APPENDIX 4

Space conference resolution

The Australian Space Development Conference is a biennial meeting which brings together members of the Australian and international space community to review developments in Australian space activity and discuss issues of common concern.

The delegates to the 10th Australian Space Development Conference at Adelaide on 22 July 2008 adopted on the voices the following resolution with regard to the questions posed in the committee's interim report:

1. *Should Australia have a whole of government space policy?* Noting that the space environment, although considered to constitute the common heritage of humankind, is becoming increasingly contested and that Australia has a significant and increasing national dependence on space-based products and services, recommend the Australian Government to develop a whole of government space policy which embraces national security, economic, environmental, educational and broader social benefits;

2. *What should be Australia's role in pure space science?* Noting Australia's achievements in and contribution to space science and the Australian Government's commitment to investing in science of global excellence, encourage the Australian Government to invest in space science in a considered and strategic way which maximises the national and international collaborative benefit with existing investments in astronomy, engineering, and other relevant disciplines;

3. *In what areas of applied space science and industry does Australia have a comparative advantage?* Noting Australia's geo-strategic circumstance, identify comparative advantage in areas which include:

- radio and optical astrophysics,
- hypersonics,
- autonomous systems/mining
- space weather
- application of earth observation to weather and climate monitoring and natural disaster reduction
- the design and construction of precision instrumentation for astronomy and space flight;
- imagery analysis, interpretation and forecasting, especially through the use of advanced modelling and simulation and the use of advanced artificial intelligence techniques, and
- satellite communications, especially the design, development and use of advanced antennas, coding and other techniques to gain improvements in capacity, reliability and security of particular importance to remote users;

4. *Would greater involvement in space science be inspirational for students and others?* Noting a persistent view among science educators, reinforced by strong anecdotal evidence that space inspires interest in the broader physical sciences, engineering, mathematics, technology and innovation, encourage the Australian Government to test this assertion with quantitative research and to gather the experience of science educators around the world and to devise ways and means to make best use of the Australian diaspora;

5. *Is there an economic case for government assistance?* Noting that assured access to space-based utilities benefits all sectors of society to meet myriad requirements recommend that the Australian and state governments consider innovative national and international co-investment with industry such as public-private partnership arrangements to meet identified needs and promote development of space industry capability in Australia;

6. *Is there a security case for government assistance?* Noting the heavy and increasing reliance on space by the Australian Defence Force (ADF) and other national security authorities, encourage the Australian Government to continue to invest in space capabilities which enhance the operational capability of the ADF and strengthen Australia's national security overall, including by investing in a national space situational awareness;

7. *Should Australia be making more use of satellites?* Noting that Australia is a sophisticated user of space applications (communications, oceanographic and meteorological observation, positioning and timing and geo-spatial data), recommend that the Australian Government commit to strong participation in coordinated global earth observing systems and embraces the importance of understanding space systems in their totality in order to balance investment, technical and operational risks between nationally owned future systems and other systems to which Australia has access and to contribute to the design and operational utility of these systems;

8. *Should there be a space cluster?* Noting the importance to the national economy of Small and Medium Enterprises (SMEs) and the importance of SMEs to the national innovation system endorse the space cluster, including tertiary education partners, as a method of fostering and supporting the development, trialling and maturation of new technologies and products which a space industry may be expected to generate;

9. *Should Australia have (or join) a space agency?* Noting the Australian Government's current modest commitment to coordinated policy arrangements and noting a persistent call from industry and other groups for stronger and more visible coordination of effort, recommend that the Australian Government establishes a national coordination body responsible for, and to show leadership in, all facets of Australia's space engagement, including relationships with international space agencies;

10. *Should the Australian Government be giving more support to the SKA?* Noting and applauding the large investment already being made by the Australian Government in the Australian SKA Pathfinder project as well as the leadership role Australia is taking in the international SKA project and noting the considerable scientific, economic, educational, social and broader national benefit which the SKA project is expected to confer,

recommend that the Australian Government considers increasing its support for the SKA project, specifically through programmes and processes which encourage and enhance early Australian industry involvement;

11. Is Australian education adequate for a space future? Noting Australia's requirement to develop a highly literate and numerate society for current living standards to be sustainably maintained and improved, recommend a redoubling of effort to strengthen all sectors of the educational system, including curriculum components which deal with all facets of the space environment and supporting technologies.