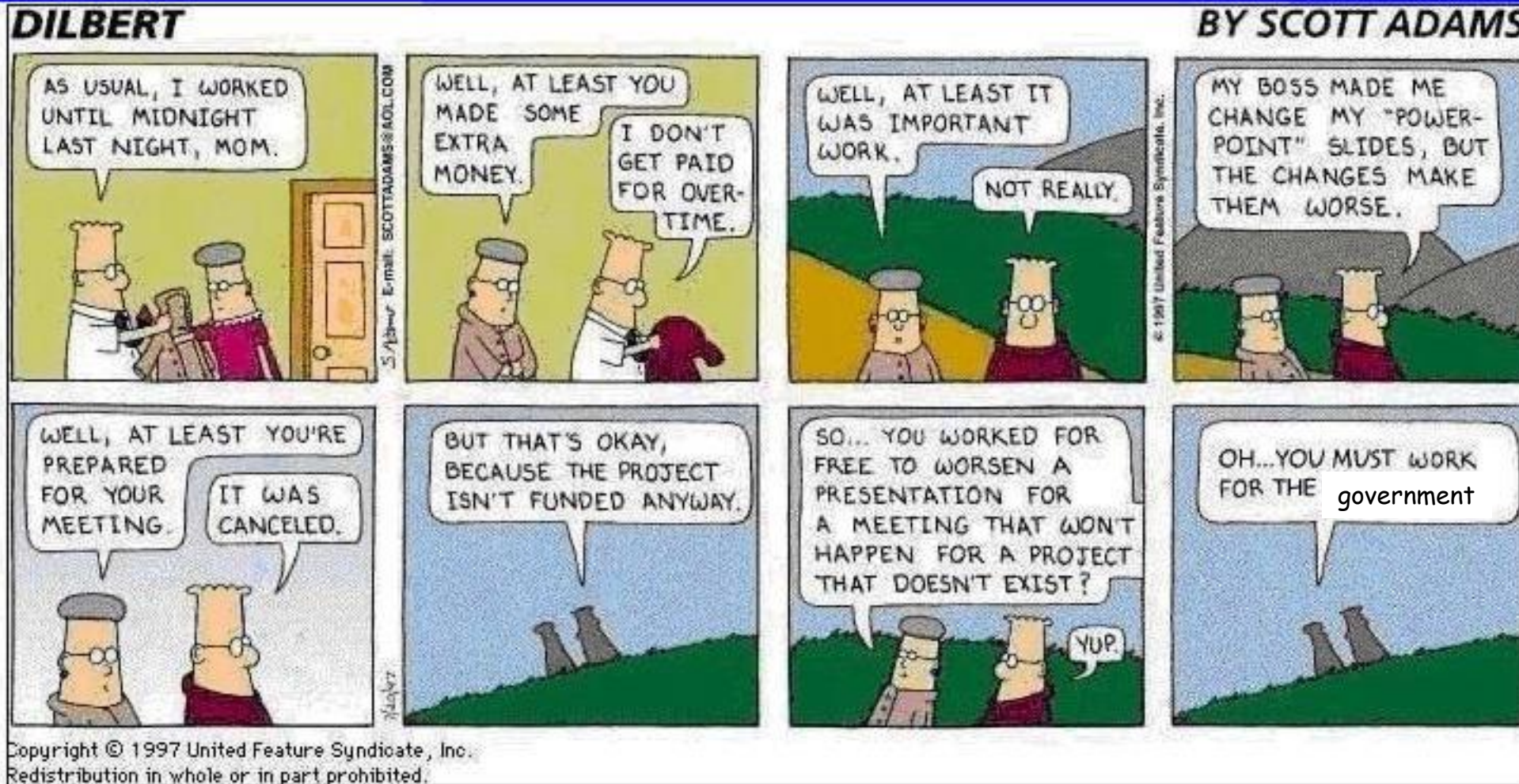
Prof Sarah Spurgeon

University of Kent

Mr William Forrest

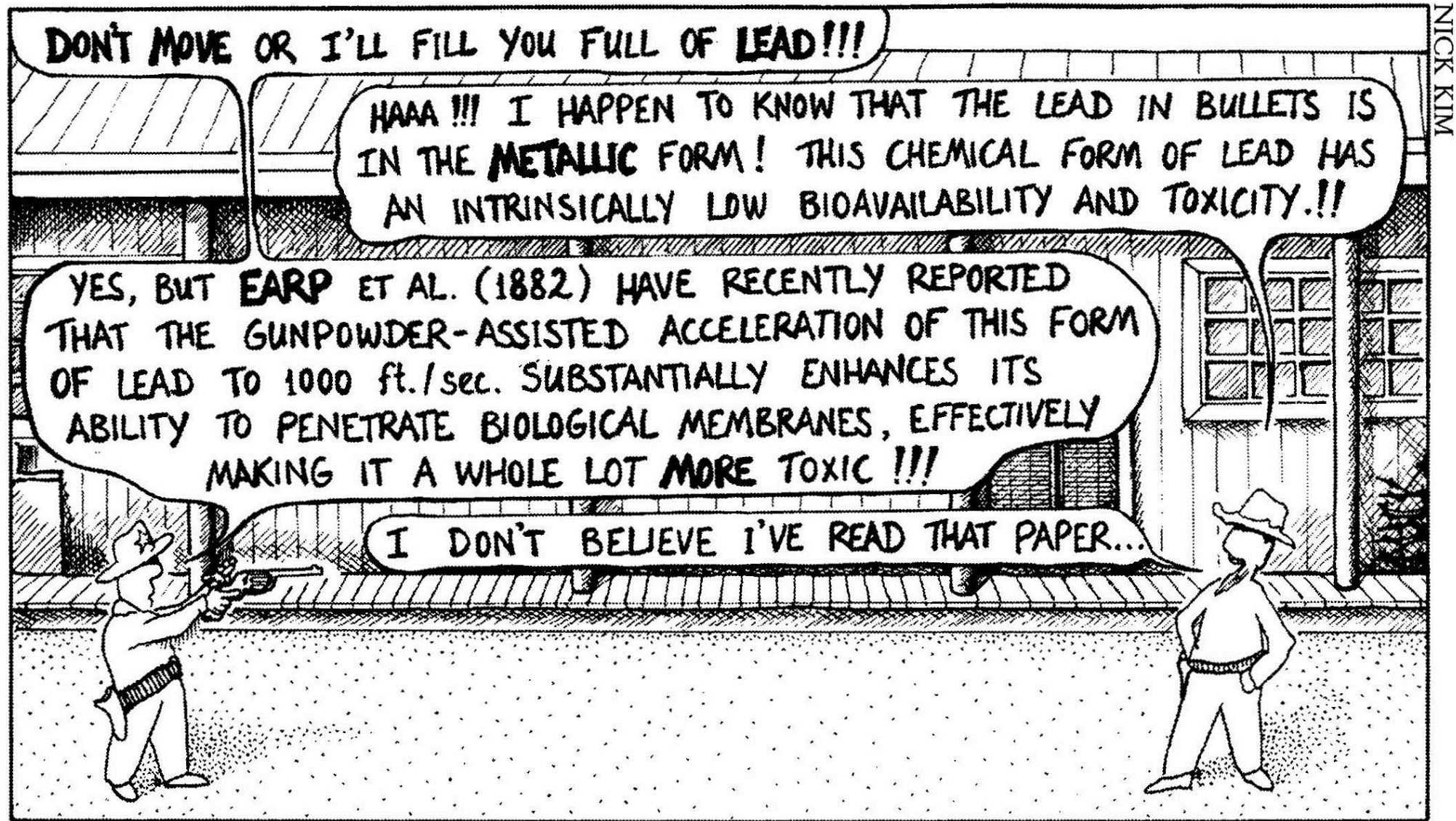
Independent Consultant

DSAC role in pictures (1)



Supporting management who are often distracted by the day to day demands of a large organisation and the government

