

Chapter 1

Introduction

1.1 Australia was an early leader in some aspects of space science and industry. It was the fourth nation (after the USSR, the US and France) to successfully build and launch a satellite from its own territory, when WRESAT was launched from Woomera in 1967.¹ The 'big dish' at Parkes had an important role in the Apollo missions.

1.2 In some areas it remains a leader. At the time of writing, the Phoenix Mars Lander is transmitting data back to Earth using the Deep Space Tracking Station at Tidbinbilla. Australia has some world class space scientists. It is a leading user of remote sensing satellite data.

1.3 But in some other aspects it now lags behind. There are no Australian-owned satellites. Since 1996, there has been no co-ordinating agency for Australia's involvement in space, and it is often pointed out that Australia is one of the few (large or medium-sized) rich countries without one.

1.4 Does this matter? To investigate this issue, on 19 March 2008, the Senate referred the topic to the Senate Standing Committee on Economics for report no later than October 2008. The reference specified that an interim report be prepared by 23 June 2008.

1.5 This interim report seeks to summarise what the Committee sees as the key questions that need to be answered to assess in what ways, if any, the government needs to act to optimise Australia's capabilities in space science, industry and education; and their contribution to the nation. The Committee does not see 'contribution' in purely economic terms. Space science has the capacity to inspire, to excite and to create a sense of wonder, and these aspects are also valued.

1.6 As well as asking the key questions, this interim report summarises views on these questions gleaned from the over eighty submissions received so far (Appendix 1), and from witnesses at public hearings held in Canberra and Adelaide (Appendix 2). Having focused on some key questions, further and supplementary submissions are welcome to help the Committee answer these questions.

1.7 The Committee's conclusions and recommendations will be contained in its final report later this year, after it conducts further public hearings and the Green Paper from the National Innovation System Review is released.

1 Source: Australian Department of Defence.

1.8 The Committee thanks those who have contributed to the inquiry so far and welcomes further involvement.

Terms of reference

1.9 The Committee was asked to investigate:

The current state of Australia's space science and industry sector, examining options to strengthen and expand Australia's position in fields that strongly align with space science and industry, giving consideration to any national strategic coordination requirements and taking into account findings and policy options of the National Innovation System Review, with particular reference to:

(a) Australia's capabilities in space science, industry and education, including:

- (i) existing Australian activity of world-class standard, and
- (ii) areas in which there is currently little or no activity but that are within the technical and intellectual capacity of the country;

(b) arguments for and against expanded Australian activity in space science and industry, including:

- (i) an assessment of the risks to Australia's national interest of Australia's dependence on foreign-owned and operated satellites,
- (ii) the potential benefits that could accrue to Australia through further development of our space capability,

(iii) economic, social, environmental, national security and other needs that are not being met or are in danger of not being met by Australia's existing space resources or access to foreign resources,

(iv) impediments to strengthening and expanding space science and industry in Australia, including limiting factors relating to spatial information and global positioning systems, including but not limited to ground infrastructures, intergovernmental arrangements, legislative arrangements and government/industry coordination, and

(v) the goals of any strengthening and expansion of Australia's space capability both in the private sector and across government; and

(c) realistic policy options that facilitate effective solutions to cross-sector technological and organisational challenges, opportunity capture and development imperatives that align with national need and in consideration of existing world-class capability.