

Australian Government Statistical Forum

Thursday 13 May 2004
2.00pm - 5.00pm

Agenda & Papers

**Australian Institute of Health and Welfare
6A Traeger Circuit
Fernhill Park
Bruce ACT 2617**

1. *Introduction and Welcome from Dennis Trewin, Australian Statistician*

2. *National Data Network (NDN)*

The NDN is a collaborative network, which will provide mechanisms to facilitate data sharing across government agencies. There will be two presentations on the NDN. The first will provide a broad overview of the project while the second will cover the NDN work specifically related to the Australian Research Alliance on Children and Youth (ARACY).

3. *Revised National Statistical Service (NSS) Proposal*

The paper will cover the revised directions for the NSS, in the context of feedback from last year's AGSF meeting and the February 2004 Information Management Strategy Committee meeting.

4. *Metadata Standards for Statistical Data*

Two case studies on the application of metadata strategies will be presented. The first will reflect on the strategies employed within the Australian Institute of Health and Welfare and relationship with its Knowledgebase System, while the second will look at the development of metadata strategies at Centrelink.

5. *Developments in Statistical Classifications and Other Standards*

The ABS will present two papers discussing recent developments in statistical classifications.
Agenda 5a - Economic Statistics
Agenda 5b - ABS contribution to the development of Classifications and Standards in Social Statistics.

6. *International Statistical Activities*

Round table discussion on international statistical meetings attended by members.

7. *Developments in Geo-Referencing*

The Geography area of the ABS will present recent developments in Geo-Referencing, including the potential benefits of a Geocoded National Address File (G-NAF) and the use of Mesh Blocks.

8. *National Statistical Training Institute (NSTI)*

The NSTI has been established to develop and deliver statistical training at the ABS. This presentation examines the potential for this role to be widened to provide a coordinated and strategically focused statistical training program for the APS.

9. *Future Agenda Items*

No papers provided.

Presentations to be given at the meeting.

THE NATIONAL STATISTICAL SERVICE

Introduction

Over the last three years, the Australian Bureau of Statistics has been developing the National Statistical Service (NSS) to improve the quality and breadth of statistical information available to Australians. The NSS initiative complements the Australian Government's push towards a whole of government approach to the management of information and aligns with many initiatives in State and Territory governments.

2. As with other countries, government agencies across all levels are increasingly producing and/or using statistical information for developing policy, performance monitoring and program evaluation. However, the depth and breadth of information that is currently supplied by statistical producers in Australia falls short of meeting the total needs for statistical information.
3. The ABS has a clear vision for the NSS. Our vision sees all government agencies working together to deliver the statistics required by Australia, no matter what their source. The full vision statement is presented in Attachment 1. This vision is a long-term goal and we recognise that it will take many years to achieve, but we can work towards it incrementally with benefits being delivered progressively.
4. This vision has been shared at various fora with Australian, State and Territory governments and has been received favourably.
5. Explicitly, the NSS aims to:
 - increase the availability, accessibility, quality and useability of information derived from key administrative and survey data sets by applying sound statistical and data management principles and practices, and
 - forge statistical partnerships to share knowledge and expertise.

This paper presents the directions forward to achieve these aims.

Background

6. Broadly, two strategies for progressing the NSS have emerged in parallel. The first more centrally driven strategy drew on NSS implementations overseas. The second more opportunistic approach used a range of disparate projects as they were identified in varied statistical fields.
7. Overseas experiences with national statistical systems have created controlled systems, such as in UK, Sweden and New Zealand with a large degree of control in the central statistical agency. The experience of these countries was used to develop a structured NSS proposal during 2003, which was presented to a range of fora. The key elements of this strategy were the NSS Key Principles, Foundation Membership and Tier 1 Official Statistics. In general, the concept of the Key Principles was received positively, while Foundation Membership and Tier 1 Official Statistics were seen as too rigid for the Australian statistical environment.

8. The second strategy, which emerged, uses opportunistic projects as vehicles to carry the NSS forward. There currently exists a range of agencies involved in production of statistics and in interdepartmental projects. Aligning these projects with the NSS vision can incrementally progress the NSS at relatively low cost. The development of many Information Development Plans (IDPs), such as in the Education and Tourism fields, can be considered in this context. Other examples include working with the state and territory governments to improve metadata management of statistical information.

Moving Forward

9. These opportunistic projects described above have yielded several successes over the past two years. Two styles of opportunities exist. The first requires gradual effort to progress over a prolonged period. Typically these projects are broad in nature and encompass activities such as maintaining relationships and developing and improving administrative data sets. The second style requires an intense effort over a shorter period. These projects have focused objectives and spearhead rapid progress of the NSS in a jurisdiction or field of statistics. Both styles of projects are useful and necessary in progressing this initiative.

10. In light of this and the reactions to elements of rigid overseas models, the ABS will focus its efforts on opportunistic projects. Rather than worrying about NSS structures, such as membership and governance mechanisms, we will progress the NSS through opportunistic projects, balancing our investment between spearhead and long-term projects. The exception is the National Data Network and the supporting services (described in the next section).

11. Spearhead projects will form the public face of the NSS and should be consistent with the vision statement. From each project, best practices and guiding statements will be extracted to build a knowledge base that can be shared throughout the Australian statistical community.

12. Each project will have a defined governance arrangement that will include stakeholders from a range of agencies and jurisdictions.

The National Data Network & the NSS

13. For the next 18 months, the National Data Network (NDN) will be a spearhead project for progressing the NSS. The NDN, which grew from the work of the Australian Research Alliance for Children and Youth (ARACY), provides an opportunity for the ABS to invest in an initiative to progress the NSS that already has the support of a number of government agencies. It is a timely opportunistic project to progress the NSS.

14. There is strong alignment between the goals and directions of the NSS and NDN. Both seek to increase the availability and accessibility of information. There are some objectives of the NDN, which are outside those of the NSS (and vice versa). However, by focusing on the common objectives both initiatives can be progressed concurrently.

15. Interim governance arrangements are currently being established for the NSS and NDN.

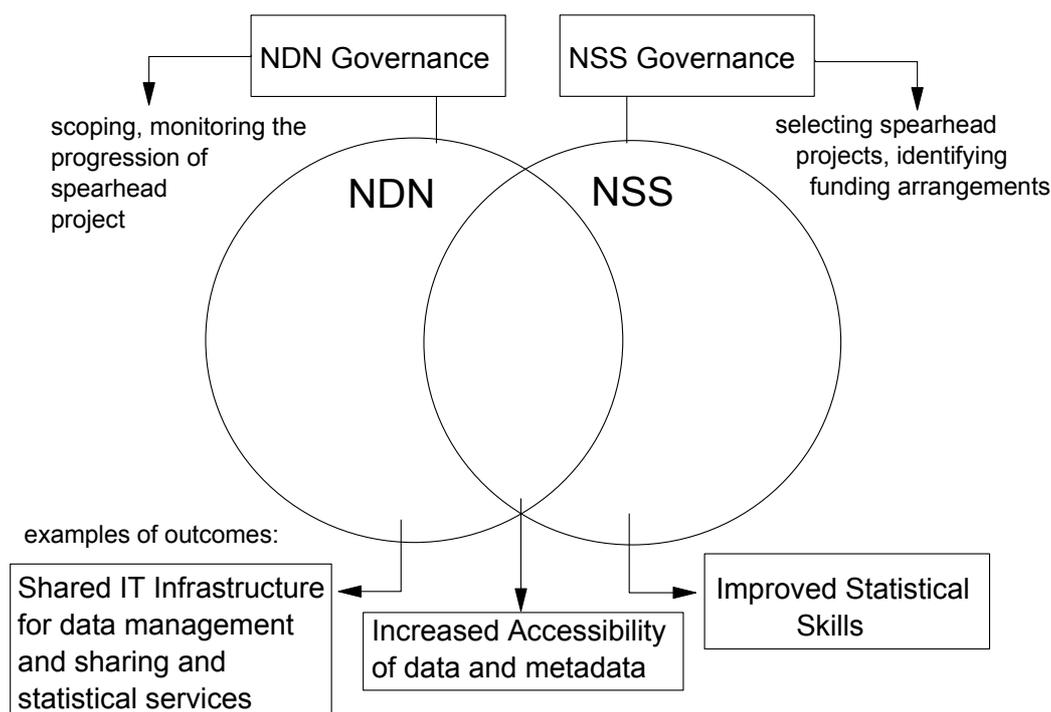
16. Because of the overlapping interests of the two projects, in the short term at least, we envisage a form of joint governance mechanism; most likely a board will be established to oversee the range of projects. This would be a group of 6-8 people who provide a spectrum of interests and backgrounds. The Board membership would not be selected on representational basis of course, it will be possible to consult with stakeholders and obtain their views prior to Board deliberations on particular topics.

