Dr Michael Spence  
Vice-Chancellor and Principal

28 October 2014

The Expert Panel  
Defence White Paper 2015  
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Russell Offices  
Department of Defence  
PO Box 7901  
CANBERRA BC ACT 2610


To the members of the Expert Panel,

Defence Issues Paper 2014

Thank you for the opportunity to make a brief submission to the Defence Issues Paper 2014.

The University of Sydney has a long and proud history of direct and indirect contribution to, and collaboration with, the Australian Defence Forces.

For example, the Sydney University Regiment and its predecessors have made a unique contribution to university life and the Defence Forces since 1900, preparing future leaders for Australia’s Army Reserve and Citizens’ Military Forces. 2014 also marks the 75th anniversary of the establishment of our Faculty of Engineering and Information Technologies’ School of Aerospace, Mechanical and Mechatronic Engineering following the Commonwealth Parliament’s 1939 decision to bolster the nation’s aeronautical engineering capability by establishing a Chair in Aeronautical Engineering at the University of Sydney.

In 1939 there were fewer than 10 enrolments in the original Department of Aeronautical Engineering and a handful of staff. Today, the School is an international leader in aviation education and research, particularly in the areas of aerodynamics, flight mechanics, autonomous systems and machine learning algorithms. Some 300 new students commence studies in the School’s courses each year, with undergraduate and research students supported by around 100 academic and professional staff. Our programs consistently attract the top students, with the space engineering speciality often enrolling those with the highest ATAR scores in their cohort.

From similarly modest beginnings the University’s Faculties of Medicine, Veterinary Science, Agriculture and Environment and many others have also made significant contributions to national security and regional peace for decades. This has occurred primarily through the active pursuit of educational and research collaborations with partners in the region that have built and strengthened people-to-people links in areas of mutual interest. It has also benefitted from the University’s
commitment, in the interests of NSW and the nation, to maintaining a critical mass of knowledge about
the languages, cultures, politics and major challenges facing countries in our region and beyond.

Today, as an institution with extensive breadth and depth of disciplinary expertise, we are focussed on
mobilising this capacity strategically to take cross-disciplinary approaches to countries and regions of
strategic significance to Australia (China, the United States, South East Asia, for example) but also in
thematic areas of national significance such as food, water, information, biological and energy
security.

The University of Sydney prides itself on graduating high quality engineers, scientists, health
professionals and generalists. We believe that the recruitment by Defence of graduates with strong
communication and leadership skills is essential if our Defence Force personnel are to remain of the
highest quality in face of strong competition from other sectors for the best talent. Attracting and
retaining outstanding graduates must be at the heart of any future Defence strategy and we look
forward to working with Defence to ensure such recruitment and retention.

Mental health is another field where the University has considerably expertise, through our Brain and
Mind Institute (BMRI) and through the Faculty of Science's School of Psychology. Enhanced
collaboration with these areas would allow Defence to ensure it is attracting and retaining the right
personnel, as well as taking the very best care of those who choose a career in the Defence Force.

The University has long valued its role as a leading contributor to civilian and defence science,
research and innovation, including through educating new generations of graduates capable of
maintaining and extending Australia’s defence science capabilities. This history of close cooperation
between the Commonwealth and the University was deepened and formalised through the signing in
June 2014 of a Defence Science Partnering Deed by the Defence Science and Technology
Organisation (DSTO) and the University.

This landmark new partnership represents a potentially major advance in the conduct of defence
related scientific research at the University, ensuring the relationship between Defence and the
University operates on a strategic, rather than ad hoc and opportunistic, basis. We commend DSTO
for its highly consultative and strategic approach to the formation of agreements like ours with a
number of Australian universities. We believe that if supported with adequate growth funds, DSTO’s
new approach will provide excellent model for enabling Defence to leverage or supplement its own
capabilities and promote innovation through heightened levels of cross-pollination with university-
based researchers.

A key innovation in the new arrangements is the establishment of a Partnership Executive Committee
comprised of senior DSTO and University representatives who will set the strategic direction and
priorities for the partnership and oversee the implementation of agreed projects. We applaud DSTO
for seeking to position itself as a long term investor in the strategic development of human capital and
research expertise, rather than simply as a purchaser of educational and research goods and
services. The new partnership approach will eventually provide a clear framework and processes for
quickly: establishing collaborative research projects; making academic appointments; providing
undergraduate and postgraduate scholarships; sharing infrastructure and equipment; facilitating staff
secondments and exchanges; and managing intellectual property issues.
We look forward, also, to finding a similarly innovative way to connect with industry. There are combined benefits to all that flow when not only Defence and academia, but also industry, work collaboratively together.

The University welcomes the Government’s commitment in the Issues Paper to ensure that the new Defence White Paper that results from these consultations will be the product of whole-of-government advice and broad consultation with organisations and communities. The University sector’s recent experience with the Defence Trade Controls legislation is one recent example of the importance of broad-based consultation in ensuring legislation is fit for purpose and that unintended consequences are avoided.

I would like to extend an invitation to the members of the Expert Panel to visit the University to meet with academic experts from across our Faculties and Schools with expertise in fields of interest to the Panel.

Should members of the Panel wish to take up this opportunity, please liaise with Mr Tim Payne, Director, Higher Education Policy and Projects in my office in the first instance: tim.payne@sydney.edu.au or 02 9351 4750.

Yours sincerely,

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Dr Michael Spence
Vice-Chancellor and Principal