INTERNATIONAL WORK ON INDUSTRY CLASSIFICATION -
WHAT ARE THE PRIORITIES?
A. Introduction

1. In recent years, the Economic Statistics infrastructure has been strengthened considerably by the adoption and implementation of the System of National Account 1993 (SNA93) and Balance of Payments Manual Rev 5 (BPM5). With significant work on commodity classification associated with the development, publication and implementation of the Central Product Classification (CPC V1.0), and continuing work to refine it, the spotlight falls on industrial classification as a major area of weakness in the contemporary international Economic Statistics infrastructure.

2. This spotlight shows up several areas of deficiency.

   (1) The present International Standard Industrial Classification of All Economic Activities (ISIC) paradigm is grounded substantially in an industrialised production economy context. It best supports economic statistics for an economy dominated by manufacturing and other goods production.

   (2) Many of the world’s national economies have changed - some quite dramatically in the past decade, since ISIC Rev 3 was published. The growth in significance and the diversification of the services industries has been particularly marked since the development work was done for ISIC 3.

   (3) A number of countries have yet to adopt ISIC 3 and will experience substantial costs to do so. Even when they do, they will be faced with its inadequacies.

   (4) There is an innate inertia against changing major classifications, because of the consequential disruptions to time series, the costs and the sheer volume of work involved.

   (5) Many users of economic and industry statistics want to view the world in a different way to the ISIC structure.

   (6) Many analyses are traditionally based on industry but other analytical frameworks, such as institutional sector, function/purpose and commodity may be more appropriate.

It is for these reasons that the ABS argued for a review of principles for industry classifications. It is disappointing that this issue is not addressed in the UNSC paper.
B. Recent Initiatives

3. The United Nations Statistics Division has taken some initiatives recently to address the relevance and use of ISIC.

(1) The Expert Group on International Economic and Social Classifications, at its November 1999 meeting, had a major discussion on the implementation and revision of ISIC. The Expert Group conclusions are set in the Annex to the Report of the Secretary-General to the Statistical Commission on International Economic and Social Classifications. Many of the experts urged that rapid progress be made to improve ISIC, noting its deficiencies in areas such as the "information" industry, wholesale trade, business services, transport, construction agriculture and fishing.

(2) UNSD has put in place tools and processes to increase ISIC useability, including improving the Classifications Website, on-line access to ISIC (and other classifications); a classifications hot line service to provide advice on problems, as part of the Classifications Registry; and a regular Classifications Newsletter.

(3) UNSD is arranging development of ISIC indexes in French and Spanish, expansion of the English index, and revision and simplification of the introduction, and elaboration of the explanatory notes.

(4) UNSD has recognised the need for better organised training, and conducted successful regional training workshops for Caribbean and Asia-Pacific countries in 1999.

C. Current Plans for ISIC

4. The timetable established by UNSD and the Technical Subgroup of the Expert Group is for

" (a) an update of ISIC Rev 3 in draft by the end of 2000, for approval by the UN Statistical Commission and submission for publication in 2001; and

(b) the revision of ISIC in draft in 2004, for approval by the UN Statistical Commission in 2005, prepared for publication in 2006 and implemented by 2007."

5. From the discussions at the Technical Group meeting following the Expert Group, it was evident that the work done by UNSD during 2000 will be limited, so that any update to be considered by UNSC in 2001 will not be extensive. The next significant update will be 2007 - this is a very slow response to what is seen to be a badly out-of-date classification. It will be out-of-date by the time it is developed and disseminated.
D. Where should the work on ISIC be focused?

6. It is clear that the present fabric of ISIC is not meeting the needs of most of its users. The North American countries have put significant effort into the North American Industry Classification System (NAICS) - but there is still work to be done to complete it. There are areas where it has departed radically from ISIC. The European NACE and Australia/New Zealand ANZSIC are older than NAICS, and have similar shortcomings to ISIC to itself, particularly in reflecting the services industries. Many of the developing economies are facing the same issues. Some, still using ISIC 2, would recognise that if they were to move to ISIC 3, they would still not have an adequate industry classification for their present or future industrial structures. This leads to the question "What must be done?".