We currently see the external boards roles as:

- influencing the choice of spearhead projects and their funding arrangements
- determining priorities of components of cross cutting projects such as the NDN
- coordinating NSS activities
- raising awareness

Separate project management arrangements, including governance arrangements, will be established for each of the spearhead projects. The long-term governance arrangements will be established in light of experience with the interim arrangements.

Diagram 1: Relationship between NDN and NSS



Other Activities

17. While the NDN will be the main new project, the ABS will continue to pursue a range of other projects. Examples of these are handbooks, a set of training programmes, assistance with developing data catalogues in other agencies and facilitating the development of IDPs.

18. There will be many activities that will be utilised by the ABS to progress the NSS. We will continue to offer consultancy services, consult through user groups and offer training programs.

19. The NSS web site, <www.nss.gov.au>, has recently been released. The web site contains a handbook to assist staff in a range of agencies develop a basic knowledge about designing and managing data collections. The web site also links together existing metadata registries and allows searches for existing data sources.

20. Those members already signed up will continue to make valuable contributions to the NSS by improving the quality and accessibility of their data holdings. The ABS will continue to assist them in their endeavours and will welcome new members who wish to commit to the NSS Key Principles.

NDN Benefits	NSS Vision
<p>Benefits to Research; by</p> <ul style="list-style-type: none"> • cost effective use of existing data, • more cross disciplinary research, • faster access to higher quality data, and • reduced dependency on costly longitudinal studies. 	<p>All government agencies working together to deliver the statistics required by Australia, no matter what their source</p>
<p>Benefits to Policy; by</p> <ul style="list-style-type: none"> • more ready access to data for policy relevant research that links information across disciplines and silos, and • enables higher-level analysis and synthesis of information. 	<p>through;</p> <ul style="list-style-type: none"> • increasing the availability, accessibility and useability of information derived from key administrative and survey data sets • applying sound statistical and data management principles and practices • forging statistical partnerships to share knowledge and expertise • building a relevant and sustainable statistical service founded on the trust of, and cooperation with, the data providers
<p>Benefits to Australian public; by</p> <ul style="list-style-type: none"> • increased understanding of causal pathways for multiple, social and health conditions enabling more effective interventions and treatments. 	<p>so that;</p> <ul style="list-style-type: none"> • policy, research and decision making is underpinned by relevant statistical information • government statistical information is efficiently collected, managed, shared and disseminated • statistical burden on businesses and households is minimised • cooperation and support of respondents and the public in general is maintained.
<p>Benefits to Agencies; by</p> <ul style="list-style-type: none"> • Access and sharing of infrastructure for data management and data publishing • Improved standards and protocols for data sharing 	
<p>Better focused allocation of resources, leading to:</p> <ul style="list-style-type: none"> • improved outcomes for children and youth, their families and communities. 	

No papers provided.
Presentations to be given at the meeting.

Forthcoming changes to Australia's economic statistics

This paper describes three initiatives currently underway that will impact on the economic statistics released by the ABS. The three initiatives are:

- the development and implementation of changes to the international standards for national accounts and balance of payments statistics;
- changes to the international accounting standards; and
- changes to the industry classification used by the ABS.

2. The changes are long-term changes and are likely to be implemented through Australia's economic statistics over the next five years. The impact of these changes will be broader than ABS statistics and may impact on other agencies surveys and administrative systems. Although these impacts are not discussed in this paper, individual agencies should consider changes to the accounting standards and the industry classification.

3. All of the changes have the potential to revise the time series information released by the ABS. Because of this, the aim of this paper is to raise awareness of the changes and to seek input from key users of economic statistics about how they would like to be involved in the process of change. The paper presents a brief overview of the changes that are likely in each of the three areas.

Changes to the System of National Accounts and Balance of Payments

Background

4. The international standards for economic statistics are currently centred around two documents, the System of National Accounts, 1993 (SNA93) and the 5th edition of the Balance of Payments Manual (BPM5), both of which were released in 1993. Together these new standards represented a significant step forward for economic statistics in terms of ensuring their relevance and coherence in measuring economies that had changed substantially in their structure and complexity.

5. The ABS introduced the new standards in 1996-97 (balance of payments) and 1997-98 (national accounts). However, it is now ten years since the standards were updated and economies continue to develop in their complexity. In response to this, relevant international organisations and a range of national statistical agencies, including the ABS, have started work to consider a range of conceptual and measurement issues that were not clarified completely at the time of the release of SNA93 and BPM5 or have emerged as important measurement issues since that time.

6. The following describes the types of issues under review, the general process and timing through which updating of the standards will take place, and the likely timing with which the changes will be implemented in Australia's economic accounts.

Topics under review

7. Although there are important changes under consideration, the current review is expected to be much more limited than the changes introduced in SNA93 and BPM5. Those changes were quite far reaching and included a number of changes that impacted on the level of GDP as well as introducing

additional detail (sectors and instruments), improved clarity of presentation (transactions, stocks, valuation and other changes) and changes to terminology. In contrast the current round of updating will target refining and identifying improved treatments of complicated market practices - such as the measurement of banking industry output. Although of smaller scope than the SNA93 and BPM5 changes, the review has the potential to change the level of GDP. Particular focus is on improved measurement of the financial sector and a better treatment of certain non-financial assets.

8. Meetings of key forums involved in the update of international statistical standards have recently been held and significant progress has been made in firming up the list of candidate issues for consideration. The topics under review are listed in 'Attachment One SNA93 and BPM5 Review Topics'.

Process for revising the international standards

9. The general process will be for individual topics or groups of topics to be discussed among national accounts, balance of payments and financial accounts experts within various task forces, working groups and so-called "city" groups. These groups either already exist (for example the Canberra Group on Capital Stock Statistics) or will be set up for particular tasks. In the case of proposed changes to the SNA, the groups will make recommendations, which will be reported back to the Inter-Secretariat Working Group on National Accounts (a body comprising representatives of the key international statistical agencies). Decisions on the recommendations will be made by a high level expert group established for the purpose of updating the SNA. These decisions will be considered by the United Nations Statistical Commission, which has the final sign-off on the updated SNA. The updating of the Balance of Payments Manual will be closely coordinated with the SNA update, but the work will be overseen by the International Monetary Fund's Committee on Balance of Payments Statistics. The IMF's Statistics Department is coordinating the updating work.

10. Many topics are already under discussion. It is anticipated that there will be a stream of recommendations over the next 3 years or so as discussion on various topics reaches maturity.

11. Australian involvement in the discussions has commenced and it is anticipated that the ABS will continue to involve itself in discussions on many of the topics listed above. The ABS also has representatives on the high level expert group for the SNA update and on the IMF's Committee on Balance of Payments Statistics.

12. It is likely that some of the changes to the SNA will also result in changes to the IMF's Government Finance Statistics Manual, which is the standard on which ABS government finance statistics are based.

Timetable for revising the international standards

13. The proposed timetables for the updating of both SNA93 and BPM5 are that draft text for particular topics will be developed over the coming three years. Final decisions on the nature of the changes will be made during 2007/08 following extensive worldwide consultation although it is likely that in principle decisions on a range of topics will be made prior to this point, as early as 2004. Release of the updated manuals is planned for late 2008.

