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LINKING QUALITY ASSESSMENT TO DEVELOPMENT OF PERFORMANCE INDICATORS

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I. INTRODUCTION

1. The Australian Bureau of Statistics (ABS) is Australia's official national statistical agency. The ABS' mission is to assist and encourage informed decision making, research and discussion within governments and the community, by leading a high quality, objective and response national statistical service. One of the ways the ABS achieves this mission is through the use of frameworks for ensuring the quality of their statistics. One of these frameworks is the ABS Data Quality Framework.

2. The Australian Bureau of Statistics (ABS) Data Quality Framework (DQF) comprises of seven dimensions based on Statistics Canada's Quality Assurance Framework and the Eurostat Code of Practice. The seven dimensions are Institutional Environment, Relevance, Timeliness, Accuracy, Coherence, Interpretability and Accessibility. Further information on the ABS DQF and its uses for defining the quality of a data item or collection of data items; assessing data in the context of a data need; and identifying data gaps and areas of future improvement can be obtained from the [ABS Data Quality Framework, May 2009 \(cat. no. 1520.0\)](#). This framework was developed to publicly declare the quality of the ABS statistics to users.

3. The ABS externalised the Framework on the ABS website initially through reporting the quality of their statistics in Quality Declarations. Quality Declarations provide synopses of the quality of the statistics being accessed according to the seven dimensions of the ABS Data Quality Framework. All quality declarations contain the seven dimensions of the Framework but may differ in the detail that is provided within each dimension because all collections are different and hence have different quality aspects that need to be declared. For example surveys of carers or indigenous populations are likely to have coverage issues and surveys with sensitive topics may have response bias.

4. Quality declarations were designed for web release only as part of the ABS' electronic data and metadata vision. This vision includes the move away from paper publications to web based releases only. Quality declarations use hyperlinks to more detailed information where applicable and are themselves accessible through a link near the heading of the statistical release on the ABS website. They were designed to complement but not replace existing metadata sources on the web (e.g. Explanatory notes, Concepts sources and methods, Technical notes), which are more detailed.

II. A NATIONAL REPORTING FRAMEWORK AND THE ABS ROLE

5. The Council of Australian Governments (COAG) is the peak intergovernmental forum in Australia. COAG comprises the Prime Minister, State Premiers, Territory Chief Ministers and the President of the Australian Local Government Association (ALGA). The role of COAG is to initiate, develop and monitor the implementation of policy reforms that are of national significance and which require cooperative action by Australian governments. The formal adoption of the ABS Data Quality Framework by other government departments started in 2008 when the Council of Australian Governments mandated that the ABS Data Quality Framework was to be used to assess the performance indicators of the National Reporting Framework "National Agreements" which influence funding to State and Territories in Australia. A consequence of this action has been an increase in the use of the ABS Data Quality Framework by government departments who supply the performance indicators, but also an increase in interest from departments in relation to incorporating the Framework into their internal processes.

6. The announcement by COAG that the ABS Data Quality Framework would be used to declare the quality of the data provided for the performance indicators led to a flurry of questions about the Framework. At the time of the announcement the ABS Data Quality Framework, whilst mentioned on the ABS website was not easily accessible. The ABS rectified this issue by producing the [ABS Data Quality Framework, May 2009 \(cat. no. 1520.0\)](#) product which provides an overview of all the dimensions and how to use the Framework. This was the start of the ABS' commitment to aiding COAG in its quest to have a more transparent National Reporting Framework.

7. The ABS has had numerous roles in the development of quality statements for COAG. The roles have included that of data provider, advisor and assessor. The roles have evolved over the past twelve months with everyone involved in the COAG reporting process learning progressively.

8. In the role of data provider the ABS, like other data providers for COAG, is required to provide quality statements to accompany the indicator data. These statements were written by the relevant areas in the ABS. They covered all the seven dimensions and commented on the fitness for purpose of the data for the indicator specified. As with other providers of data and quality statements, the first year of reporting was quite new and over time it is expected that the content of quality statements will be refined and become more explicitly set by COAG as to requirements.

9. In the role of advisor the ABS has acted as both a teacher and consultant. The ABS has provided seminars to government departments on the ABS Data Quality Framework and how it can be used for their own internal purposes and for COAG reporting purposes. These seminars have been interactive and have led to departments requesting workshops and training courses for more tailored help.

