

## GLOBAL NONPROFIT INFORMATION SYSTEM PROJECT

### Testing the *Handbook on Nonprofit Institutions in the System of National Accounts*

#### OVERVIEW

In broad terms, the draft framework for a Nonprofit Institutions (NPI) satellite account proposed by the Global Nonprofit Information Systems Project in the *Handbook on Nonprofit Institutions in the System of National Accounts* (the *Handbook*) is workable for Australia. At its base level it ties in explicitly with national accounts principles and frameworks.

The size of the NPI “sector” is very much affected by some grey areas relating to government and cooperative and mutual organizations operating as market producers. While the satellite account framework was illuminating for presenting information on NPISH, we are less convinced about the worth of an account for the NPI “sector” in the Australian context.

ABS has compiled the majority of tables relating to economic variables in the suite of tables proposed in the *Handbook*. The accounting framework described in the *Handbook* is an expanded SNA93 system, tailored to focus on NPIs. At the core of the expanded NPI system is the SNA93 Production Account. This imposes some limitations on Australia’s ability to complete the full suite of tables from existing data sources. Data on output and intermediate consumption for institutional sectors are generally not available from the Australian System of National Accounts.

Tables concerned with capacity and output indicators have been completed as far as possible from data currently available. The ABS collects a wide range of capacity and performance information from NPIs that could be included in a NPI satellite account.

The year chosen for compiling tables was 1998-99. This corresponded with most recent data available from the ABS annual Economic Activity Survey (EAS), used as the principal data source in compiling tables for economic variables. There are certain limitations on the quality of estimates produced through this exercise. The quality of EAS data for NPIs is untested. However, anecdotal evidence suggests that NPIs are undercovered on the business register. It is also the case that institutional data has not been a variable in survey design. In some instances the number of NPIs actually included in the sample was not adequate to provide reliable estimates. There is potential undercoverage of NPIs serving general government because the ABS Government Finance System does not generally distinguish NPIs separately from government departments financing them. The distinction between the two seems contentious and decisions taken can have a major impact on the overall size of the NPI “sector”.

Additional ABS data on NPIs from the Government Finance System, the Household Expenditure Survey, Service Industry Surveys, as well as one-off collections were used to augment EAS data. A variety of techniques were used to extrapolate data only available for years other than the reference year, 1998-99. It is expected that these conversions embody some unquantified error. Additional data will be available from further ABS collections later this year that would enable improvements to be made to the estimates.

Although we managed to complete most of the required tables, we have reservations about our capacity to produce a satellite account for NPIs of sufficient quality right now. However, the ABS is interested to further review the data and to consider what further steps need to be taken to develop the data in the future.

**Highlights from the pilot-test (results are indicative only):**

NPI contribution to Australia's GDP in 1998-99

SNA93 basis: 4.2%

With production boundary expanded to include volunteer services: 5.5%

NPI contribution to employment in Australia in 1998-99

SNA93 basis: 8.1%

With production boundary expanded to include volunteer services: 11.4%

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This report is set out as answers to the series of questions posed in **GENERAL BACKGROUND AND INSTRUCTIONS, REPORT GUIDE**. The report is prepared in association with Tables I to VI, described in the *NPI Handbook*, Annex 2.

#### **On Chapter 2: Defining Nonprofit Institutions**

**Q1.** *Does the definition of a non-profit institution given in paragraph 2.15 of Chapter 2 of the Handbook work for your country? What problems did you encounter applying it?*

2.15 *Thus, as a working definition, we may define the nonprofit sector for purposes of this satellite account as consisting of (a) self-governing organizations that are (b) private and (c) voluntary (in the sense of non-compulsory), and that, (d) by law or custom, do not distribute any surplus they may generate to those who own or control them.*

A1. The definition in the *Handbook* generally works well for Australia.

Earlier work in this field by the Australian Bureau of Statistics (ABS) culminated in production of a draft publication, *Not-For-Profit Organizations, Australia*, 1995-96. This work, designed to be a compendium of statistics on not-for-profit organizations (NPOs) was eventually not published. However, a workable definition of Australian NPOs was developed for this work, (the term NPO can be considered a proxy for NPI). The definition developed by ABS follows:

*'NPOs are defined as being legal or social entities created for the purpose of producing goods or services, whose status does not permit them to be a source of income, profit, or other financial gain for the units that establish them. In practice, their productive activities are bound to generate either surpluses or deficits, but any surplus they happen to make cannot be appropriated by other institutional units.'* *NPOs can be created by private businesses, governments, or persons for a wide variety of purposes.'*

There is much in common, then, between the definition proposed in the *Handbook* and that earlier proposed by the ABS for Australian NPOs. 'Self-governing' corresponds with 'legal or social entity' and prohibition of distribution of any surplus is explicit. ABS questions whether *Handbook* definition. ABS considers that by explicitly including 'voluntary' there is a chance that this will be read as 'volunteer', which is not a necessary condition for an NPO.

The notion of 'private' from the *Handbook* definition is a further point of difference. In Australia, private is generally understood to mean the private corporate sector and the household sector, as well as any NPIs attached to these sectors. While it's clear that the definition of NPIs proposed by the ABS embraces the notion of government NPIs, it's less clear that the *Handbook* intends government NPIs to be included.

Universities are a significant contributor to the International Classification of Nonprofit Organizations (ICNPO) GROUP 3: Education and Research. In Australia, the majority of universities are NPIs attached to the national general government sector. The majority of their funding is supplied by the Commonwealth Government. If the notion of 'private' as generally understood were applied to universities, they would be excluded from Australia's NPI accounts.

While the expanded definition of 'private' in paragraph 2.16 of the *Handbook* can be interpreted to include universities in Australia, a reader of the short definition would expect them to be excluded. The word 'private', as proposed in the *Handbook* definition thus needs further consideration.

Apart from universities, no other units have been assigned as NPIs serving general government. The distinction between units of government and NPIs serving government seems difficult to make. Depending on the view taken, the latter could be a significant component of the general government sector. ABS would be interested in the views of other countries.

***Q2. Were the examples of 'borderline' cases provided in paragraph 2.19 helpful to you in making decisions on such cases in your country? Did you identify other borderline cases? Please provide examples of 'borderline' cases that emerged in your country and how you dealt with them.***

2.19 provides advice on the following borderline cases:

- (a) Cooperatives
- (b) Mutuels
- (c) Self-help groups
- (d) Social ventures
- (e) QUANGOS

A2. The advice provided in 2.19 was quite helpful in the case of *cooperatives* and *mutuals*. Both cooperatives and mutuals in Australia tend to be based around commercial activities. Cooperative marketing of agricultural produce is widespread and generally aimed at securing best prices for members of the cooperative. Cooperative buying of goods and services is generally aimed at securing lowest prices for members. Any community development function of such cooperatives is generally incidental to their commercial purposes.

Similarly, most mutuals in Australia are financial institutions with a commercial focus. Their activities range from life, general, and health insurance to credit unions, building societies, and friendly societies. Again, any community development function of these mutuals is of secondary importance to their commercial function. Another key reason to separate financial mutuals from NPIs in Australia has been the trend to de-mutualization of these entities over the past few years. De-mutualization has been associated with a return of capital or issue of shares to members and listing as a corporate entity on stock exchanges.