Implementation in Australia's economic accounts

14. Within the ABS, a Macro-economic Standards Committee is to be established to oversee the various tasks and processes relating to this work and to ensure that it is carried out in a well-coordinated manner. In particular, the committee will oversee and coordinate any changes to ABS

statistics arising from the changes to the international standards. For the ABS, an important part of the update process is engaging in appropriate consultation with users of statistics.

15. In terms of timing of implementation within the ABS, it is the case that many of these areas under review are discrete bodies of work and hence, in theory, could be implemented progressively. However, many will impact on the measurement of GDP. As GDP is now measured in a supply and use framework, the implementation of changes associated with the definition of GDP requires a reworking of all supply and use tables. This is a significant task and one that cannot be undertaken on an ongoing basis. It is also the case that users of the statistics are likely to prefer a single implementation point rather than multiple changes in concept over a period of time. Historical revisions of the supply and use tables are already planned for 2005 and 2009 (for ANZSIC changes). Although the ANZSIC change is a very significant change for national accounts, particularly in terms of required resources, 2009 looks to be the best alternative for implementing the next SNA.

16. It is possible, however, that certain changes may be implemented earlier if both (a) operationally possible and (b) supported by users. It is likely that the implementation of the SNA and BPM changes in balance of payment statistics, international investment statistics, the financial accounts and government finance statistics will follow similar time frames. However, the timing of financial accounts changes is made complex by the fact that most data for the financial accounts is sourced from APRA and any changes required to collections to take account of new concepts need to be carefully planned.

Adoption of International Accounting Standards

Background

17. The Financial Reporting Council has adopted a policy that will see all current Australian accounting standards reworded to reflect International Financial Reporting Standards for implementation on 1 January 2005. This rewording will not only see different terminology used to describe similar accounting concepts, but also will adopt stricter controls on some accounting practices and less restrictive ones on some others. These changes are expected to have an effect on how businesses record some transactions and account for assets, liabilities and equity in their accounting records.

18. It is a requirement of the Corporations Act 1989 that incorporated companies prepare their accounts in accordance with accounting standards. ABS Economic Statistics surveys collect data items that are largely determined by accounting standards.

19. ABS collections will need to be prepared for revisions to forms design, standard question wording and (possibly) data items. Although it is not uncommon for an accounting standard to change regularly, in this instance all the Australian Accounting Standards Board standards are being updated at the same time.

20. It may not be possible for the ABS to identify all of the changes to standards before the changeover deadline. While some changes will not materially affect ABS time series, others have the potential to introduce significant discontinuities. For the latter, the ABS will need to formulate bridging or back-casting strategies. The ABS will put the most effort into the changes, which affect time series the most. While all of the standards will not be finalised for some time yet, there are some changes that are largely completed and it is known that significant discontinuities to ABS time series will result. These include expensing share options (significant impact on compensation of employees

and operating surplus); and changes to both allowable valuation methodologies and options for accounting for assets, liabilities and equity.

21. Impacts for the ABS from the changes relate to both:

the timing of the introduction of the accounting standards resulting in conceptual differences in the data collected (units with different financial years will, for a period, be reporting on the basis of different accounting standards); and

the collection instrument used (changed question wording).

Work Required

22. There already exists a document, published by the Australian Accounting Standards Board (AASB), outlining the incompatibilities of international standards with Australian standards. The ABS is identifying:

- the financial reporting changes required as of 1 January 2005;
- any inconsistencies with System of National Accounts / Balance of Payments Manual requirements;
- which reporting changes will affect data collected by the ABS; and
- any necessary question wording changes.

23. There will be a period during which companies may be using either the existing standards or the revised standards. This period will cover the calendar year of 2005. The ABS is considering the most efficient way to collect data during this transition period.

24. The timetable for this project will be tight, and the work coincides with other significant developments, which compete for resources.

25. There are a number of business risks associated with this project including:

- variable take-up by small business of the changes to accounting standards;
- capacity of the Australian Tax Office to reflect the changes to accounting standards (ATO data are a significant input into ABS economic statistics) ;
- timing of business reporting change overs; and
- timing of ABS receipt of information on the changes to accounting standards.

Timing

26. Previously, the AASB had intended to issue the new standards in a staged process, 'making' each standard as it was approved. The Board decided on 4 Sept 2003 that all Australian equivalents to International Accounting Standards Board (IASB) standards will instead be 'made' at one point in time, when the set is complete. The latest information available from the AASB is that this will take place on a date no earlier than 16 June 2004.

27. Until then, the Australian Accounting Standards Board will continue its schedule of approving the equivalents and, subject to resolution of copyright issues, place them as 'Pending Standards' on its web site, available for down-loading.

28. The AASB has stated that there will be no early adoption permitted.

Implementing the revised Australian and New Zealand Standard Industrial Classification

Background

29. The current Australian and New Zealand Standard Industrial Classification (ANZSIC) was released in 1993. It was produced jointly by the Australian Bureau of Statistics and Statistics New Zealand (SNZ) and is presently used in both countries for the production and analysis of official industry statistics. It is also widely used in administrative systems and other statistical databases.

30. ANZSIC is being updated to ensure that it continues to reflect the current structure of the economy. There has been growth in the services, information and environment areas, and ANZSIC 2006 will reflect these changes in the economy. In addition, ANZSIC 2006 will adopt a more consistent supply-side conceptual framework so that the classification better meets user needs.

31. The primary objective of this review is to facilitate the use of the ANZSIC for key users. This has been achieved by:

- recognising the changing needs of users of industrial data;
- implementing a more consistent conceptual framework;
- identifying new and emerging industries;
- updating industry descriptions to reflect the adoption of new materials, technologies and production techniques; and
- providing for development of alternate industry views.

32. The updated ANZSIC will be released in 2006 and the proposed revision will be substantial in some areas. Primarily, this is because of changes in the structure of the economy but is also a result of changes in the conceptual basis of the classification (through applying the supply side concept more consistently throughout) and to the creation of entirely new categories to aid analysis, such as the Information Media and Telecommunications Division. The updated ANZSIC will be referred to as ANZSIC 06. As the introduction of an industrial classification is a complex undertaking, it needs to be planned and monitored carefully.

Implementation strategy

33. The ABS will ensure that the introduction of the revised ANZSIC into ABS collections and publications is undertaken in a consistent manner while maintaining business continuity.

34. The statistical strategy for the implementation of ANZSIC 06 into business statistics contains four main components, working back from the publication strategy, centred on the incorporation of the revised classification into the National Accounts.

35. The first component, therefore, involved determining that the first publication of the quarterly National Accounts on an ANZSIC 06 basis would be the September 2009 quarter publication and the first publication of the annual national accounts on an ANZSIC 06 basis would be the 2008-09 publication. Both of these publications would be released in late 2009.

36. The second component relates to the decision that the publication of other ABS business related statistics on an ANZSIC 06 basis will be contingent upon the completion of survey redesigns based

on the revised classification. Except for benchmark and irregular collections (for example the 2006-07 Manufacturing Census and the 2006 Population Census) all other business related collections will be redesigned on an ANZSIC 06 basis from July month and September quarter 2009 reference periods for sub-annuals; and from 2006-07 reference year for annuals.

37. The third component relates to the creation of ANZSIC 06 estimates from ANZSIC 93 survey designs. To aid back-casting (the aim of which is to ensure that historical series are converted to the new basis to remove breaks in the series) and to smooth the incorporation of ANZSIC 06 into the National Accounts, parallel estimation (rather than dual coding) will be undertaken for affected sub-annuals and regular annuals.

38. To enable this approach, the final component of the implementation strategy involves the ABS Register carrying two ANZSIC codes from January 2006 to June 2009. As the ABS Business Register is substantially based on the Australian Business Register, ABS/ATO liaison is occurring in a number of different fora to ensure the success of this component.