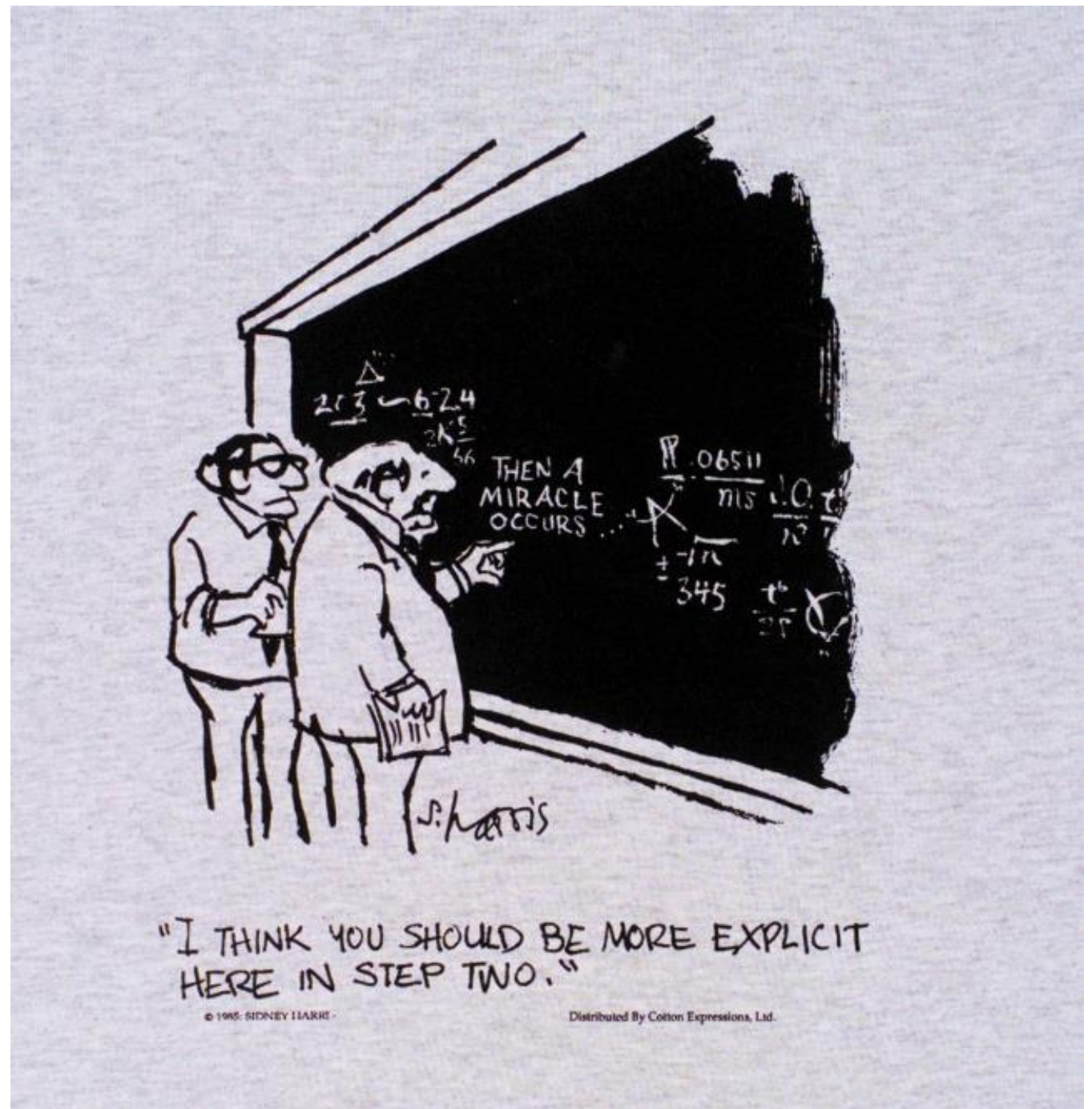
DSAC role in pictures (2)



Through members own expertise or access to non MoD sources of expertise, DSAC can provide advice on scientific developments!