There is very little data on self-help groups currently available to the ABS.

Social ventures are important in Australia for their capacity to train and employ disadvantaged individuals. The definition clarifies that such organizations should be treated as NPIs.

QUANGOS, to the extent they exist in Australia, operate as extensions of government, exercising governmental authority. The definition provided makes it clear that they should be excluded from the nonprofit sector.

There are a number of other borderline cases in Australia that have been the subject of debate both here and internationally. The sectoring applied in this project is consistent in principle with that applied in the Australian national accounts, but other countries may have adopted different treatments in some instances. Universities are included as NPIs serving governments. Private schools are classified as NPISH.

A major problem for this project is that ABS Government Finance Statistics do not distinguish NPIs serving general government from the Departments providing the funding (except for universities). We would expect numerous borderline cases if that distinction were to be made.

### **On Chapter 3: Classifying Nonprofit Institutions**

***Q3. Does the International Classification of Nonprofit Organizations (ICNPO) classification given in Paragraphs 3.7-3.13 of Chapter 3 work for your country? What problems, if any, did you encounter in applying it?***

A3. Table 1 provides a concordance between the ICNPO classifications and the Australian and New Zealand Standard Industrial Classification, 1993 (ANZSIC), which is used as the basis for classification of industries, subdivisions, and group and class titles in the ABS. The majority of economic data collected by the ABS is classified according to ANZSIC.

ANZSIC, as its name implies, is a classification of industries (by division), subdivisions (by title), Groups (by title), and Class (by title). It is closely based on ISIC, but with more attention to those industries and groups of particular relevance to Australia and New Zealand. ICNPO, on the other hand, is more an activity classification, cutting across several industry groups.

As can be seen in Table 1, there was a direct, or at least fairly close relationship between many of the Groups and Subgroups in ICNPO and ANZSIC at the 3 and 4-digit level of classification. There were however, quite a few instances where 4 digit ANZSIC codes were spread across several ICNPO Groups and Subgroups, and some instances where there was no corresponding ANZSIC code for an ICNPO Group or Subgroup. One case in point is political parties. In ANZSIC these are included with "Other interest groups" that are spread across a number of ICNPO categories and NPISH types. Consequently there is nothing shown for "Political organizations" in this study. However estimates could probably be developed given time.

Because the majority of data collected by ABS is in terms of the ANZSIC classification, it is not possible to get a perfect match with the ICNPO classifications in the tables prepared in response to this test. It would not be possible for Australia to strictly adhere to ICNPO.

**Table 1. ICNPO/ANZSIC Concordance**

<b>ICNPO Major Groups and Subgroups</b>	<b>ANZSIC equivalent</b>
Group 1: Culture & recreation	Division P: Cultural and Recreational Services
1100 Culture & arts	911, 912, 921, 922, 923, 924, 925
1200 Sports	931
1300 Other rec & culture	932,933
Group 2 Education & research	Division N: Education
2100 Primary & secondary	842
2200 Higher education	843
2300 Other education	841, 844
2400 Research	781
Group 3 Health	Division O: Health and Community Services (part)
3100 Hospitals & rehabilitation	8611
3200 Nursing homes	8613
3300 Mental health & crisis intervention	8612
3400 Other health services	862, 863
Group 4: Social services	Division O: Health and Community Services (part)
4100 Social services	871, 8721, 8729
4200 Emergency and relief	8722
4300 Income support & maintenance	No appropriate code in ANZSIC
Group 5: Environment	Division Q: Personal and Other Services (part)
5100 Environment	9629, part
5200 Animal protection	9629, part
Group 6: Development & housing	Division Q: Personal and Other Services (part)
6100 Economic social and community development	9629, part
6200 Housing	No appropriate code in ANZSIC
6300 Employment & training	7861
Group 7: Law, advocacy, and politics	Division L: Property and Business Services (part)
7100 Civic and advocacy organizations	7841, part
7200 Law and legal services	7841, part
7300 Political organizations	9629, part
Group 8: Philanthropic intermediaries and volunteerism promotion	Division Q: Personal and Other Services (part)
8100 Grant-making foundations	No appropriate code in ANZSIC
8200 Other philanthropic intermediaries and volunteerism promotion	9629, part
Group 9: International	No appropriate code in ANZSIC
9100 International activities	No appropriate code in ANZSIC
Group 10: Religion	Division Q: Personal and Other Services (part)
10000 Religious congregations and associations	961
Group 11: Business and professional associations, unions	Division Q: Personal and Other Services (part)
11100 Business associations	9621, part
11200 Professional associations	9621, part
11300 Unions	9622
Group 12: Not elsewhere classified	No corresponding code in ANZSIC
Split into - 12000 Interest groups	Allocate 9629 here
12100 n.e.c.	NPIs not covered by ANZSIC codes listed

The ABS used a classification by field of voluntary work in the Survey of Voluntary Work 1994-95, which closely resembles the ICNPO Group classification. Definitions of the categories within the field of voluntary work are:

*Arts/culture*

This category refers to the production of the arts, i.e. providing a service for others. Examples of arts/culture organizations include libraries, museums and galleries, historical associations, and festivals.

*Business/professional /union*

Organizations promoting, regulating, and safeguarding business, professional, and labor interests, including business standards.

*Education/training/youth development*

Organizations and activities administering, providing, promoting, conducting, supporting, and servicing education, training, and youth development.

*Emergency services*

Refers to those emergency services involved in search and rescue and disaster relief (not including emergency medical services). First aid was included under health, not emergency services.

*Environmental/animal welfare*

Organizations promoting and providing services in environmental conservation, pollution control and prevention, environmental education and health, and animal protection.

*Foreign/international*

This refers to the focus of organizations' activity, rather than their origins. They promote greater intercultural understanding between people of different countries and historical backgrounds, may provide relief during emergencies, and promote development and welfare abroad.

*Health*

Organizations engaged in health related activities providing health care, both general and specialized services, medical research foundations and emergency health services, and administration of health care services and health support services.

*Law/justice/political*

Organizations and groups that work to protect and promote civil and other rights, or advocate the social and political interests of special or general constituencies, offer legal services, and promote public safety (related to the law rather than emergency services).

*Religious*

Organizations promoting religious beliefs as their primary focus, administering religious services and rituals.

*Sport/recreation/hobby groups*

Organizations in general and specialized fields of sport, recreation, and leisure: sports clubs and facilities; indoor and outdoor recreational facilities; racing and gambling; social leisure and hobby clubs; zoological, botanical, recreational parks and gardens; and theme and amusement parks.

*Welfare/community*

Organizations and institutions providing human and social services to the general community and specific target population groups. Included are organizations whose work is for the wider social benefit of the general community without the provision of direct services.

*Other*

Organizations not elsewhere classified.

Table 2, shows a concordance between ICNPO and the ABS classification field of voluntary work.