Engaging and informing stakeholders

39. There are two types of users of the classification - statistical users and users who use the classification (and coders) as an administrative tool in business processes, for example the Australian Tax Office (ATO), Workcover and the banks. Appropriate expert advice will be provided to external users. The latter users will also require more support, including updated coders.

40. To keep users aware of the changes and their impact the ABS will be conducting seminars in each of the states and territories and we are planning to produce the following information papers:

June 2004 - outline of the new classification and the detailed communication strategy;

March 2005 - introducing the new classification in more detail and outlining the implementation strategy; and

March 2006 - updated version of information paper detailing the implementation strategy.

41. Following the release of the June 2004 paper, a series of ANZSIC 2006 information seminars will be held during late July /early August 2004. Interest in attending one of these can be registered by contacting Paul McCulloch (paul.mcculloch@abs.gov.au).

Measurement of income and production

- improved measures of banking industry output;
- Financial Intermediation Services Indirectly Measured on non-performing loans
- improved measures of general insurance and reinsurance flows;
- improved recording of life insurance and superannuation;
- consideration of capital gains as an income supplement (or indeed as part of income) and its influence on economic behaviour and its metrics;
- treatment of employee stock options;
- cost of ownership transfer
- treatment as capital gains taxes;
- definition of tax revenue and treatment of uncollectible taxes and tax credits
- valuation of government output
- accounting for capital services and gross operating surplus
- treatment of goods sent abroad for processing
- merchanting

Financial assets, flows and income

- income flows on non-performing loans
- valuation of financial instruments including non-performing loans
- treatment of indexation adjustments on indexed debt
- treatment of interest at concessional rates
- securities lending and gold loans
- treatment of guarantees
- unfunded pension scheme liabilities
- original versus residual maturity
- application of accrual principle to debt in arrears
- treatment of interest under high inflation

Asset boundary issues and classification

- classification of assets and terminology used
- definition of assets and liabilities (including treatment of contingencies, provisions and constructive obligations)
- treatment of military weapons
- treatment of improvements to land
- water
- cultivated assets
- treatment of data bases
- treatment of research and development expenditure/patented entities
- treatment of mineral exploration
- treatment of leases including Build-Own-Operate-Transfer type schemes
- treatment of originals and copies
- treatment of goodwill and other non-produced intangibles
- amortisation of non-produced assets
- securitisation of future receipts of government

Units, sectors, residence and territory

- treatment of ancillary units
- treatment of outsourcing (e.g. all staff of an enterprise employed by the one institutional unit)
- private/public/government sector delineation
- privatisations
- treatment of holding companies, special purpose entities and trusts
- treatment of multi-territory enterprises
- identification of quasi-corporations
- privatisations including securitisation
- meaning of national economy

Introduction and Background

In population statistics a strong focus on standards to provide for comparability and consistency of data collected from different sources is relatively new, both within Australia and internationally. In comparison with the situation in economic statistics there are no over-arching international frameworks such as the System of National Accounts.

2. Within specific fields of population statistics there are international standards and frameworks in some areas such as labour market statistics and household income statistics. These frameworks have been used to underpin Australian data in these fields.

3. There are also international standard classifications such as the International Standard Classification of Occupations, the International Standard Classification of Education and the International Classification of Diseases. These classifications are used widely in many countries including Australia either in the form of national adaptations or directly, to promote the comparability and usefulness of data in both statistical and client oriented applications.

4. The need for a degree of standardisation and consistency in population statistics which goes beyond this became evident in the early 90s. At this time the ABS initiated a project to develop standards for the full range of items, which are generally collected across the range of subject matters within population statistics. The factors, which led to this drive for increased standardisation, can be summarised as follows:

- Increasing awareness of problems faced by users in confronting data from a range of ABS and other agency sources which were not comparable due to the use of different concepts and classifications.
- The need to provide data from a range of statistical and other administrative sources to inform policy makers about the characteristics of specific 'at risk' population groups.
- Recognition that, in order to get the full picture on issues associated with particular areas of social concern such as health or education, it is frequently necessary to draw data together from a wide range of administrative and statistical sources.
- Acknowledgment that in many cases a more cost effective and high quality outcome can be achieved when thoroughly developed and ready-made standard concepts classifications procedures or question are used, in comparison with developing such things specifically for each individual collection. This is particularly the case with complex concepts such as occupation or household income.

5. Following this work, there has been an increasing awareness by Commonwealth and other government agencies of the need for standard definitions of concepts, classifications, question sets, etc for use in administrative as well as statistical applications. This has been driven by:
- increasing demand for information,
 - increasing sophistication of users of data, and
 - the capacity through developments in information and communication technology to access data from diverse sources and put it together in an integrated form (whether conceptually comparable or not).
6. Recent policy initiatives such as the Review of Government Service Provision have further sharpened the focus of policy makers and analysts on the need for data comparability.
7. The ABS has responded to these demands by actively promoting the use of its standards in external administrative and statistical applications involving Australian and/or State Government agencies, and by actively supporting agencies in the use of ABS standards. In some cases this has led to adaptations of existing ABS standards to suit the requirements of service provision and administrative data collection activities.

Current Situation

8. The ABS has to-date developed standards for the bulk of statistical variables which are required to provide the basis for comparability of statistics across the range of subject matter fields in population statistics.
9. These standards are maintained, reviewed and updated by the ABS as appropriate. This suite of standard core variables allows for the comparability of data on the key characteristics of households, families and persons in all relevant ABS collections. The standards are also suitable in many cases for use in administrative applications. They include variables associated with cash income, cultural and language diversity, core demographic characteristics, education, family and household composition, housing, and labour force characteristics. A full listing is provided at Attachment 1.
10. The statistical standards for core variables have been documented in a rigorous manner and use a consistent and structured format. They provide comprehensive documentation covering all elements required to achieve comparability of data from a range of sources. This includes basic things such as the name of the variable and definitions of the concept being measured, and more complex things such as procedures for classification and coding, collection methods including standard questions, and recommendations on the presentation of statistical information in tables.
11. These standard variables are supported by a range of major standard classifications such as the Australian Standard Classification of Occupations, the Australian Standard Classification of Education and the Australian Standard Classification of Languages. A full list of standard ABS classifications in population statistics is provided at Attachment 2.
12. Although a lot has been achieved in developing and promoting the use of these core standard variables and classifications, a great deal of work remains to be done to ensure that the suite of standards is complete and that existing standards are maintained and periodically reviewed to ensure they are up-to-date and remain relevant.

13. Important development and review work which the ABS currently has plans to undertake includes development of a new set of standards associated with disability status and type, updates of the Australian Standard Classifications of Languages, Religious Groups and Ethnic and Cultural Groups in time for the 2006 Census, a review of the set of standards for cash income statistics and development of a new Australian and New Zealand Standard Classification of Occupations (ANZSCO). The ABS is also currently consulting with key stakeholders to determine whether there is a need to update the Australian Standard Classification of Education.

14. The largest of these activities is the development of the new ANZSCO. This is being undertaken jointly by the ABS, Statistics New Zealand (SNZ) and the Department of Employment and Workplace Relations (DEWR). During the first half of 2004 the ABS, SNZ and DEWR are seeking advice from professional organisations and industry and employer bodies on particular occupation groups, to help refine a draft classification structure, which was completed early in the year. In mid-2004, a final round of information sessions will be held to give stakeholders the opportunity to provide input to the draft classification. The classification will be implemented in ABS and SNZ collections from 2006. ABS will be in contact with agencies that use the current occupation classification in their own data collection and service provision activities during 2004.

15. The ABS has given its highest priority in standards development to those core items, which provide the basis for comparability across collections and has established a section, the Population Statistics Standards Section, to develop, maintain and provide support for the use of these standards. Attention is also being given, however, to the development of standards in particular subject areas such as health, education and crime and justice. Whilst standards for most of these subject-specific areas have not yet been documented in the same form as the standards for core variables, information about these standards is available in a range of statistical framework documents and documents on concepts, sources and methods in specific fields of statistics. These are available on the ABS Website or have been published.

