

**Answers to Questions on Notice from the Australian Bureau of Statistics
Public Hearing, December 17 2010
Social Security Amendment (Income Support for Regional Students) Bill 2010**

Please find below answers to question on notice:

This information is an extract from the ARIA + Version 2 Methodology Document,
Produced by The National Centre for Social Applications of GIS (GISCA), The University
of Adelaide, January 2004,

Population is a Proxy for Service Availability

The *ARIA+* methodology is based on the assumption that the range of services available from a *service centre* is related to the size of its population.

This assumption was tested in the construction of the original *ARIA*. A database of *localities* was constructed, containing service and population information. Service information was obtained from Desk Top Mapping Services Pty Ltd. This dataset brought together information from the Telstra White and Yellow Pages, as well as the Universal Business Directory. Services were grouped into 20 categories using Australian and New Zealand Standard Industrial Classification (ANZSIC) industry codes. While these data have some limitations that would constrain their usefulness as a source of data on specific services or locations (coverage, duplications, lack of classificatory rigour), they were considered sufficiently accurate for a generic validation of this assumption. A 1996 population dataset was obtained from the Australian Bureau of Statistics.

Analysis showed that there was a limited relationship between population size and the availability of many commercial services. There was, however, a relatively strong relationship between population size and the availability of services where government had a role in provision, funding or planning (for example, health and education). Additionally, there appeared to be distinct categories of centres clustered in particular population ranges, with natural breaks in the population distribution. These breaks informed the *service centre* classification presented in Table 1.

Table 1. *ARIA+* Service Centres

Category	Population
A	250,000 persons or more
B	48,000 – 249,999 persons
C	18,000 – 47,999 persons
D	5,000 – 17,999 persons
E	1,000 – 4,999 persons

So in summary, each category would be expected to offer a similar range of services - particularly the type of services provided by government.