**Table 2. ICNPO/ABS Survey of Voluntary Work Concordance**

<b>ICNPO Major Groups and Subgroups</b>	<b>Survey of Voluntary Work equivalent</b>
Group 1: Culture & recreation	Culture & recreation
1100 Culture & arts	Arts/culture
1200 Sports	Sport/recreation hobby
Group 2 Education & research	Education/training/youth development
Group 3 Health	Health
Group 4: Social services	Social services
4100 Social services	Welfare/community
4200 Emergency and relief	Emergency services
Group 5: Environment	Environment/animal protection
Group 6: Development & housing	No corresponding field
Group 7: Law, advocacy, and politics	Law/justice/politics
Group 8: Philanthropic intermediaries and volunteerism promotion	No corresponding field
Group 9: International	Foreign/international
Group 10: Religion	Religious
Group 11: Business and professional associations, unions	Business/professional/union
Group 12: Not elsewhere classified	Other/not collected

Table 2 illustrates that there is a close match between the ICNPO Group level, at least, and the ABS Voluntary Work classification, except for Group 6: Development and housing, and Group 8: Philanthropic intermediaries. Groups 6 and 8 are not considered to be of particular significance for Australia.

Data from the Survey of Voluntary Work is not available at the ICNPO Subgroup level, except for Culture & recreation and Social services.

***Q4. Were the clarifications provided in paragraphs 3.17-3.21 necessary or helpful in your country? Please provide examples of types of organizations that were difficult to classify and how you dealt with them.***

A4. The further clarification of NPI types in paragraphs 3.17-3.21 was helpful, though not necessary for Australia.

3.17 *Financial institutions* - As noted in A2, mutuals, credit units, building societies, etc. in the financial sector in Australia provide a commercial function that excludes them from the scope of NPIs.

3.18 *Non-governmental organizations (NGOs)* - All employing NPI-NGOs are subject to selection in the ABS Economic Activity Survey (EAS) where they would be expected to self-code as not-for-profit organizations. ABS allocates an appropriate ANZSIC industry code for NGOs surveyed.

3.19 *Co-operatives, mutual societies and self-help groups* - It will be difficult to include estimates for these organizations in Australia. Unless they are employers, thus within the scope of EAS, or generate taxable income and fall within the Australian Tax Office data (ATO) catchment area, they are generally beyond the scope of current economic statistics. Insofar as these activities fall within the scope of the ABS Survey of Voluntary Work, or are funded by transfers from general government, they are included in the current study. Their output would be assumed to be equivalent to the imputed compensation of employees for volunteer services.

The exclusion of non-employers from ABS survey frames will change in 2002, as the new joint ABS/ATO register will be based on Australian Business Numbers (ABNs) allocated to businesses by the ATO. As ABNs are required for value added tax imputation credits by businesses, it is expected that virtually all businesses operating in Australia, whether employers or non-employers and whether they report taxable income or not, will apply for ABNs. They will thus be on the register and part of the ABS survey frame.

3.20 *Religious organizations* - The treatment of religious and affiliated service organizations in Australia is as described in the *Handbook*.

3.21 *Foreign establishments* - There are only a few foreign establishments operating as NPIs in Australia. They generally act as collectors of donations from within Australia, not as NPIs providing social assistance within Australia. Such an NPI would be regarded as a resident establishment according to national accounting conventions. Its classification in ANZSIC would be somewhat problematical. An organization such as World Vision, for example, which essentially promotes children's health and welfare issues in developing countries, would seem likely to be classified as a religious organization (ANZSIC 9610).

***Q5. Is the concordance between the ICNPO and ISIC, Rev. 3 given in Table 3.3 workable? Please provide specific comments about any subgroups and classes that do not seem to match in practice.***

A5. These comments are equally applicable to the concordance between ICNPO and ISIC, and ICNPO and ANZSIC (see Table 1, above). The problem is not so much about devising an appropriate ICNPO, but linking that classification to either ISIC or ANZSIC. Linking a field of activity classification with an industry classification will always throw up inconsistencies. In the ICNPO/ANZSIC concordance, there are many ANZSIC codes that are equally applicable to several ICNPO Groups. For example, ANZSIC code 9629 - Interest groups not elsewhere classified, includes primary activities such as:

- Accident prevention association operation
- Associations' operation (for promotion of community or sectional interests) n.e.c.
- Automobile association operation
- Clubs operation (for promotion of community or sectional interests) n.e.c.
- Consumers association operation
- Housewives association operation
- Personal taxpayers association operation
- Pensioners association operation
- Ratepayers association operation
- Society operation (for the prevention of cruelty to animals)

These primary activities cover ICNPO Groups 5,6,7,8 and 12. There is no realistic way to split ANZSIC 9629 to these Groups at present, other than by some arbitrary allocation of percentages. Data is simply not collected or coded at the level of detail that would provide an accurate split.

Similarly, Table 1 notes that in some cases there is no appropriate ANZSIC code to match an ICNPO code. These include ICNPO codes:

- 4300 Income support and maintenance
- 6200 Housing
- 8100 Grant making foundations
- 9100 International activities.

These kinds of mismatches and splits limit the overall usefulness of the concordance. At the same time, it has to be recognized that official statistics, at least economic statistics, will be collected in something resembling an ISIC/ANZSIC classification framework. The challenge will be to continually adapt and modify the framework to increase its usefulness for parallel studies such as NPIs.

***Q6. Does the sectoral classification given in paragraph 3.26 of Chapter 3 work for your country? What problems, if any, did you encounter applying it?***

A6. Examples of appropriate category/sector classifications would have been useful. There are quite a few borderline cases where the definition may apply either way - especially in deciding between NPISH and Government funded and controlled NPIs, and between units of government and Government funded and controlled NPIs. Private schools, hospitals, and nursing homes all prove difficult to allocate by reference to the definitions provided. See Table 3 for comments.

**Table 3. Sectoral Classification of Nonprofit Institutions**

Category/Sector	Definition	Comments
Nonmarket NPIs serving households/NPISH	NPIs whose resources come principally from voluntary contributions by households, corporations, or government; or from property income. They customarily cover less than half their operating expenses with receipts from the sale of their services.	Agree, works for Australia. Australia includes NPIs such as schools and hospitals operated by religious organizations in this category/sector. These schools/hospitals generally receive a significant portion of their funding for operating expenses from general government. In this respect, the Australian treatment may differ from that of other countries where such schools/hospitals are classified as NPIs/Government.
Market NPIs serving households/Corporations	NPIs that customarily cover at least half their operating expenses by receipts from the sale of their services. They may also receive voluntary contributions from households and corporations, grants from government, and property income.	Agree, works for Australia.
Government funded and controlled NPIs/Government	NPIs that customarily cover less than half their operating expenses by receipts from the sale of their services, that receive significant government support, that are subject to some government control by law or equity holdings, and that are able to receive voluntary contributions from the public in addition to support provided by government from compulsory levies.	We find the distinction between units of government and NPIs serving government to be very unclear. Decisions taken can have a significant effect on the size of the “NPI sector”.  The ABS Government Finance System does not distinguish NPIs. The only NPIs we have included in this category are universities, and this is also contentious.
NPIs serving business/Corporations	NPIs that for the most part are created by associations of the businesses whose interests they are designed to promote. They are financed by dues or subscriptions, which are treated as payments for services rendered.	Agree, works for Australia.
Nonresident NPIs active in the economic territory of the country/Rest of the World	NPIs that, although resident outside the economic territory of the country, are registered in order to receive contributions from residents or otherwise carry on activities in the country.	Agree. Generally applicable for Australia in respect of organizations registered to receive contributions, not carry out activities.
NPIs organized as mutuals or cooperatives/Corporations	NPIs that are organized to provide some good or service of mutual benefit.	Disagree. NPIs of this type should be NPISH if there is no commercial function. If there is a commercial function, they should be part of corporate for-profit sector.