Standards in Administrative Datasets

16. In Commonwealth and other government agencies a number of initiatives have been undertaken, some of which are well established, to improve comparability and standardisation of data within particular subject fields and areas of administrative and service provision activity. This has been particularly the case where there is a need identified for coordination and integration of information between Australian and State and Territory Governments where service provision is frequently the responsibility of States and Territories.

17. The Australian Institute of Health and Welfare (AIHW) has played a prominent role in coordinating the activities of Australian and State Government and non-government agencies with respect to the development and promotion of administrative data standards. As a result national data dictionaries in the fields of health, community services and housing assistance have been established. These dictionaries provide for comparability of data from a wide range of collections in both administrative and statistical settings in these fields and are based on relevant ABS standards wherever these exist and are appropriate.

18. In the case of statistics in Vocational Education and Training the National Council for Vocational Education Research (NCVER) has a well established management information and statistical system which provides standardised and comparable data in statistical collections in the field of Vocational Educational and Training. The utility of this information has been greatly

enhanced by the use of ABS statistical standards wherever possible. An initiative to standardise the core information collected on school enrolment forms is also underway and has led to the inclusion of ABS standards for core demographic items in these collections leading to the potential for significant improvement in both data quality and comparability.

19. The ABS has sought to involve itself strongly in these and other statistical standards setting initiatives through the relevant subject matter areas and National Statistics Centres, and the Population Statistics Standards Section. In some fields the ABS has played the leading role in coordination of statistical activity in particular fields. For example, the National Centre for Crime and Justice Statistics has coordinated and gained agreement on statistical standards for recorded crime, courts and corrections statistics. The National Centre for Education and Training Statistics has taken responsibility for the development of a Dictionary of Standards for Education and Training Statistics.

Indigenous Status

20. An example that shows how the adoption of ABS statistical standards can make a big difference to the availability, quality and comparability of information relates to the identification of Aboriginal and Torres Strait Islander people in service provision settings. The need for useful and high quality data which informs debate about the over or under representation of the Indigenous community in various government services such as prisons, hospitals and higher education is a high priority for policy makers.

21. The use of a variety of questions and categories relating to the Indigenous population has led to serious concerns, however, about the quality of this type of information. In order to calculate data about rates of use of particular services, it is usually necessary to combine data from administrative sources about the use of those services with data on total numbers in the population taken from ABS collections such as the Census. If different questions and procedures are asked in the Census and administrative collections then comparability of data from these sources is limited. This has been compounded by reluctance of some individuals in the service provision agencies to ask an 'Indigenous Status' question of someone who they consider may not be Indigenous.

22. The ABS has strongly promoted the use of its standard question for 'Indigenous Status' in the full range of administrative collection activities with a considerable degree of success. This, combined with strong promotion of the notion that the standard question should be asked regardless of the appearance of the client, or assumptions which the service providing officer may have made, has led to a significant improvement in the provision of data on this population although much work remains to be done.

What Does the Future Hold?

23. Current technological developments have led to increasing interoperability and capacity for sharing of information between computer systems within and between Government Departments. Many agencies have developed Information Warehouses, which consolidate all data holdings in a single repository. This presents an opportunity to further improve the quality and comparability of information and of policy and administrative decisions based on this information.

24. A major impediment to this goal is the non-comparability of information from different sources through lack of use of standards or lack of provision of information about limitations of the data. In the worst case bad decisions may be made because of the assumption that comparability of two similar data items from different sources is valid, when in fact it is not.

25. Adoption of data standards in statistical and administrative systems may involve some initial cost, however. It typically requires changes to existing practice, which may involve both computer and clerical systems and require training of staff. In the long-term however costs to agencies of developing and maintaining their own non-standard definitions of concepts, questions and classifications etc may also be high; long term costs associated with non-comparability of data on similar topics from different sources may similarly be high.

26. It follows from this that good planning is essential when an agency is considering introducing new statistical standards. The ideal time to do this is when information systems themselves are being developed. Developers of information systems need to know about the data standards policy of their organisation and they need to know how to access information about relevant ABS and other standards.

27. Despite these issues and difficulties, agencies are increasingly becoming aware that the proliferation of varying definitions and codesets for concepts that are collected across a range of service provision and data collection activities is not sustainable in the current technological environment. This may lead to ongoing costs associated with bad decision-making and extra working to force comparability of data. While this is clearly not a desirable outcome, it is one which could easily happen, and which the NSS initiative aims to avoid.

Standards for Core Variables in Population Statistics

Attachment 1

Cash Income Variables

Cash Income - Principal source of cash income

Cash Income - Sources of cash income

Cash Income - Total cash income

Cultural Diversity Variables

Ancestry

Australian Citizenship

Country of Birth of Father

Country of Birth of Mother

Indigenous Status

Religious Affiliation

Year of Arrival in Australia

Demographic Variables

Age

Country of Birth of Person

Registered Marital Status

Sex

Social Marital Status

Education Variables

Highest year of school completed

Level of highest educational attainment

Level of highest non-school qualification

Main field of highest educational attainment

Main field of highest non-school qualification

Year non-school qualification completed

Family and Household Variables

Family Type

Household Type

Number of Children ever born

Relationship between Families

Relationship in Household

Housing Variables

Dwelling Structure

Landlord Type

Number of Bedrooms

Tenure Type

Labour Force Variables

Labour Force Status

Labour Force: Duration of Unemployment

Labour Force: Full-time/Part-time Status

Labour Force: Hours Worked

Labour Force: Status in Employment

Language Variables

First Language Spoken

Languages Spoken at Home

Main Language Other than English Spoken at Home

Main Language Spoken at Home

Proficiency in Spoken English

Occupation Variable

Occupation

Australian and New Zealand Standard Industrial Classification (ANZSIC)

Australian Standard Classification of Cultural and Ethnic Groups (ASCCEG)

Australian Standard Classification of Drugs of Concern (ASCDC)

Australian Standard Classification of Education (ASCED)

Australian Standard Classification of Languages (ASCL)

Australian Standard Classification of Occupations (ASCO)

Australian Standard Classification of Religious Groups (ASCRG)

Australian Standard Offence Classification (ASOC)

Standard Australian Classification of Countries (SACC)

No papers provided.

Developments in Geo-referencing

Statistical Geography

Geographically classified statistics are statistics with a 'where' dimension. Such statistics are often, but not always appropriately, referred to as 'small area statistics'. In particular the Census of Population and Housing is designed to collect data for small areas and small groups within the population. The familiar Census Basic Community Profile is in fact a collection of information, all about an area.

