

# Challenges of adopting international industrial classification & progress on adopting ISIC - Australian Context

## Contents

1. Executive Summary .....	1
2. History of ANZSIC.....	2
3. Uses of ANZSIC.....	2
4. Challenges related to adopting ISIC.....	4
4.1 Challenges of adopting ISIC .....	4
4.2 General issues with implementation of any new classification.....	4
4.3 Region specific implementation issues with adopting ISIC.....	5
5. ABS next steps .....	5
Appendix A - Preliminary comparison of ANZSIC 2006 to revised ISIC.....	6

## 1. Executive Summary

1.1 This paper outlines the history and use of the Australian New Zealand Standard Industrial Classification (ANZSIC) and articulates some of the challenges related to implementing the revised International Standard Industrial Classification of All Economic Activities (ISIC). It provides an update on the processes the Australian Bureau of Statistics (ABS) is following to determine fitness for purpose of the revised ISIC in meeting Australia's need.

1.2 ANZSIC is an industrial classification providing the basis for production, analysis, and dissemination of economic data on an industry basis for Australia and New Zealand. As well as being the standard industrial classification that underpins ABS and Statistics New Zealand's industry statistics, in Australia the ANZSIC is widely used by government agencies for decision making and program delivery, industry organisations and researchers for various administrative, regulatory, taxation and research purposes.

1.3 ANZSIC was last updated in 2006, with Australia requiring a more contemporary industry classification to better reflect the modern Australian economy and its industrial structure. The economy has evolved since the last review and the current structure no longer provides a sufficient representation of the economy's industrial structure. Information, Communication and Telecommunication Division is a prime case with the expansion of internet content provision, internet related services, cybersecurity and the gaming industry since the classification was last updated.

1.4 As the major update and implementation of ANZSIC 2006 was costly and resource intensive project for both the ABS and users of the classification in Australia, the ABS is undertaking a feasibility study on adopting ISIC as its industrial classification to reduce the development costs, with an added benefit of improving the international comparability of Australia's industry statistics. The feasibility study is expected to recommend one of three outcomes: 1) ISIC should be adopted; 2) a region-specific version of ISIC should be

developed; or 3) ANZSIC should be revised either as joint classification with Statistics New Zealand or independently. All options will incur significant implementation costs.

1.5 Key challenges with implementation relate to the cost of integrating the classification into existing infrastructure, educating users about the conceptual underpinnings and structure of the new classification, and maintaining the integrity of time series. As Australia's economy has some distinct features, requiring specific policy initiatives, a major region-specific risk to adopting ISIC is it not reflecting industries significant to Australia.

## 2. History of ANZSIC

2.1 ANZSIC was introduced in 1993 to replace the existing Australian Standard Industrial Classification (ASIC) and New Zealand Standard Industrial Classification (NZSIC). The idea of joint classification stemmed from a desire for comparable statistics and data between Australian and New Zealand using a single classification.

2.2 In the development of the ANZSIC 1993, greater emphasis was placed on alignment with the international standards than was the case in the past. The ISIC Revision 3 was used as the international standard for reference purposes and led to significant improvements in the international comparability of Australia's industry statistics.

2.3 ANZSIC 1993, was replaced by ANZSIC 2006 to better reflect a contemporary view of the Australia and New Zealand's industrial structure. Since the release of ANZSIC 2006, minor updates were made to ANZSIC 2006 in 2008 and 2013 to reflect a subset of new and emerging activities. This update did not result in any changes to the structure of ANZSIC.

2.4 The conceptual framework underpinning the ANZSIC 2006 was more rigorously and consistently applied and international comparability was further enhanced by aligning the classification, at the two-digit level, with the then proposed ISIC Revision 4.

## 3 Uses of ANZSIC

3.1 ANZSIC and industry data have a broad range of uses in Australia. As the standard industry classification for Australia, the ABS uses ANZSIC to group information from like businesses to produce official business and economic statistics. It is critical to ensuring these statistics are representative of the different types of business activity occurring in the modern Australian economy. It is also a key variable in de-identified data made available to researchers via the ABS Business Longitudinal Analysis Data Environment (BLADE)<sup>1</sup>.

3.2 In the ABS, ANZSIC is applied to statistical units in our business register - particularly to the production unit within our Economic Units Model (EUM). It is then derived for other elements in the EUM such as the institutional unit and enterprise group. ANZSIC is also applied to legal entities (e.g. businesses) when they register (with the Australian Business Register) for an Australian Business Number. This use of ANZSIC supports regulatory and compliance activities and has also been used to target government assistance during disasters, such as the COVID-19 pandemic.