**On Chapter 4: Key variables and Tables of the NPI Satellite Account**

*Q7. Are the variables selected for the 'short form' of the satellite account appropriate ones in your opinion? Are there variables you would delete? Are there variables you would add? Please be specific.*

A7. The key variables, together with an indication of whether they are appropriate and associated comments, are shown in Table 4.

**Table 4. Key Variables and Measures for NPIs - Short Form**

<b>Variable</b>	<b>Appropriate</b>	<b>Comments</b>
<b><i>Core monetary variables</i></b>		
Market output Of which: third party payments from government	Yes No	Detailed estimates of output by industry (not institutional sector) are prepared in input output tables by the ABS. However, Australia's national accounts do not include an SNA93 style Production account with output and intermediate consumption for current periods. Third party payments from govt. are not identified in Australia's govt. finance statistics.
Other non-market output	Yes	
Compensation of employees	Yes	
Intermediate consumption	Yes	See comment under 'Output'.
Consumption of fixed capital	Yes	
Taxes on production (net)	Yes	
Property income	Yes	
Other current transfers Capital transfers Of which: Receipts from private philanthropy Of which: Receipts from govt. grants and transfers Of which: Receipts from foreign grants and transfers	Yes Yes Yes Yes Yes	Not able to split this by donor sector. Data on source of capital receipts is not available from NPIs. Limited data on counterpart transactions is available from government. Receipts from abroad are not expected to be significant for Australia.
Final consumption expenditure	Yes	
Imputed value of volunteer employment at average wage	Yes	Identification of an appropriate average wage rate needs further discussion.
<b><i>Structure</i></b>		
Entities, number	Yes	
Employment, number and FTE	Yes	Only aggregate employment data are available for Australia. Classification by full-time, part-time, average hours worked, skill level, gender, and age are not currently possible.
Volunteers, number and FTE	Yes	Classification into recommended categories is possible from the Survey of Voluntary Work.
Members, number	Yes	An important measure of associational activity and an indicator of social capital, but difficult to interpret. Members may belong to several organizations so the aggregate number of members is largely irrelevant. Classification by category is not presently possible for Australia.
Memberships, number	Yes	Same comments as for Members.
<b><i>Capacity and output</i></b>		
Physical measures of capacity and output	Yes	Need to develop a more useful set of indicators. More appropriate for long form.
Share of NPIs in total capacity and output	Yes	As above.

***Q8. The tables of the satellite account are specified in three versions - SNA Basis, With Volunteer Labor, and With Volunteer Labor and Output Valued by Expenses. Did you find this three-fold distinction workable? Did you encounter any problems with this format or concept?***

A8. Paragraph 4.44 outlines the basis for the three-fold distinction:

(a) SNA Basis: This version uses standard SNA conventions for all variables;

(b) With Volunteer Labor: This version adds to the paid employment of NPIs the imputed value of volunteer labor contributed to NPIs. Such labor is an important component of the operation of many NPIs. It represents both a contribution to NPI production and a source of NPI revenue. The estimation procedure recommended for this labor input is to value it at the economy-wide average wage, including fringe benefits, as described in paragraph 4.26;

(c) With Volunteer Labor and Output Valued by Expenses. This version adds to the SNA-basis both the imputed value of volunteer labor and an estimate of the nonmarket production of the 'market' NPIs in the SNA's corporations sectors. This adjustment is necessary in view of the fact that NPIs, unlike other market producers, can have substantial nonmarket output that is not captured in their market receipts. Without some adjustment, the value of this nonmarket output can therefore be missed. To correct for this, the output of market NPIs is valued by operating expenses rather than by market receipts.

We found the three-fold distinction both workable and useful. Obviously, the inclusion of volunteer labor is very important. The distinction in (c) is less useful for Australia.

An issue that is not explicitly dealt with in the documentation is the treatment of volunteer labor associated with market producer NPIs. We included it in output (valued at cost). However, we found it necessary to create a final consumption expenditure item for market producers in order to get balance in the system, i.e. the output of volunteer work has to be consumed within the sector, similar to the treatment of non-market NPIs. This requires some further discussion and clarification in the draft handbook.

***Q9. Do the table sequence and its description make sense? If not, what do you suggest?***

A9. The general sequence of tables described in the Handbook makes sense for Australia. Tables I-IV, based around SNA93 constructs, are generally able to be implemented with data on hand to ABS National Accounts Branch.

Tables V.1-4, which ask for a range of structural data and selected capacity and output data, makes less sense from a national accountant's point of view, but is generally understandable in a wider civil society context.

Table VI - Key dimensions of the consolidated NPI sector, combines economic data and structural variables that have already been identified in earlier tables. Is there a need to reiterate this data in a separate table?

***Q10. Guidelines for valuing volunteer work are provided in paragraph 4.23. Is this method feasible in your country? If you are already measuring unpaid work, please describe your methodology. Would it be more appropriate to use an economy-wide or industry average wage for valuing volunteer labor? What difference do you estimate it would make?***

A10. Principal data sources were used in compiling estimates of the value of volunteer work and calculate FTE employment for volunteers:

Voluntary Work, Australia, June 1995 (ABS cat. no. 4441.0)  
How Australians Use Their Time, 1997 (ABS cat. no. 4153.0)  
Unpaid Work and the Australian Economy, 1997 (ABS cat. no. 5240.0)  
Average Weekly Earnings, Australia, (ABS cat. no. 6302.0)  
Australian Demographic Statistics, (ABS cat. no. 3101.0)

### **Methodology:**

The ABS conducted a Survey of Voluntary Work in June 1995. The Survey was conducted throughout Australia as a supplementary topic of the ABS Monthly Population Survey. Information was collected from individuals about the field volunteered for, voluntary activities performed, time spent volunteering, perceived benefits of volunteering, and reasons for volunteering. Results from the Survey of Voluntary Work were released in *Voluntary Work, Australia, June 1995* (4441.0).

The Survey estimated that 434 million hours were spent in unpaid voluntary work in Australia in 1995.

*Unpaid Work and the Australian Economy* (5240.0) provided a range of estimates that were useful in determining the boundary and value of volunteer work in Australia for 1997.

Table 10, Value of volunteer and community work, Australia - Individual function replacement cost method, estimated the value of volunteer and community work in Australia in 1997 at \$25 billion. This value was based on average time spent by all persons above the age of 15 years on the following activities:

Support for adults - 11 minutes per day  
Unpaid voluntary work - 6 minutes per day  
Associated travel - 4 minutes per day  
Other - 1-minute per day (includes associated communication).

Time spent on ‘support for adults’, ‘associated travel’ and ‘other’, are not consistent with the standards for measuring volunteer output proposed in the Global Nonprofit Information Systems Project, and were excluded from the estimates in this paper.