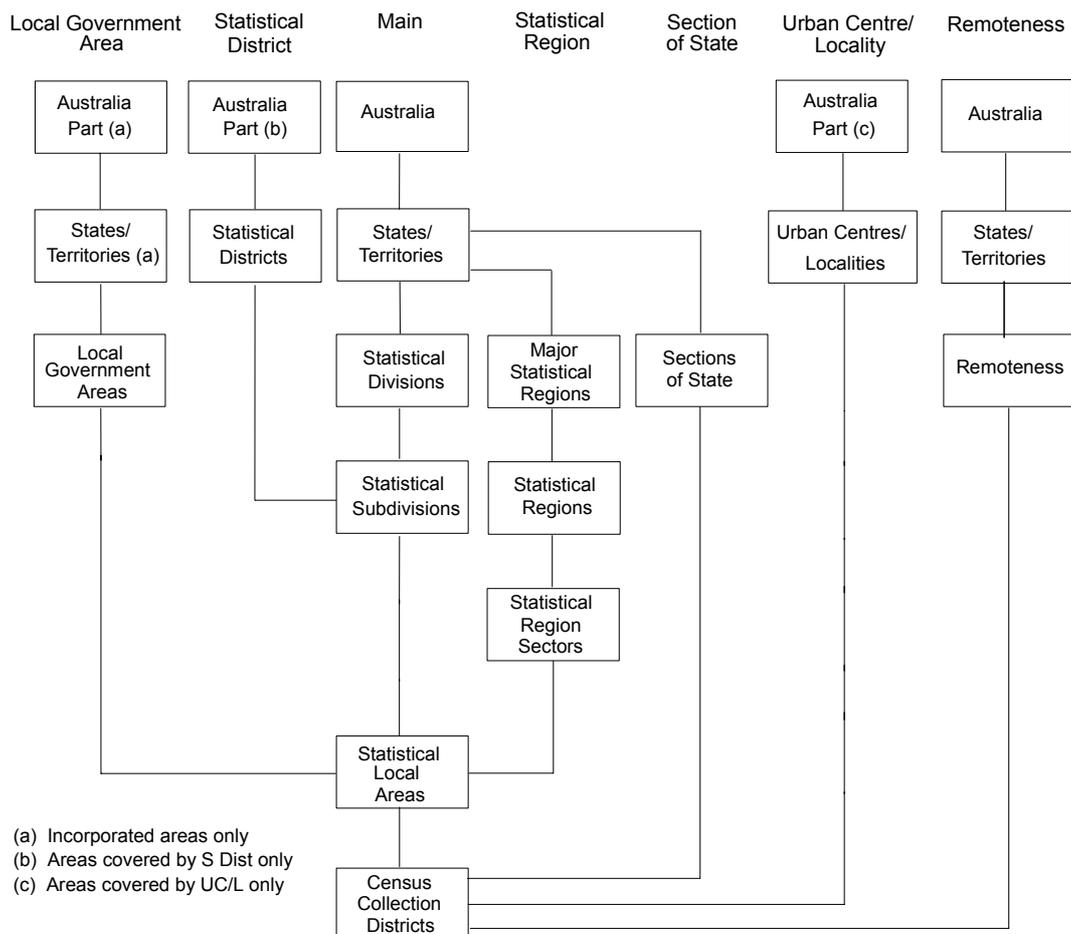
2. The basic concept of geographically referenced statistics is that data are aggregated for the area in which an activity takes place. In the case of population statistics this generally equates to where a person is located on Census night or where they usually live or work. In the case of economic statistics, the concept of where activity takes place can be more problematic. With vertically integrated and multi location businesses now commonplace in Australia, some economic concepts are only loosely coupled to the 'where' dimension.

3. When data are aggregated to small (or large) areas the size, shape and location of those areas greatly influences the usefulness of the statistics. If data are to be compared across collections, across subject matter and across organisations then the areas themselves must be comparable.

Standard Geography - The ASGC

4. Since the early 1980s the ABS has used a common standard for geographical areas across all ABS data collections - the Australian Standard Geographical Classification (ASGC). The ASGC has also been adopted by many other organisations for collection and analysis of geographically referenced statistics. The ASGC is a relatively complex classification that currently consists of seven parallel hierarchies, each designed for a different collection or dissemination purpose. The spatial units of the ASGC are fully described in ABS publication Cat No 1216.0.

Figure 1: Australian Standard Geographical Classification



5. The most familiar hierarchy of the ASGC is the **Main Structure**. In this structure **Census Collection Districts (CDs)** add together to form **Statistical Local Areas (SLAs)**, which in turn are added together to form **Statistical Subdivisions (SSD)**, which in turn add together to form the large stable geographical areas, **Statistical Divisions (SD)**.

6. For the purpose of this paper the important features of a CD are that it:

- is the smallest building block of the ASGC from which all higher level spatial units are formed;
- typically contains from 100 to 220 households; and
- is designed predominately for collection purposes.

7. The Census collection methodology records which CD each household lies in but that is the only location information that the ABS currently captures for a household. No information is retained about exactly where the household is within the CD. Thus the ABS can currently only disseminate Census data for areas that are aggregates of CDs and this primary spatial dissemination unit is in turn constrained in its size and shape by Census collection management requirements.

8. An important feature of the ASGC Main Structure is that it respects Local Government boundaries. In other words CDs and SLAs aggregate exactly to **Local Government Areas (LGA)**. The important administrative area of LGA is therefore an intrinsic part of the ASGC. While this feature of the ASGC enables the ABS to produce a range of accurate statistics for the third tier of Australian government, it is also the feature which causes a great deal of change to statistical boundaries.

The ASGC is revised each year on 1 July to keep it aligned to LGA boundaries. This annual revision only applies to SLAs and units that are aggregates of SLAs. CDs are only revised in the year of the Census.

9. The remaining hierarchical structures of the ASGC are designed for particular geographical and statistical purposes.

Non-standard Geography

10. It is not uncommon for other organisations to define administrative or statistical geography which is not an official part of the ASGC but which is based on ASGC units. By doing this, organisations can develop spatial units which best suit their particular needs but at the same time maintain comparability with ABS statistics. Examples of special purpose units derived from ASGC units are Tourism Regions, Agro-ecologic regions, some Commonwealth and State Government planning and management regions and the NEPMT geographical classification of students.

11. Despite the ability to derive special purpose units and the seven parallel structures already included in the ASGC there are still a number of existing or emerging geographical concepts which are not provided for. Some important geographical units not directly incorporated in the ASGC are State and Commonwealth Electoral boundaries, postcodes, river catchments and Geographic Names Boards' suburbs and localities.

12. These alternative geographies conflict with the existing ASGC hierarchies and with each other, to an extent that makes it impossible to incorporate them directly into the classification. The best the ABS can currently do is to approximate them using a 'best fit' of CDs. Currently CD derived approximations, and consequently a full range of Census data, are available for Electoral boundaries, postal areas and suburbs. Commonwealth Electoral boundaries are approximated fairly well because the AEC, where possible, makes Electoral Divisions aggregates of whole CDs. Similarly, for the 2001 Census, CDs were made to fit suburbs where possible and so CD derived suburbs are a close approximation of official suburbs. However there are very significant differences between CD derived postal areas and official Australia Post postcodes, mostly to do with the nature of postcodes, which make them problematic as a spatial unit.

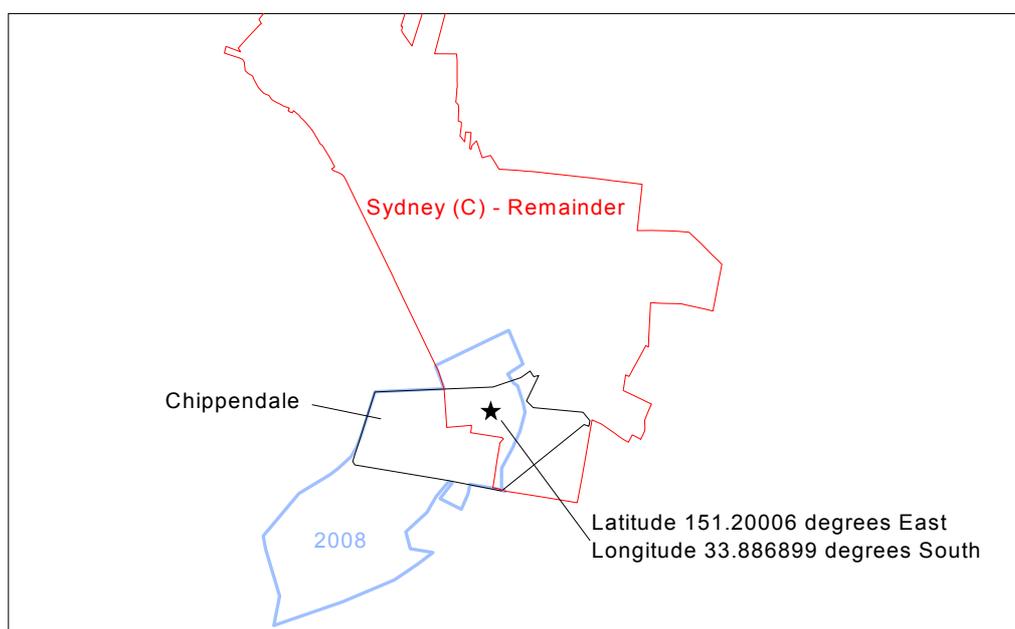
13. Because of the constraints placed on CDs for census collection purposes, CD boundaries do not align well to river catchments, Geographic Names Board localities, small rural communities and temporal regions such as the National Action Plan Priority Regions. This lack of alignment is largely due to the fact that CDs must have a physical boundary visible to a census collector in the field, such as the middle of a road or a river, while many natural and administrative boundaries are aligned to less obvious features in the landscape or to property (cadastral) boundaries.