---

<sup>1</sup> BLADE "is an economic data tool combining tax, trade and intellectual property data with information from ABS surveys to provide a better understanding of the Australian economy and businesses performance over time." [Business Longitudinal Analysis Data Environment \(BLADE\) | Australian Bureau of Statistics \(abs.gov.au\)](https://www.abs.gov.au/business-longitudinal-analysis-data-environment)

3.3 In Australia, businesses can have an ANZSIC, or industry code assigned to them through several processes including:

- At the point of registration, new businesses applying for an Australian Business Number (ABN) through the Australian Business Register (ABR) identify what industry they primarily belong to using a point of contact coder. This information can then be updated by the Australian Taxation Office (ATO) or the ABN holder if a change is identified. Currently only one activity is recorded at registration. The ABS primarily uses ABN information from the ABR to determine the ANZSIC of a business. In a small number of cases, where the ATO has more current information regarding a business' economic activity, this will be used to assign an ANZSIC code to a business. If the unit is considered significant and/or complex, ABS surveys the businesses to gather further information on the structure and activity of the unit to assign an ANZSIC code. Both the primary and secondary activity are recorded.
- Businesses have an ANZSIC code assigned through applications for government funding, finance and insurance assessments.

3.4 As well as being the standard industrial classification underpinning official industry statistics, government, non-government organisations and researchers also use ANZSIC for various administrative, regulatory, taxation and research purposes. These official and research statistics are used to measure changes in the Australian economy, to inform Government policy and program development, monitoring and evaluation as well as to support international reporting and comparisons. Matched with information on location, industry information is invaluable to understand the impact of climate related events on local economies and what is required to support response and recovery programs.

3.5 Users of ABS' statistics also require alternate views of business and economic data outside the structure of the ANZSIC. That is, they want to group business information based on other characteristics not specifically covered by the classification. For example, users want to understand what is happening in the "digital economy" or the impacts of COVID-19 on tourism. The ABS develops "Satellite Accounts" to meet this user demand on alternate views of the economy, which takes time and requires high quality industry data.

3.6 Other use cases of ANZSIC and industry data include:

- Meeting regulatory reporting requirements, like financial and insurance reporting to the Australian Prudential Regulation Authority (APRA)
- Identifying finance and insurance risk for banks and insurance companies to assess applicability of receiving finance and determining insurance premiums
- Linking data from different sources, an increasingly important activity aiming to unleash the power of "big data"
- An individual's response to the Australian Census of Population and Housing and Labour Force Surveys includes information about the industry of their employer which is ANZSIC coded. This is identified through asking a range of questions relating to their employer's activities in Census form or through matching their employer's ABN information to ANZSIC code, as stored in the ABS Statistical Business Register.

## 4. Challenges related to adopting ISIC

### 4.1 Challenges of adopting ISIC

4.1.1 Challenges of adopting ISIC can be broken into two broad areas:

- General issues with implementation of any new classification
- Region specific issues with adopting ISIC

### 4.2 General issues with implementation of any new classification

4.2.1 A key challenge with implementation relates to the cost of integrating the classification into existing infrastructure used by a range of industrial classification users, including the ABS, Australian Business Register and other government and non-government bodies. This is a resource intensive exercise requiring significant funding and time for both the ABS and other users of the classification. For example, implementation of ANZSIC 2006 required approximately 6 years for Australia. Examples of infrastructure using ANZSIC include ABS statistical collection and analysis systems, statistical (e.g. business) registers, coding tools and classification reference material (e.g. the actual classification, correspondences, classification change tables and classification structures) and non-ABS infrastructure including Australian Business Register, accounting and taxation infrastructure as well as banking and insurance systems.

4.2.2 Another key challenge is maintaining the integrity of the time series of industry data. In Australia, ANZSIC is both an input and output classification. A new classification needs to be first implemented in the Australian Business Register, maintained by Australian Tax Office (ATO), before being implemented by ABS Statistical Business Register. The ABS Business Register uses business registration data from the Australian Business Register as a key input. The classification must then be implemented in business statistics areas, with impacts on frame and sample design, estimation and imputation systems, and subsequently in Australia's National Accounts. A critical issue related to implementation is the extent to which data compiled on the new industry classification needs to be back cast to provide time series on the new basis for industry analysis.

