Australia and Asia: common interests in Antarctic science, logistics and diplomacy

While Asian countries are increasingly emerging as significant players in Antarctic science and affairs, Asian engagement in the Antarctic is not a new phenomenon. Nor is Australia's close involvement in that engagement. Japan's first expedition to Antarctica, under Lieutenant Nobu Shirase, set out in 1910. The travails of this expedition led to Shirase and his crew spending time in Sydney, during which a strong relationship developed between the Japanese expedition and Australian scientists, in particular Sir Tannatt William Edgeworth David.

Japan was one of the 12 original signatories to the 1961 Antarctic Treaty. The next Asian country to become a member of the Treaty was the Republic of Korea in 1976, followed by China in June 1983. Chinese scientists first travelled to Antarctica with Australia in the late 1970s and early 1980s, and strong bonds continue to exist between Antarctic scientists in China and Australia today. India also became a member in 1983. All of these countries now have substantial research interests in Antarctica and have Consultative status (ie voting rights) in Antarctic Treaty meetings. North Korea, (1987) and more recently Malaysia (2011) and Pakistan (2012), have become Parties to the Treaty. Malaysia, once a fierce critic of the Antarctic Treaty system, has made clear its intentions to have a significant scientific program in Antarctica and to achieve Consultative status.

The nature and extent of Asian involvement in Antarctica has been evolving steadily over the life of the Antarctic Treaty, and will continue to do so as the region's economies and societies evolve and strategic interests shift. In recent years, China and India have established new and substantial research stations in the Australian Antarctic Territory and Korea plans to build a research station in Terra Nova Bay in the Ross Sea. China and Korea have invested in new Antarctic icebreaking research and resupply vessels. China is also expanding its Antarctic air capability and 'blue water' marine research capacity.

The interests of Asian players in Antarctica are often divergent, and even though an Asian science and logistics group meets regularly to discuss common interests, Asian countries do not operate as an homogenous bloc in Antarctic affairs.

Australia has mature and productive relationships in Antarctic affairs with China and Japan, and solid links with Korea, India and Malaysia. These are underpinned both by practical scientific and operational collaboration and, in some cases, by formal agreements (such as the Memorandum of Understanding on Antarctic Cooperation signed between the Chinese Arctic and Antarctic Administration and the Australian Antarctic Division on 13 June 2012). Australia and Japan have recently conducted a series of joint scientific workshops to build future collaborations; and Chinese and Japanese research agencies are formal partners in the Antarctic Climate and Ecosystems CRC.

Science is the currency of influence and diplomacy in Antarctica. It is in Australia's national interests to ensure that it has both the capability and the capacity to engage with others in our region of interest in the South. Considerable opportunities exist to expand Australia's collaboration with the expanding Asian programs in Antarctica. Antarctic science is both expensive and logistically difficult. Building strong international scientific and logistical links in key research programs is in the interests of all involved. Key research questions on climate change and the sustainability of the Southern Ocean require sustained research and observation programs where the benefits of international coordination and collaboration are obvious.

It is consistent with Australia's position of leadership in East Antarctica that we remain at the forefront of key scientific endeavours, such as the search for and recovery of a one million year ice core. These require robust logistics as well as innovative research equipment. Pooling resources and

efforts between countries is one way to both reduce costs and minimise risk while maximising the probability of success.

The movement of personnel and supplies to and from Antarctica is also expensive and logistically difficult. There is great potential for collaboration in resupply and personnel transport, both to and from Antarctica, and within the Antarctic. Hobart is already a well established Antarctic gateway. Expanded collaborations in shipping and inter- and intra-continental air transport would complement Hobart's reputation as a major centre for Antarctic, climate and marine science.

Close collaboration with other nations active in Antarctica – including the expanding Asian players – will also be essential to successfully deal with the future issues facing the continent. One such challenge is the environmental management pressures arising from expanding human activity and research station footprints in Antarctica. Another is the sustainable management, during a period of growing food security concern, of the marine living resources of the Southern Ocean, including krill – viewed by some fishing nations as the largest underexploited fishery in the world. Other prominent issues include tourism management, the treatment of biological prospecting, and persistent speculation that there will be growing interest in mineral resources in the Antarctic (notwithstanding the absolute and indefinite ban on mineral exploitation, including oil, under the Madrid Protocol).

The key prism through which such challenges will be faced is the Antarctic Treaty System. This is a unique and enduring international legal regime which continues to present the most effective and mechanism for dealing with Antarctic challenges. Historically, even in times of great conflict (eg Argentina and the UK during the Falklands War; the USA and the USSR during the Cold War) the Antarctic Treaty has provided a venue where international cooperation in peace and science transcended international discord. Australia enjoys close relationships with key nations in the Antarctic Treaty system and will continue to work through it to reaffirm and realise the vision of the Madrid Protocol of Antarctica as a natural reserve devoted to peace and science.

As Asian interests in the Antarctic expand as the "Asian Century" unfolds, Australia is well placed to take advantage of its geographic proximity to both Asia and Antarctica, strong bilateral links with prominent Asian players and multilateral opportunities through the Antarctic Treaty System to continue to build on our scientific, logistic and diplomatic collaboration with these key nations and remain a leading Antarctic nation throughout the years ahead.

24 September 2012

Jason Mundy	Tony Press
Australian Antarctic Division	Antarctic Climate and Ecosystems
Department of Sustainability, Environment,	Cooperative Research Centre
Water, Population and Communities	