14. Where data has been collected on non-aligned or incomparable boundaries various approximation techniques can be used to try to make the data comparable but these can severely degrade the original data and, if used naively, can result in incorrect conclusions.

Geocoding

15. Geocoding is the process of giving something a latitude and longitude, thereby describing its position on the surface of the earth. In the case of statistical data this generally means assigning a latitude and longitude to a statistical unit. The ABS statistical units to which geocoding most readily applies are dwellings and business locations. Once a statistical unit has been geocoded it is a relatively simple process to code it to any geographical classification simply by "overlying" the geocoded point with a set of regions in a Geographical Information System (GIS). This is a relatively intensive mathematical process but one that is a simple background task in any correctly configured GIS. For example the GIS can compute from the latitude and longitude the relationships that are obvious to the observer in Figure 2 below, i.e. the point lies within postcode 2008, the SLA of Sydney (C) - Remainder and the suburb of Chippendale.

Figure 2: Geographical coding of a geocoded point

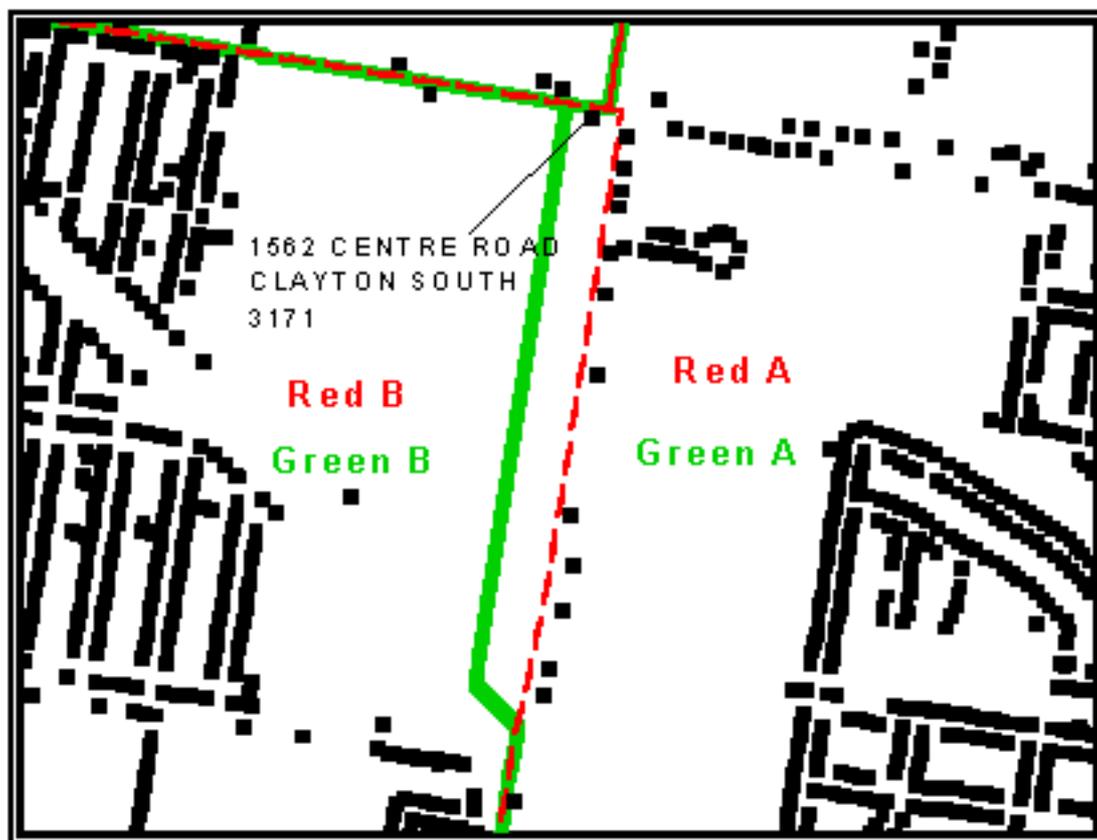


16. The power of geocoding lies in the fact that once a statistical unit has been allocated a latitude and longitude it can be coded to any geographical classification, or even old editions of the same classification. It is no longer necessary to maintain separate coding indexes for each classification. Output geography can be much more flexible and consequently there is less pressure on the standard geographical classification (the ASGC) to be all things to all people. In the case of the Census, geocoding of dwellings would enable the ABS to completely separate enumeration geography from output geography. The CD could be designed purely for efficient collection of the census and the output geography could be designed to better meet the needs of statistical data users.

17. The ABS obviously will not publish confidential information from the Census. Geocoding of the Census would be just a means to aggregate data to more flexible areas. However, the ABS must not only ensure that individual confidentiality can be guaranteed, it must also manage public perceptions of confidentiality. To store the latitude and longitude of each dwelling alongside the census record is not the same as recording name and address but is perceived by the general public to have similar connotations. The ABS is very experienced in protecting personal and private information. Secure systems could be developed to ensure confidentiality is maintained. However, there is a particular risk with geocoded data that is difficult to completely eliminate. This is known as the 'differencing problem' shown in Figure 3. Here two customised geographical regions are

displayed, either accidentally or deliberately, to disclose data for an individual dwelling by subtracting aggregated data for one region from the same data items for a slightly different region.

Figure 3: the differencing problem



Mesh Blocks

18. A solution to the confidentiality problems, while at the same time providing much enhanced geographical outputs, is to create a new micro level of geography, smaller than a CD but large enough to contain a 'safe' number of dwellings. Such units are used by other National Statistics Offices and are variously known as Mesh Blocks, Unit Blocks or Block Faces. A Mesh Block could consist of between 20 and 50 dwellings (yet to be decided) and would be designed to aggregate reasonably exactly to the widest possible range of administrative and natural boundaries. Only very basic Census data would be published at the Mesh Block level, perhaps only number of dwellings and population counts, but some more detailed Census data would be available for combinations of Mesh Blocks.

19. Economic statistics which are closely linked to location, such as Agricultural Census commodity data, could also be aggregated to Mesh Blocks to provide comparability between population and agriculture data and also provide agriculture data output on alternative geographies such as river catchments.

20. The efficacy of Mesh Blocks depends very much on how well they can be designed to align with the maximum number of existing statistical and administrative regions. Once designed and readily available, Mesh Blocks have the potential to become a new building block of Australian geography so that any organisation developing a set of regions would build up its areas simply by adding Mesh

Blocks together in whatever combination best suited its purpose. This in turn would ensure that census data could be accurately derived for those regions. Mesh Blocks are, however, not just designed for census data. They will provide a spatial unit to which, not only the ABS, but any organisation can aggregate data.

21. Any organisation, which is the custodian of a large administrative data set, will be able to code its address lists to Mesh Blocks and aggregate information about its clients or activities to produce summary statistics for Mesh Blocks or groups of Mesh Blocks. Both legally and physically, Mesh Block level statistics will be much easier to transfer between agencies than data about individuals.

22. Lack of geo-referencing is currently a major impediment to the creation of useful "small area" statistics from large administrative databases. Until now the practice has been to aggregate statistics by the postcode of the client or provider's address. Postcode is not in itself a useful area unit for analysis and is not compatible with any other administrative boundary. Coding address-based data to Mesh Blocks, on the other hand, would create summary statistics that are immediately comparable and which can be aggregated to any significant geography, current, past or future.