‘Support for adults’ is an aggregate covering both the physical and emotional care for adults and helping or doing favors. It is generally home based without NPI intervention. It includes time spent on activities for oneself and family as well as the community at large. ‘Associated travel time’ was excluded from the estimate as valuation of travel time is inconsistent with valuation of paid work. ‘Other’ may or may not include unpaid voluntary work and was excluded on the basis of its nebulous nature.

‘Unpaid voluntary work’ is activities that are performed for community organizations without pay. This fits squarely with NPI definitions. Wage rates for paid work were used as shadow prices for calculation of imputed compensation for volunteers.

Data from the TUS was not ideal for estimating volunteer services to NPIs, as its purpose was rather broader than focusing on volunteerism. However, the results derived from the fairly narrow interpretation of unpaid voluntary work were broadly consistent with those from the 1995 Voluntary Work survey.

## **Population**

The scope of estimates in the time use survey, which provided data for 4153.0 and 5240.0, was restricted to persons 15 years of age and over. It covered residents of private dwellings in urban and rural areas across all States and Territories of Australia. The following exclusions were made for conceptual and operational reasons:

- foreign diplomatic personnel and members of their families who did not qualify as Australian residents;
- other overseas residents in Australia;
- members of foreign defense forces (and their dependants) stationed in Australia;
- some 175,000 persons living in remote and sparsely settled parts of Australia;
- all persons living in special dwellings (e.g., prisons, hospitals); and
- Australian defense force members.

In all, some 14,040,000 persons (97% of Australia’s resident population, aged 15 years and above) were in scope of the TUS. Estimates of the value of volunteer work for 1998-99 are based on this same scope, yielding an in-scope population of 14,540,000 persons.

## **Hours of volunteer service**

In 1995, it was estimated that 434 million hours were spent in unpaid voluntary work in Australia (4441.0). This represented 32 hours per person per annum for the in-scope population. The 1997 TUS, estimated that total time spent on ‘unpaid voluntary work’ had risen just over 530 million hours, an average of about 36.5 hours per person for the in-scope population (4153.0).

Though the purpose and methodology of the respective surveys was very different, the results for unpaid volunteer work were quite comparable. While the 1997 TUS confirmed an expected increase in volunteerism compared with 1995, it was decided to discount the apparent increase in hours of voluntary work from the TUS for this current exercise and to set the rate at 35 hours per person per year in 1998-99. Hours per person per annum were then multiplied by the in-scope population to estimate total hours of unpaid voluntary work for 1998-99 (505 million). Data from the ABS Survey of Voluntary Work, 2000 will be available later this year and will provide a much firmer basis for estimates of hours of voluntary service.

### **FTE employment**

FTE employment was calculated as follows:

$$\begin{aligned} & \text{total annual hours worked (505 million)/1610} \\ & = 313,400 \text{ FTE employment persons} \end{aligned}$$

where: 1610 = FTE daily hours worked, full time employee (7) x days at work per person per annum (230).

### **Wage rate**

The wage rate used in calculation of the value of volunteer and community work in 1997 was \$13.96 per person per hour (5240.0). An explanation for the adoption of an individual function replacement cost method for valuing unpaid work in Australia can be found in 5240.0. The wage rates adopted was based on data for a range of work types approximating volunteer and community work. While certain types of volunteer and community work, associated travel and communication, have been excluded from these current estimates (see TUS - minutes per day, above), it is still considered appropriate to use the wage rate derived in 5240.0 as an approximation for in-scope volunteer activity.

The wage rate for 1998-99 was estimated using data on Average Weekly Earnings of Employees, Australia (6302.0, Table 3) to derive an index linking 1997 and 1998-99.

The appropriate wage rate for 1998-99 was estimated to be \$14.51 per person per hour.

### **Imputed compensation**

Imputed compensation was calculated by multiplying estimated hours of volunteer work in 1998-99 (505 million hours), by the derived wage rate, \$14.51 per hour.

$$\begin{aligned} \text{i.e., } & 505 \text{ million} \times \$14.51 \\ & = \$7,320 \text{ billion} \end{aligned}$$

### **Industry/group estimates**

Tables 8 and 9 from 4441.0 provided data on number of persons volunteering and hours worked by volunteers by field of voluntary work. The fields described closely approximate those in the current study. A summary of this data follows in Table 5.

**Table 5. Field of Voluntary Work, Persons, and Hours, 1995**

<i>Field of voluntary work</i>	<i>Persons <sup>(a)</sup> (number '000s)</i>	<i>Person hours (million)</i>
Sport/recreation/hobby	828.2	104.6
Welfare/community	784.7	105.7
Health	181.7	24.0
Emergency services	128.6	14.8
Education/training/youth development	668.0	61.1
Religious	466.1	70.6
Environment/animal welfare	98.2	12.4
Business/professional/union	86.2	7.8
Law/justice/political	43.9	3.7
Arts/culture	108.0	15.5
Foreign/international	19.1	2.6
Other		4.9
Not collected		6.2
Total	2639.5	433.9

<sup>(a)</sup> As a volunteer can work in more than one field of voluntary work, the figures for individual fields of voluntary work will not add to the total.

The ratio of person hours in each field of voluntary work from this study was used to allocate to groups in the current exercise. Data from the 1997 Time Use Survey was not applicable at this level of detail for comparison. Data from the Survey of Voluntary Work, 2000 can be used to recalculate these ratios.

## Results

The results from this exercise using 1995 data appear quite plausible, though results are only possible at the group total level. Zero values are recorded for three groups - Development and housing, Law, advocacy, and politics, and Philanthropic intermediaries. (Law, advocacy, and politics was set to zero despite recording a positive value in the 1995 study. Results from EAS for 1998-99 for this group were implausible.) It would not be expected that significant amounts of volunteering would be recorded in these groups in Australia. Table 6 summarizes these results.

**Table 6. NPIs - Estimated FTE Employment and Imputed Compensation by Group**

	Ratio (from 1995)	Estimated FTE employment (persons)	Imputed compensation (\$m)
TOTAL: ALL NONPROFIT INSTITUTIONS	1.0000	313,400	7,320
GROUP 1: Culture and recreation	0.2768	87,500	2,040
GROUP 2: Education and research	0.1408	44,500	1,040
GROUP 3: Health	0.0553	17,500	410
GROUP 4: Social services	0.2777	87,800	2,050
GROUP 5: Environment	0.0286	9,000	210
GROUP 6: Development and housing	0	0	0
GROUP 7: Law, advocacy, and politics	0	0	0
GROUP 8: Philanthropic intermediaries and volunteerism promotion	0	0	0
GROUP 9: International	0.0060	1,900	50
GROUP 10: Religion	0.1627	51,400	1,200
GROUP 11: Business and professional associations	0.0180	5,700	130
GROUP 12: Not elsewhere classified	0.0256	8,100	190

***Q11.** Table 1 of the satellite account presents the Consolidated NPI Sector Account, which records the key variables in the short form for all NPIs that meet the specified definition at the aggregate level. Is the structure of this table understandable? Were you able to complete this table? Which data item or items presented the most difficulty for you? What gaps did you have to leave in this table and why? How complete, in your estimation, is the coverage of the data items you were able to report in this table? Please be specific.*

A11. For **Part A: SNA Transactions, Other Flows & Stocks**, the structure is straightforward and understandable from a national accounting perspective. There are, however, certain limitations to Australia's ability to fully compile the data requested.