7. The first step is to get a clear understanding of the use of ISIC. This is what should drive the work priorities, not just the views of the Classification Experts, who may have a limited awareness of the range of uses of economic data for policy development and evaluation purposes, and consequently an incomplete view of the priorities. One issue which will assist in focussing future work is to establish whether international agencies, including the IMF, World Bank, OECD and the UN agencies, require ongoing data at a level finer than Industry Subdivision. Even if they do, is it achievable? Most of the industry data that are published in international comparative form are published only to Division or Subdivision level. (An exception is manufacturing data, published in the UNIDO International Yearbook of Industrial Statistics at 4 digit level. However, the questions might well be asked how good the quality of such data is, and whether it is required and used at that level of detail. The reality is that a major source of industry description data is a brief description, sometimes through an administrative rather than a statistical process.)

8. We believe the priority should be to put in place a top-level structure to the classification, to present at Division and Subdivision level a structure which provides a solid basis for the future. One option here would be for the UN to adopt the North American Industry Classification System top structure.

9. The UN Statistics Division should be putting the major effort of its Classifications Work Program into this work, to provide a relevant top structure for the needs of the world's economies, rather than targeting its efforts at the finer details. (That work will be done by some of the better-resourced national or transnational statistical agencies anyway.)

10. If there is a need for a more detailed classification, it is likely to be much different for African countries than Western European countries, for example. It could then be developed at the regional level with the leadership of the regional statistical commissions.

11. If the task is simplified in this way, it would be more achievable, require less resources and be completed in a shorter time frame.
E. Is Industry still a relevant concept?

12. The Industry dimension has been used as the basis for many economic analyses. For some of those, Institutional Sector or Commodity or Purpose are more relevant. But even as those analytical frameworks are developed more, there will continue to be a need for industry data analysis. There is, of course, the need to compile unduplicated aggregate measures such as the National Accounts for the whole economy. Industry provides the best basis for doing that. And, pragmatically, most of the economic statistical collection infrastructure uses industry as a foundation as it is relatively easy to collect information which enable businesses to be coded to industry. Also, industry is traditionally held on business registers from which data collections are run.

13. However, increasingly there are users of economic statistics that want to look at "Industry" from non-traditional perspectives. Some of these, such as tourism, environment and culture/recreation, may be best handled through satellite accounts or other measures, that take a "commodity" demand perspective.

14. Another set of users see "industry" in a different hierarchical form than ISIC. Examples are:

- **Resources**: mining exploration, mining, some early stage manufacturing such as smelting, and mine construction and transport activities associated with mining.

- **Food**: agricultural production, food manufacture, distribution and consumption.

15. The ABS response to these user needs has been to commence projects to define and seek user consensus on what is included or excluded, in ANZSIC terms. The next step will be to develop strategies to assemble data using such alternative industry views. This work is at an early stage, but may be of interest in other countries where similar user demands are rising. The UNSD may wish to act as a "clearing-house" to enable the results of such initiatives, including their operationalisation, to be shared internationally.

F. Conclusions

16. The priority for UNSD must be the developing countries, and international comparisons.

17. UNSD should urgently develop and establish a high level (Division/Subdivision) structure. This could be done before the end of 2000.

18. There should be a specification of the key user needs for ISIC. We expect that a sophisticated 4 digit classification that tries to cover all countries will be seen as overkill for most realistic uses.
19. UNSD should facilitate regional work to fill in relevant detail at finer levels as appropriate, and maximise the advantage that can be taken of work done in different regions with common application, by use of experts and by arranging to share the results of relevant work.

20. UNSD should continue to make it a priority to provide the tools and training that developing countries need to use classifications effectively.

21. UNSD may provide a clearing house for the international exchange of alternative industry views, or broader groupings.

Australian Bureau of Statistics
February 2000