4.2.3 In Australia, as the uses of ANZSIC are very diverse, ranging from collection and production of official industry statistics to using it for research, policy analyses and program delivery, a major challenge is engaging with the broad range of stakeholders both internal and external in communicating the change as well as undertaking impact analysis of the change. Implementation of the classification may also have unintended consequences on current policies or program delivery. Consideration of impact on the interests of private sector activities that have commercial interests must also be undertaken. Any implementation timeline for new classification will also need to consider 2026 Census timing as well as the implementation of the System of National Accounts which is currently under review. A strategy for implementing the new classification needs to be developed, articulating a timeline, a risk plan as well as stakeholder engagement strategy and communication plan.

4.2.4 A further challenge is educating users and providers of statistical data about the conceptual underpinnings and structure of the new classification, which is essential so that it is used appropriately. As a revised classification could result in break in time series, particularly at the lower levels of the classification, understanding the implications of the changes to the industry data is critical for ABS and our users. All structural changes resulting

from implementing a revised classification need to be communicated to the stakeholders, so that the appropriate adjustments can be made to their models and analytical work.

### 4.3 Region specific implementation issues with adopting ISIC

4.3.1 Australia's economy has some distinct features, requiring specific policy initiatives. A risk with adopting an international classification is that it may not focus on industries significant to Australia, thus making it less fit for purpose for country specific analysis and policy needs. For example, Australia has a significant primary production industry with great importance placed on mining and agriculture. The lower industrial breakdown provided by ISIC may not meet Australian users need. Appendix A outlines the comparison of ANZSIC 2006 to the revised ISIC, by current ANZSIC Division. As globalisation increases, the importance of being able to produce internationally comparable data has increased for Australia.

4.3.2 Some other key region-specific implementation issues with adopting the new classification are listed below, noting these may be similar for other countries.

- Australia has well-developed governmental, financial and regulatory structures with specific reporting requirements which utilise industrial classifications. This is a complex system. Ensuring the new classification can provide these requirements is imperative.
- Research agendas, which may feed into policy objectives, require specific targeted granular level information on an industry. The required granularity may not be present in an international classification.
- Industry groups desire greater visibility in official statistics to support their strategies for growth and support, and lobby to be better identified in the classification.
- The need for alternate views of the economy by Australian users cannot be supported by the current international classification structure. Examples of alternate views are Health and related industries, Defence and related industries, Tourism, Transport, Event management, Digital Economy and Domestic Violence related industries.

## 5. ABS next steps

5.1 The ABS is currently assessing the following options in regards to Australia's future industrial classification:

Option 1. Adopt ISIC fully to produce industry statistics and for all other uses of ANZSIC.

Option 2. Create a region-specific version of ISIC to reflect Australian users' requirements. This would provide an opportunity to customise the ISIC classification at the lower levels of the hierarchy or to add extra detail.

Option 3. Review ANZSIC either as joint classification with Statistics New Zealand or independently.

5.2 To make an informed decision about which option to follow, an assessment of whether the ISIC structure will meet Australia's need and whether there is a requirement for a joint classification between Australia and New Zealand is currently in progress.

5.3 A decision on which industry classification option will meet Australia's need will be made after the endorsement of revised ISIC by the United Nations Statistical Commission (UNSC) in March 2023.

5.4 Leading to this decision point, two parallel tasks are currently being undertaken

- Broad consultation with users of ANZSIC to understand their use of industrial classifications, issues with ANZSIC, whether ISIC will meet their needs and barriers to implementing a revised industry classification
- Active participation in the ISIC review through the Task Team on ISIC (TT-ISIC)

5.5 To facilitate the broad consultation the ABS is consulting with both government and private sector organisations to gather a diverse range of views to inform the decision about the future of industrial classification in Australia. The broad consultation includes both targeted engagement with significant users of ANZSIC and a public consultation, which is currently in progress through the [ABS Consultation hub: Help Shape the Future of Classification on Industries in Australia](#). The consultation closes on 26<sup>th</sup> October 2022.

5.6 To assist in the decision-making process ABS is also undertaking a statistical impact assessment of replacing ANZSIC with the revised ISIC, based on information available to date on the revised ISIC.

5.7 This research will feed into the development of a road map which will include the need to establish both priority and funding for adoption of a new industrial classification in Australia.

## Appendix A - Preliminary comparison of ANZSIC 2006 to revised ISIC.

Note this comparison is based on information available to date on revised ISIC.



Comparison of  
ANZSIC 2006 with pi