In the production account, output can only be identified at the aggregate level for the market sector. It was not possible to compile separate estimates of 'Third-party payments'.

General government in Australia is changing the way it relates to NPI service providers. In the past, government transfers to NPIs were generally untied transfers for current or capital purposes that could be tracked through the government finance system. Government is now moving to a more business-oriented relationship with NPI service providers. Funding has begun to be tied to contracts in which funding is dependent on delivery of specific services. That is, governments are moving to a third-party payment approach to NPI funding. Unfortunately, government finance statistics do not currently separate third-party payments from transfers to NPIs. In addition, it seems clear that some of these third-party payments are also included as part of the intermediate consumption of government. It was considered that a better overall result would be obtained by not attempting to identify third-party payments in this test.

One issue that arose on the data side is the accounting for volunteer labor provided to market NPIs. This is not discussed in the handbook. A final consumption expenditure item for market NPIs seems to be required to balance the books for the whole economy. This is the approach we have taken for this study, but would be interested in the views of others.

For **Part B: Other Variables**, the structure is understandable. ABS does not provide employment data on an FTE basis, preferring to use measures of employed persons and hours worked. However, FTE estimates for volunteer work have been included in this study.

***Q12. Table II of the satellite account presents the variables of the Consolidated NPI Sector Account of Table I, disaggregated by type of nonprofit institution, using the ICNPO. Is the structure of this table understandable? Were you able to complete all four parts of this table? What gaps did you have to leave in this table and why?***

A12. The 4 parts of Table II comprise:

Table II.1 - Categories of Expense Classified by Type of Nonprofit Institution

Table II.2 - Sources of Revenue Classified by Type of Nonprofit Institution

Table II.3 - Transfer Payments Classified by Type of Nonprofit Institution

Table II.4 - Paid and volunteer employment and Compensation Classified by Type of Nonprofit Institution

We had difficulties understanding what was required in these tables. The logic behind including final consumption expenditure (P.3) in table II.1 and other non-market output (P.13) in table II.2 is unclear. If these are carried through to total expenses and total revenue as appears to be required, double counting appears to result on both sides. The purpose and logic behind these tables requires further clarification.

ABS was able to complete the tables to varying degrees. ABS was able to complete the table rows except for ICNPO activity classifications Group 8: Philanthropic Intermediaries and Group 9: International, for which no data is separately available.

For Table II.1, the table column 'Gifts, grants and transfers paid' was only completed in respect of Group 1: Culture and Recreation. Data in this column was not otherwise allocated to Groups.

For Table II.2, the column 'Revenue from sale of services' was not compiled. ABS does not have data required to fill this column. The column 'Revenue from private philanthropy' was completed only in respect of Group 2: Education and Group 12: Not elsewhere classified. Total receipts here are probably understated, however there is limited data available on such receipts. The column 'Revenue from RoW' is shown as a zero total, which seems correct for Australia.

For Table II.3, data on transfers from Government appears reasonably sound. As mentioned earlier though, Governments are moving towards a service contract relationship with NPIs. Funding may now be on a fee-for-service basis and recorded in government accounts as intermediate consumption, rather than as a transfer. Measuring transfers from the government side of the transaction will understate the total amount the government provides to NPIs. There is limited information available on transfers received from other sectors. A sectoral split of Transfer payments made is not possible at present.

For Table II.4, FTE for paid employment is not available. FTE for volunteer employment has been estimated to enable comparison with paid employment.

***Q13. Table III of the satellite account presents a derivative of the Integrated Economic Accounts disaggregated by sector, but with the NPI and non-NPI components of each sector recorded separately. Is the structure of this table understandable? Were you able to complete all three versions of this table: SNA basis, with volunteer labor, with volunteer labor and output valued by expenses? What problems did you encounter in separating NPIs from non-NPIs in each sector? Was one version more difficult to complete than another?***

A13. The 3 parts of Table III comprise:

Table III.1 - Integrated Economic Accounts, by Sector and Type of Institution, SNA Basis

Table III.2 - Integrated Economic Accounts, by Sector and Type of Institution, Including Volunteer Labor

Table III.3 - Integrated Economic Accounts, by Sector and Type of Institution, Including Volunteer Labor and NPI Output Valued by Expenses

The structure of these tables was understandable.

ABS was not able to complete these tables. Separate estimates of Output, Intermediate consumption, Taxes less subsidies on products, Compensation of employees, and Other taxes less subsidies on production are not compiled for institutional sectors. This data is only available at the total economy level. In addition, splitting current transfers into the three categories - private philanthropy, government, and overseas was not possible, though receipts from overseas would be negligible.

Data that was able to be completed for these tables - Operating surplus/Mixed income, Property income, Current taxes on wealth, and Other current transfers (total) were available for both the sector totals and for NPIs. None of the versions of these tables was more difficult to complete than another, so far as it was possible to complete them.

***Q14. Table IV of the satellite account breaks down the data in the three versions of Table III by activity or purpose, as appropriate, for a subset of critical variables: output, value added, employment, and final consumption expenditure. Is the structure of this table***

***understandable? Were you able to complete all parts of this table? For which variable(s) or version(s) did you encounter problems, if any? Please explain in detail the nature of the problem and how it was or could be resolved.***

A14. The 5 parts of Table IV are:

Table IV.1 - Output, Value Added, and Employment, by Industry, Sector, and Type of Institution, SNA Basis

Table IV.2 - Output, Value Added, and Employment, by Industry, Sector, and Type of Institution, Including Volunteer Labor

Table IV.3 - Output, Value Added, and Employment, by Industry, Sector, and Type of Institution, Including Volunteer Labor and NPI Output Valued by Expenses;

Table IV.4a - Final Consumption Expenditure of General Government by Type of Institution, Classified by Purpose

Table IV.4b - Final Individual Consumption Expenditure by Sector and Type of Institution, Classified by Purpose

The structure of these tables is understandable. ABS was not able to complete all parts of these tables.

ABS does not currently publish a production account for Australia as described in SNA93, although the information is available from unpublished supply/use tables for a number of years up to two years prior to the current reference year. Institutional sector tables are not produced through this process. ABS produces annual estimates of Industry Gross Value Added, though again, not for institutional sectors. It is thus, not possible to complete Tables IV.1, IV.2 and IV.3 by institutional sector.

Information on employment by industry and institutional sector of the employer is similarly, not available, though employment by industry is available and has been used in these tables.

Table IV.4a has been completed. Final consumption expenditure of general government for Australia is classified by the Government Purpose Classification (GPC). The GPC closely follows COFOG. A concordance linking GPC to ICNPO is shown at the foot of Table IV.4a.

Table IV.4b has been completed.