DSAC role in pictures (3)

Help in explaining S&T developments and the role of MoD S&T to wider communities

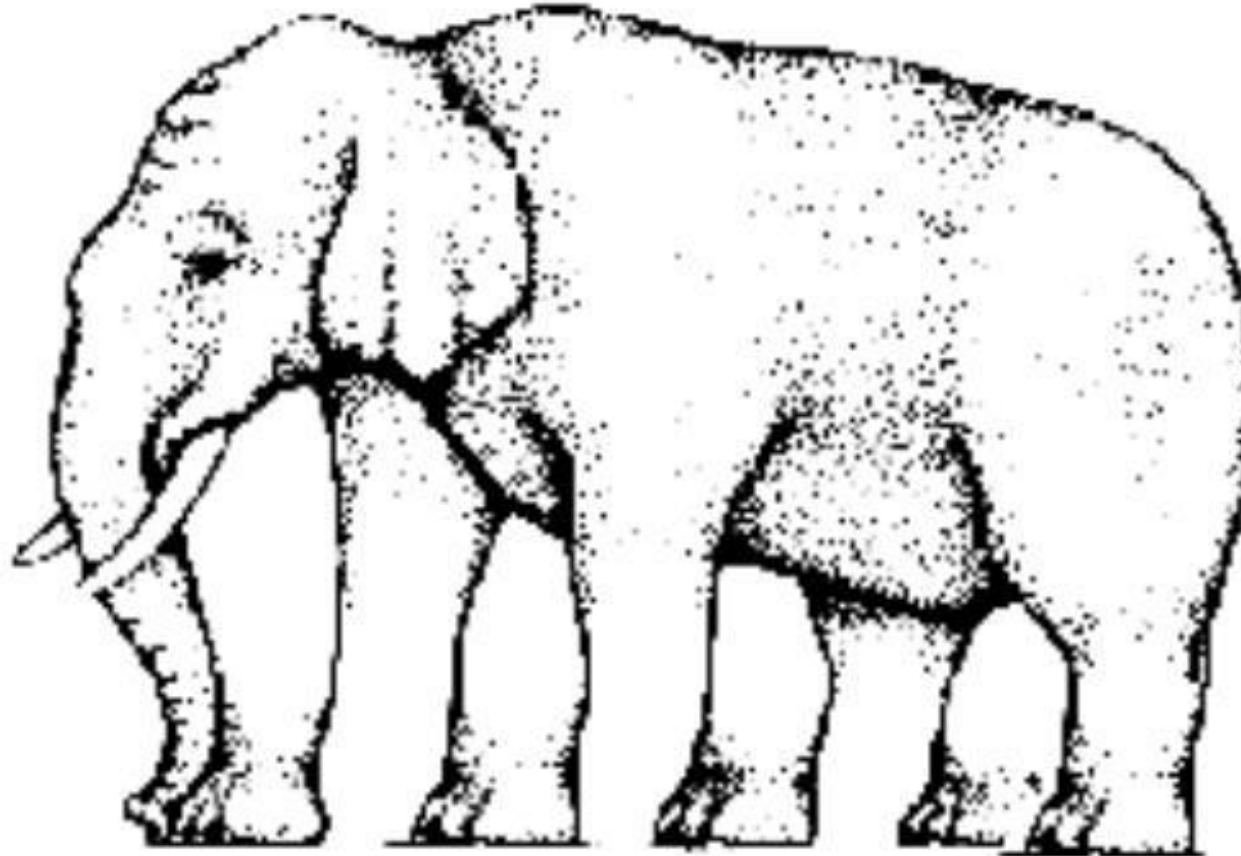


DSAC role in pictures (4)

Helping to say the
unsayable - giving advice
that something might not
be a good idea!



DSAC role in pictures (5)



Standing back from the problem - being too close to a big problem sometimes means you can't see what's wrong!

DSAC role in pictures (6)



Keeping the MoD advised of developments in the wider academic and industrial spheres

Changes to MoD S&T since DSAC was formed

Dstl history (abridged): MoD RRE formed 1957, became RSRE in 1976, became DRA in 1991, the DERA in 1995, then in 2001 split into Dstl (1/4 of staff) and a privatised QuinetiQ). At peak employed >45000 researchers and technicians

Dstl Quinquennial Review 2015 (David English, Dstl Trading Fund Review Team Leader):
“Dstl can no longer continue as a Trading Fund and should transition to an Executive Agency of the MOD as the most appropriate future status”

DSAC comments to the Review Team:

- Would any proposed changes adversely impact the quality of the S&T that Dstl undertakes or oversees?
- Would any proposed changes help improve the quality of the S&T that Dstl undertakes or oversees?
- Would any proposed changes enable improved engagement with research providers and users?
- How would any proposed changes affect Dstl’s ability to work with other agencies and government departments in the delivery of S&T? If this was affected, what would be the knock on effects?