10. Consultancy work differs from teaching in that it's an on-going specific role. The ABS has acted as a consultant to two of the groups that work on the reports that are presented to COAG. Advice was provided on possible content expected within each dimension of the ABS Data Quality Framework. This

involved reviewing draft quality statements and considering other information not mentioned that might have a bearing on whether the data was fit for COAG's purpose. This advice was considered and where appropriate the questions for more information were directed to the suppliers of the data. The ABS also supplied a staff member to one of these groups in an outposting arrangement to explicitly help in the set up of this new reporting program. This officer has acted as an advisor and also facilitated communication between the group and the ABS where necessary.

11. The expertise of the ABS was requested by COAG in the role of assessor. The ABS review quality statements produced (including their own) and provide feedback on how well the data meets the requirements along with suggested improvements for quality statements for subsequent rounds of reporting. The role has also seen the ABS helping to identify data gaps through analysis of the quality statements and the fitness for purpose of the data for the performance indicators, such as the ABS increasing sample size in some of our population surveys to meet COAG requirements of State and Territory level data for comparison. It has also led to new collections being developed primarily for COAG reporting purposes. These changes have been very quick to be implemented to the survey program of the organisation.

III. NEW INITIATIVE TO AIDE THE CREATION OF QUALITY STATEMENTS

12. The first cycle of the National Reporting Framework National Agreements and their subsequent quality statements was completed in 2009. Feedback from users of the ABS data quality framework for COAG reporting purposes, indicate they have found it difficult to know what to report beneath each dimension of the Framework. There has also been confusion over the validity of including Institutional Environment in the reporting framework from users for COAG purposes. As a result of the feedback the ABS is developing an on line quality tool that will help users create quality statements using the ABS Data Quality Framework by providing contextual information within each dimension to guide the content. The framework also expands on the COAG template used in 2009 to include a section on contact details for the person who creates the quality statement. These changes are a direct consequence of the feedback received from COAG. In keeping with the reporting requirements for COAG the tool is scheduled to be in production in March 2010 to help with the composition of the second round of quality statements for COAG. The tool will be accessed through the National Statistical Services website <www.nss.gov.au>.

13. The tool has three general streams for writing a quality statement; Survey Data, Administrative Data, and Multiple Data Sources, with some tailoring for those aspects that are more administrative or survey related issues to assist the user in reporting the most relevant quality information.

14. COAG quality statements are supported by a separate path with questions which are more specific to COAG requirements in terms of the examples provided and the terminology used. There are specific streams of help information for different priority reporting areas which will be included through hyperlinks from the section that is being answered within the tool. The decision to have only one stream for filtering the COAG quality statements is due to the limited time frame for the construction of the quality on line tool.

15. Testing of the system will cover both ABS internal testing and some external agencies required to provide quality statements to COAG. The inclusion of external agencies in the testing of the system encourages buy in for the use of the system. It is anticipated that the system will be advertised on both the ABS and National Statistical Services websites prior to release to also encourage up take. Promotion of the tool will also occur through various areas of the ABS whose role are to primarily deal with external clients.

IV. FUTURE OPPORTUNITIES FOR DEVELOPMENT

16. The suggested content that has been developed within the tool is based on feedback received to date from the 2009 round of quality statements. The tool has been developed quickly to meet the specific COAG need. As a result, further feedback from the 2009 round of quality statements and from the release of the tool will provide opportunities for further refinement and improvements.

17. Further discussions with external client agencies, other than COAG related ones, could result in the tool being expanded to cater for other requirements. The current working title for the tool on the website is "Data Quality Online" which provides scope for a range of different quality initiatives to be housed within this tool in the future.

18. These possible future developments may help cement the ABS Data Quality Framework as the framework that is used for quality assurance throughout Australian Government departments, not only for COAG purposes, but for general internal practices and processes.

V. CONCLUSION

19. The adoption of the ABS Data Quality Framework by the Council of Australian Governments for use in reporting the quality of the performance indicators for their National Agreements has provided the ABS with an opportunity to expand their statistical leadership role. The development of the quality on line tool has been in response to the needs of users in other government organisations who have been requesting greater clarification and help in using the ABS Data Quality Framework for meeting COAG requirements. The quality on line tool has the potential to be of benefit for this current need and also to be expanded to provide more information for greater overall quality assurance planning of projects in the future.