***Q15. Table V of the satellite account presents indicators of NPI structure, capacity and output. It also builds some links to other statistical systems covering labor force and other population characteristics. Is the structure of this table clear? What problems, if any, did you encounter in completing Tables V.1-.3? Please be specific. With respect to Table V.4, for which capacity and output measures would it be desirable and feasible to collect and report***

*estimates in the NPI satellite account? (Table V.4 provides some examples of such measures.) Please list the desired capacity and output measures and, where available, provide estimates.*

A15. Table V consists of:

Table V.1 - Nonprofit Entities, Members, and Memberships by Type of Nonprofit Institution

Table V.2 - Paid Employees, Volunteers, and Members of Nonprofit Organizations by Occupation, Gender, and Age

Table V.3 - Giving to Nonprofit Organizations by Occupation, Gender, and Age

Table V.4. Selected Capacity and Output Indicators by Type of Nonprofit Institution

The structure of these tables is generally clear, though average age (years) for Table V.1 is less so. It is not currently possible for ABS to compile Tables V.1, V.2, or V.3. Data is not available on Legal type, Median size of assets, or Average age for Table V.1. Data on occupation/ages for paid employees and volunteers is not available to complete Table V.2. Data on labor force status by industry and by occupation, as well as information on age of volunteers is available for volunteers from the Survey of Voluntary Work. It would be possible to concord this data to Table V.2 with additional time. Similar data is not available for paid employees. Data on giving to NPOs by occupation and gender is not available for Australia.

Data on capacity and output indicators are available for Australia, though Table V.4 has not yet been compiled. The ABS produces an extensive range of data on the size, characteristics and selected performance indicators for a broad range of NPIs. Data on specific NPIs by field of activity is published regularly.

***Q16. Table VI of the satellite account summarizes key dimensions of the Consolidated NPI Sector using variables presented elsewhere in the satellite account, but presented in a form more accessible to nonprofit specialists. Is the structure of this table understandable? Were you able to complete this table? If not, what items are missing and why?***

A16. Table VI consists of Key Dimensions of the Consolidated NPI Sector, by Type of Institution. The structure of this table is understandable. As ABS was unable to complete all structural information in this table it was not compiled. Data on core monetary variables was supplied in Table II.

### **On Chapter 5: Implementing the Satellite Account - Data Sources**

***Q17. Is the data compilation framework given in Chapter 5 workable for your country? What problems did you encounter in using it?***

A17. The framework in Chapter 5 recommends several tasks to undertake towards implementing an NPI satellite account. The first of these is to establish a register of NPIs. Information to be included on the register includes the organization's name and address, an identification number to link its enterprise/establishment data sets and registers, industry, purpose, institutional and other classification information, income, assets or other size measures, and other indicators of legal status.

The ABS has not yet attempted to establish such a NPI register for Australia. The extent to which the type of register described already exists is an issue that the ABS has not sounded out at present. The treatment of NPIs on the ABS register of 'businesses' is described below.

ABS sampling methodology has been designed to produce accurate industry estimates given certain cost constraints. The need to produce accurate NPIs estimates has not been a consideration.

***Q18. Please describe the principal data sources you used to develop your estimates. For example, does the source contain transaction data as well as establishment totals? Is there a registry of NPIs or several registries? How are NPIs treated in the business and establishment registers? How are NPIs treated in the VAT system and other administrative records?***

Data sources used in this exercise were quite varied. The principal data source was the ABS Economic Activity Survey (EAS). EAS is a survey designed to provide data on income, expenditure, inventories, assets, liabilities, and capital formation - principally to be used in compiling Australia's national accounts. EAS is a large-scale survey that uses non-government employing businesses as its frame. Data from EAS is supplemented by data on non-employers from the Australian Tax Office (ATO) and by data on general government units from the ABS Public Finance System. Businesses responding to EAS are asked to answer the question "Is this a not-for-profit organization?" This screening question has not been edited or tested prior to this current exercise - it is known that some businesses misinterpret the question and respond yes because they have not been profitable in that year. More importantly, NPIs are not a selection variable in EAS sample design - it is designed to provide industry estimates, not institutional estimates. There is no guarantee that the EAS sample is representative of NPIs, especially at the more detailed industry level.

The ABS business register has an NPI flag, but it is not fully operational. A large scale profiling survey of businesses in the NPI target industries was undertaken in 1996 to update the flag and to code businesses to the NPISH sector. Identification of NPIs was considered quite good after completion of that work, bearing in mind those non-employing businesses are out of scope. It is probable that the standard of NPI flags on the register has deteriorated somewhat since the profiling work was done.

Australia recently adopted a VAT style of taxation called the Goods and Services Tax (GST). Prior to the introduction of GST, ATO maintained records of entities that generated a taxable income. To the extent that NPIs did not generate taxable income, or were not subject to paying

other taxes such as payroll tax (if they were non-employers), the ATO did not require them to submit regular statements of income and expenditure. However with the introduction of GST, NPIs like other businesses must apply for an Australian Business Number (ABN) and file returns to ATO to receive imputation credits on GST paid. It is expected that virtually all businesses operating in Australia, whether employers or non-employers and whether they report taxable income or not, will apply for ABNs. NPIs with an existing tax-free status may not necessarily apply for ABNs, but it is expected that virtually all will do so. ABS expects to adopt a new business register in conjunction with ATO in 2002 that will be based on ABNs.

ATO recently conducted a business census as part of the implementation of the new tax system. Data from the census is being used to build the new ABS/ATO register, which includes an NPI flag. However, classification of NPI status is still based on a mix of self-identification and existing register status. The quality of any NPI list derived from this new register will have to be established, but it is expected to be a rich source of institutional sector data. ABS plans to make use of by-product data from the GST more generally, and will also investigate it as a potential source for NPI data.

***Q19. Were most NPIs already covered by the data collection systems used in your national accounts, e.g., establishment censuses and surveys, labor force surveys, administrative records, etc.? Were they easily identifiable?***

A19. Most NPIs incorporated in the results for this exercise are covered by the data collection systems used in Australia's national accounts, insofar as economic data is concerned. As noted above, the scope of the ABS register (integrated Register, now Inteframe) is employers at present. ABS regular enterprise/establishment surveys (actually 'management units') that use Inteframe as the selection framework (EAS, for example) are thus restricted in their scope to 'employing units', again, this is expected to change from next year. To the extent that NPIs are employers, their chances of selection in these surveys are the same as any other unit of that size. There would be a large number of very small NPIs that are non-employers, and would therefore escape the net. However a significant part of their activity would be picked up in the volunteer component.

There is some concern that NPI status on the business register has not been thoroughly tested or edited. There are also some doubts about the institutional sectoring of NPIs, especially concerning the market/non-market status. There is also concern that data included in this exercise does not make allowance for non-employing NPIs. More generally, data from the Australian Tax Office (ATO) is used to supplement EAS data in respect of non-employers. However registered NPIs are not obligated to submit a tax return, so it is unlikely that there would be much representation of non-employing NPIs in ATO data.

It is unlikely that the ABS will establish and maintain a separate NPI register.

The Survey of Voluntary Work, results from which contributed substantially to this exercise, is based on persons rather than organizations. The Survey of Voluntary Work was conducted as a supplementary topic to the ABS Monthly Population Survey. It is likely that a similar approach to

measuring volunteering will be adopted by the ABS in future. This is a cost effective alternative to surveying NPIs for information on their providers of voluntary services.