Critical success factors in geo-referencing

23. The ABS has been investigating geocoding, in one form or another, for many years. The latest feasibility study, conducted in 1996, concluded that the costs of geocoding outweighed the benefits because of the lack of a quality geocoded reference file, i.e. a file containing every valid street address in Australia that included latitude and longitude. At that time it was possible to reliably geocode about 70% of a typical list of addresses using commercially available products but the remaining 30% were expensive and sometimes impossible to resolve. The ABS therefore decided to work with other interested parties to improve Australia's geocoding infrastructure. The ABS, the Electoral Council of Australia (ECA), Australia Post and more recently Centrelink have worked with PSMA Australia Ltd to create a Geocoded National Address File (G-NAF). Australia Post and the ECA have provided their address files as inputs to the G-NAF. When combined with the address base of each of the State/Territory mapping authorities these represent the most comprehensive address listing ever assembled for Australia. The first edition of G-NAF was constructed during 2003 and the product was officially launched at Parliament House on 2 March 2004. G-NAF is now available from PSMA Australia or its value added resellers.

24. A high quality, comprehensive and up to date G-NAF makes geocoding of addresses more cost effective and more achievable than ever before. In the process, addresses can also be validated and standardised, an important element in fraud prevention.

25. Geocoding requires complete street addresses, including street number, and precise geocoding is impossible without these. People's knowledge of a precise street address will vary depending on the nature of the topic and their particular circumstances. Most people know the precise address of their usual residence, however, this is less likely of people living in an institutional setting. Large numbers of people do not know the precise address of where they work. While Mesh Blocks will be quite small, Mesh Block coding does not require quite as much precision as geocoding. For instance some streets will be entirely within a single Mesh Block and it is not necessary to know the house number in those streets. But as a general rule Mesh Block coding, like geocoding, requires a complete and unambiguous address. The Census Program is currently testing alternative form designs, which is an important part of capturing accurate addresses. The ABS also supports initiatives by the Intergovernmental Committee for Surveying and Mapping (ICSM) to encourage householders and businesses to use their correct street address.

26. As well as designing and creating Mesh Blocks, the ABS will pro-actively encourage their use by other agencies. Digital Mesh Block boundary files will become part of the Australian Spatial Data Infrastructure and will be disseminated under the auspices of the Commonwealth Spatial Data Pricing and Access Policy at marginal cost of transfer pricing. PSMA Australia will also be provided with the Mesh Block code for every address in G-NAF so that any agency that licenses G-NAF will also have immediate access to Mesh Block coding.

27. The ABS acknowledges that some agencies will have valuable administrative data but insufficient internal demand for geo-referencing to justify the purchase of G-NAF and the development or purchase of in-house address matching facilities. Such agencies will be given access to the ABS' own Mesh Block coding facilities. This will most probably be done by way of a Web Service to which addresses can be streamed and a Mesh Block code returned.

Conclusion

28. Mesh Blocks have enormous potential not only in the statistical arena but also for Australia's administrative geography in general. To achieve this potential, however, Mesh Blocks must be designed to meet a very wide range of statistical and non-statistical needs. Design criteria for Mesh Blocks have been developed by a panel of statistical and geographical experts. The proposed criteria were published in an ABS Position Paper : [Mesh Blocks \(ABS Cat. no. 1209.0\)](#) released via the ABS web site on 16 March 2004. Australian Government agencies are invited to provide feedback on the proposed criteria.

There will always be a need to define different sets of geographical areas for different purposes - one size will never fit everyone. It is possible, however, for different geographies to share a common building block and thereby achieve a level of comparability and compatibility far beyond what we have today. Mesh Blocks in conjunction with G-NAF and improved geo-referencing infrastructure also have the potential to hugely increase the quantum and quality of small area statistics. The ABS has the expertise, technology and the data sets to create this new building block and the coding infrastructure to support it but the outcome for small area statistics will ultimately be determined by how many other agencies embrace geo-referencing and the goals of the National Statistical Service.

Timetable for development of Mesh Blocks

June 2003	Fact-finding mission to Statistics New Zealand and Land Information New Zealand
July 2003/March 2004	Panel of experts developed the ideal design criteria for Mesh Blocks
2 March 2004	G-NAF available for all of Australia
16 March 2004	Panel of expert's views published in Cat. No. 1209.0.
July/September 2004	ABS to review feedback from stakeholders and finalise criteria for Mesh Block design.
September 2004/May 2005	ABS creates Draft Mesh Blocks and supporting coding infrastructure
May 2005	Draft mesh blocks tested in Census Dress Rehearsal processing
August 2006	Draft mesh blocks implemented in census processing systems
August 2007	Draft Mesh Blocks finalised using 2006 Census counts.
September 2007	Digital maps of final Mesh Block boundaries available via the Australian Spatial Data Infrastructure
December 2007	Basic census counts available for Mesh Blocks
January 2008	Customised geographic outputs available for census data
June 2008/June 2009	Consultation on new standard geographical units to replace CDs for data dissemination.
August 2011	New standard geographical units implemented

National Statistical Training Institute

Introduction

In August 2003, the ABS created a National Statistical Training Institute (NSTI) to provide a strategic and comprehensive approach to statistical training in the ABS. The NSTI vision is for the ABS to have highly skilled, professional and confident statisticians to maintain and build on the ABS' high international and national reputation for producing quality statistical products. As part of the National Statistical Services initiative, a long-term objective for the NSTI is to provide accredited statistical training to other agencies.

2. Since the creation of the NSTI a national statistical training program (or curriculum) has been developed which has identified courses, which need developing as well existing courses, which need updating. A series of practitioner-based courses will be developed that are practical extensions of the introductory statistical courses. A statistical learning pathway underpins the curriculum.

External Training

3. For the next 18 months the focus of the NSTI will be on developing and delivering statistical training to ABS staff. However, the development of courses will take into account future NSTI directions such as providing accredited training both internally and externally. In the long term, the NSTI will take responsibility for external training but for now the NSTI will work closely with the Statistical Coordination Section to assist with any external training requirements where the ABS material can be easily converted to an external audience. Attachment A contains a broad outline of the NSTI work program.

4. Many of the courses being developed are ABS focused but it is expected that parts of them will be easily converted to an external audience. A new Learning Management System is being implemented by the Learning and Development section, which will assist in the provision of learning objects outside of the ABS. In March 2005, a process will be developed for consulting with stakeholders to identify and meet external statistical training needs.

Current Developments

5. The NSTI focus in the last four months has been on developing statistical training products, these include:

- Developing (and updating) training courses to improve the statistical writing skills and analytical thinking skills in the ABS; and
- Developing modules for the practitioner based training.

Statistical Writing Training Program and Thinking Analytically, Problem-solving and Story-telling courses

6. The Statistical Writing Training Program (SWTP) and Thinking Analytically, Problem-solving and Story-telling (TAPAS) are two courses that together will improve communication with ABS clients. The SWTP focuses on the development of writing skills for statistical reports, articles and publications. TAPAS introduces an analytical thinking process which participants then get to apply in different contexts to improve the content of statistical reports, articles and publications.

Collection Conduct and Management Training

7. The CCMT is a large suite of modules, which will extend the introductory courses to more practical application of data collection methods. Work has commenced on the following modules:

- Editing - including data validation
- Setting collection parameters and sample design
- Dissemination

Year	Activities
2003 - 2004	<ul style="list-style-type: none">• Develop a statistical capability framework.• Develop National Statistical Training Program (Curriculum), which is mapped to a statistical capability framework.• Develop statistical training courses.
2004 - 2005	<ul style="list-style-type: none">• Develop and deliver internal statistical training.• Link development activities to statistical capability framework.• Develop processes for providing external training.
2005 - 2006	<ul style="list-style-type: none">• Develop, review and deliver internal statistical training.• Link with appropriate training authority to provide accredited statistical training.• Convert ABS specific courses for external clients.
2006 - 2007	<ul style="list-style-type: none">• Review and deliver statistical training.• Provide accredited statistical training for ABS employees.• Provide accredited statistical training for external clients.
2007 - 2008	<ul style="list-style-type: none">• Review and deliver statistical training.• Provide accredited statistical training to international clients.• Provide in-country courses.