The Science and Technology Capability Review (Sir Mark Walport, GCSA Leader)

Commissioned to provide a benchmark of MOD's S&T capability. Ten expert panels looked across the entirety of MOD's S&T capability residing within Dstl and (to a more limited extent) its supplier base. DSAC members chaired eight of these and ISTA members the other two.

The review's key findings are:

- There was strong consistency across the review's ten capability panels that overall the Science & Technology (S&T) is of high quality.
- There needs to be greater transparency and accountability in requirement setting for S&T capability, and greater focus on longer term strategic requirements.
- Despite high quality S&T, there is not enough systematic independent peer review of internal or external capability by Dstl.
- There needs to be a better balance between long-term versus short-term investment in S&T, as well as between technology pull from military end-users and technology push providing new opportunities to the UK's military.

RECOMMENDATIONS FROM THE MOD SCIENCE & TECHNOLOGY CAPABILITY REVIEW (specific areas of likely DSAC input)

MOD must **implement a structure that provides transparency and accountability in S&T requirement setting and encourage innovation**. There must be clear two-way interaction established between customer and provider, involving MOD's Chief Scientific Adviser.

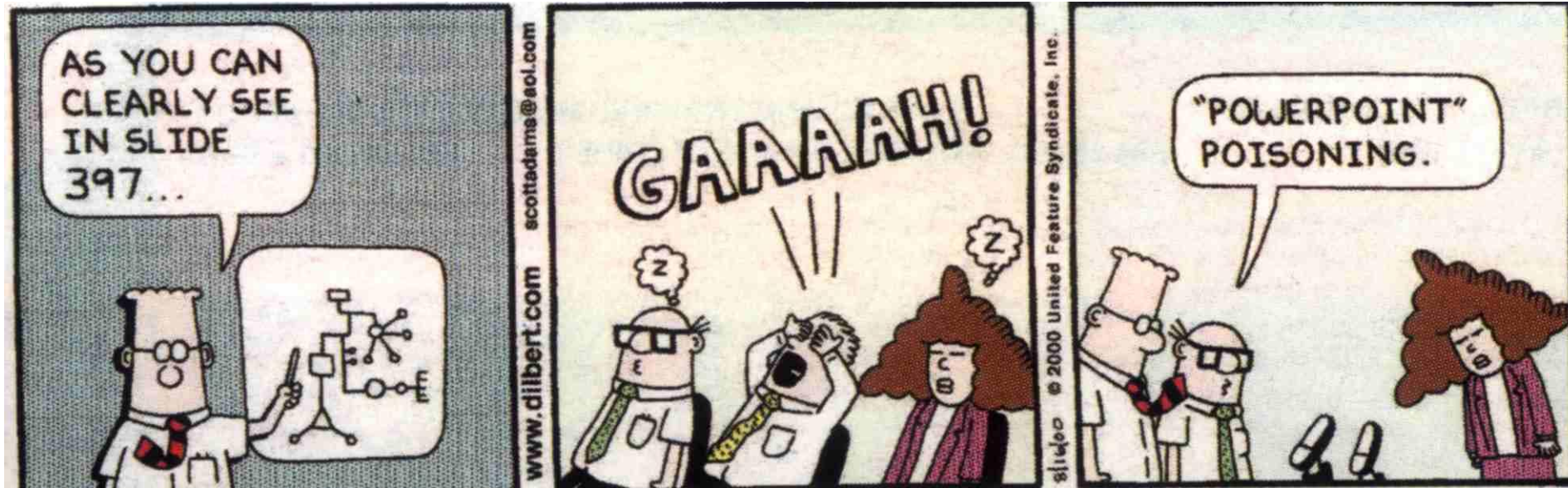
There needs to be more investment in S&T for longer-term developments in defence and warfare alongside shorter-term and tactical needs,

MOD must **develop a systematic approach** to ensuring that, wherever possible, there is **independent peer review** of the S&T provided by both internal and external providers.

Governance, roles and responsibilities for S&T requirement setting, exploitation and **assurance of the quality** of the S&T need to be reviewed and clarified.

There should be a **review of the engagement mechanisms** between government defence programmes and S&T in academia and industry that are used internationally.

End of Presentation – Questions?



Hopefully Not!