***Q20. Did you find many entities that were previously not covered by the statistical system?***

Entities included in this current test are covered by the statistical system. Statistical system should be viewed in a fairly wide context here, covering non-government employing units from the ABS business register, non-government non-employing units in ATO collections, and government units from the ABS Public Finance System. In theory, this should give total coverage of NPI entities in the economy. This study has shown that there are significant gaps in our coverage of NPI operations that can be linked to an imperfect recognition system in ABS collections. NPI status has not been a selection variable for ABS collections so little attention has been given to their identification.

***Q21. How much time (person-days) was required to complete the tables to the extent you were able to complete them? Do you consider this a reasonable amount of time for this work?***

A21. Approximately 95 days have been devoted to this exercise. This represents a reasonable amount of time considering the progress that has been made. However, more time is required to resolve some data inconsistencies and to do further investigations to verify results.

***Q22. What are the major gaps in data coverage on NPIs? What additional steps would be needed to collect these missing data on NPIs or fill in data gaps? How much additional time do you estimate would be needed to undertake these additional steps?***

A22. The most obvious gap in data coverage for Australia at present is for small, non-employing NPIs. As outlined earlier, employing NPIs are randomly selected from the ABS register for inclusion in ABS surveys. We are not sure if this is a significant omission at this stage. NPIs selected in the annual Economic Activity Survey are, at least in theory, representatives of their size and industry classification. However, the issue is whether enough are selected to be representative of NPIs. To be sure of this, NPIs would have to become a survey design parameter.

The second gap in ABS coverage is, as previously noted, for institutional sector data. Much of the data in this exercise is based on an NPI screening question in the EAS, the accuracy of which is untested. EAS is essentially an industry-based, not an institutional sector-based, survey. Verifying NPI and other institutional sector flags for EAS respondents would be a time consuming extra step. However, more satisfactory institutional sectoring could be developed with some further work, especially for NPISH.

Both these data gaps could potentially be addressed in the future as the new business register system is introduced. As for new sample designs to incorporate requirements for NPI data, it is not possible to say at this stage. This would be a corporate decision that could only be taken after further investigation. There are a number of issues that would need to be considered, including any impacts on the quality of overall industry estimates.

Better estimates of volunteering, FTE, and imputed compensation will be able to be prepared upon release of results from the second ABS Survey of Volunteering later this year.

Some gaps that became evident during this current exercise could largely be filled with existing data - a transfer matrix for example. It would take perhaps a month to develop a workable transfer matrix.

***Q23. For this test, we have asked you to develop estimates using current prices or at least identify the path for doing so. What additional steps would be necessary to report the data in constant prices?***

A23. The ABS has compiled quite a wide range of price indexes for goods for many years, but has only recently begun to compile price indexes for services (other than those in the Consumer Price Index). However, these new indexes only relate to market activities and many of the services produced by NPIs are not marketed.

Estimates of non-market services volumes have traditionally relied on indirect indicators of input volumes to derive constant price values. An example of an indirect input indicator is hours worked to produce the service. There is a reasonable amount of data on hours worked in NPIs, both by employees and volunteers (more to come later this year). The output of the NPI sector is measured as the sum of its inputs, so hours worked is a proxy for any volume change. However, simply using hours worked does not take account of productivity changes or changes in the quality of service provided. They are widely recognized as a poor measure of volume change.

ABS is about to introduce new techniques for deriving constant price estimates for health and education services using direct indicators of output volumes. They could probably be applied to NPIs involved in those activities.

The ABS is of the view that non-market service volume is particularly difficult to estimate well.

### **Other Questions**

***Q24. Before beginning this test, how far along was your country in developing institutional sector accounts' that is, which accounts are compiled for institutional sectors? For what time period do you have institutional sector accounts? How easily could compilation of these data on NPIs be incorporated into your program?***

A24. Australia compiles institutional sector accounts for:

- Households (including NPISH)
- Corporations
  - Financial
  - Non-financial
- General government

External (overseas)

Accounts produced for each institutional sector include Income and use of income accounts, Capital accounts, Financial accounts, and Balance sheets. These accounts for each institutional sector are available annually from 1959-60 to 1999-2000. Australia does not produce sector production accounts as described in SNA93.

Australia would not be in a position to compile sectoral NPI accounts on an ongoing basis. The existing business register and surveys would not support it. The best prospect would seem to be for periodic releases of a satellite account for NPIs along the lines of this study.

A first step for Australia will probably be development of separate NPISH accounts.

***Q25. Did carrying out this work provide new insights for the development of institutional sector accounts?***

A25. Yes. This work enabled us to develop a good understanding of the strengths and weaknesses of our current system for producing estimates for NPIs and for sectors more generally. The work demonstrated that development of NPI accounts is feasible in principle, though much more work will need to be done on assessing the quality of data currently available. The bigger challenge will be in implementing changes to data collections to improve the quality of the available data for NPIs. Major improvements in the business register resulting from the new tax system in Australia should improve the prospects for upgrading the data available for NPIs in the future.

One aspect that clearly emerged is that it will be essential to develop a matrix of transfer payments linking each of the institutional sectors and NPIs attached to the sectors. In Australia's current system of national accounts, intra-sector transfers are not identified, except between the separate levels of government. Carrying out this work highlighted the importance of identifying intra-sector flows in the households (including NPISH) sector.

***Q26. Do the tables in the satellite account comparing the NPI sector to the total economy and to other sectors add to your understanding of the 'three-sector economy'? Is there interest in producing the NPI satellite account in your country?***

A26. Yes, comparisons of a separate NPI sector with the rest of the economy add to understanding of the economy. The expansion of the production boundary to include volunteer services is a very useful addition. There is significant interest in NPIs in Australia at present. The Government is currently conducting an enquiry into the definition of charities that is expected to report in June. This enquiry has focused community attention on NPIs and their role in the community. ABS will use the experience gained through participation in the current test to assess what would have to be done to develop an NPI satellite account for Australia. We are also interested in separating the NPISH sector from households in the regular national accounts.

***Q27. Does identifying the NPI and non-NPI components of the other sectors improve the picture you have of the corporations, government, and household sectors?***

A27. Yes. Participation in this test has focused attention on a range of classification and borderline issues. Data limitations prevented a proper delineation of the corporations and general government sectors' NPIs. Identifying the NPISH sectors would provide the most valuable new information.

***Q28. Please provide any other comments or suggestions on the Handbook or tables.***

The accounting framework proposed in the *Handbook* provides a useful starting point and reference anchor for developing NPI satellite accounts. National accountants will find the guidelines and table structures proposed understandable. An understanding of SNA93 is presumed. However, the usefulness of the structure proposed in the *Handbook* will be limited by the ability of non-national accountants to understand and interpret the complex concepts and table structures presented. The short form is complex, the long form even more so.

A wider audience should have available to it data that can be easily understood, interpreted, and used to draw conclusions. It is suggested that further development of the Handbook consider options for presenting summary data at least, in a format that is more understandable to a wide audience. To progress development of NPI satellite accounts, the public needs to understand the issues.

The ABS publication: *Australian National Accounts Tourism Satellite Account, 1997-98* (ABS Catalogue no. 5249.0) is an example of a vehicle that presented complex national accounting issues in a format understood by a wide audience.