

## The future of occupation classifications in Aotearoa New Zealand: Consultation







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#### **Purpose**

Stats NZ Tatauranga Aotearoa is seeking your feedback on the future of occupation classifications in Aotearoa New Zealand.

There are two related parts to this consultation that we want your feedback on:

Part A: Options for an updated occupation classification and our intention to introduce separate but aligned occupation classifications for Aotearoa New Zealand and Australia.

Part B: Implementation considerations, concerns, and mitigations.

Note: in the future we will report on our separate consultation on industry classifications – industry classifications are not within the scope of this review. Preliminary consultation was undertaken between January and April 2024 to canvass early views on potential options and understand changing user needs for industry classifications. The findings of that consultation will be published on 26 July 2024. Following that report we will work closely with the Australian Bureau of Statistics (ABS) on a suite of potential options for industry classifications.

#### How to provide feedback

We suggest you read this paper in full for a complete, informed picture, then provide feedback. We note questions throughout the paper to guide your feedback and list these at <u>Questions</u>. We welcome any other feedback.

Submissions open on 15 July 2024 and close at 5pm on 9 August 2024. For more information, email occupations@stats.govt.nz.

We encourage you to provide feedback by emailing your submission to <u>occupations@stats.govt.nz</u>, using the <u>Questions</u> in this paper. If you would like to discuss your feedback in a meeting, please email us to arrange.

Once the submission period has closed, we will analyse the feedback, and publish a summary of our findings. This findings paper will be published in early October. Findings from this consultation will inform final decisions on New Zealand's occupation classification. The Government Statistician will make an announcement on this in early October. We expect next steps for the New Zealand occupation classification will also be advised at this time.

# Part A: Options for an updated occupation classification and our intention to introduce separate but aligned occupation classifications for Aotearoa New Zealand and Australia

#### **Background**

The Australian and New Zealand Standard Classification of Occupations (ANZSCO) is used to classify occupations and jobs. This standard is jointly managed by Stats NZ and the ABS.

Both Stats NZ and the ABS consider ANZSCO is significantly out of date. Since it was released, the labour market and economy have changed significantly, and the classification does not accurately reflect the contemporary reality in both countries.

The Government Statistician and the Australian Statistician have discussed the proposed changes to the current ownership model of this classification.

Stats NZ intends to consult on this classification to understand the needs of stakeholders, the potential opportunities and/or implications of different options, and different implementation considerations.

We are testing the preferred option for the occupation classification in this consultation. The proposed approach, including how it will work, the benefits, risks, and mitigations are described below.

## Proposal to introduce a separate but aligned occupation classification

In the last 20+ years, our national and user contexts have been changing. While the informal policy to harmonise statistics through joint standard classifications has demonstrated benefits, these have been outweighed by the challenges this arrangement presents.

#### Challenges include:

- ANZSCO is no longer representative of the New Zealand labour market
- Australia and New Zealand have differing need and priorities
- joint classifications reviews are challenging and require substantial resourcing and effort.

## ANZSCO is no longer representative of the New Zealand labour market

Our workforce and economy are constantly changing, and this is likely to continue. Already it is recognised that ANZSCO is significantly out of date in both countries.

Since the publication of ANZSCO in 2006, the structure of New Zealand's labour market, like that of Australia and other countries, has undergone significant change. For example, in the occupation space in New Zealand, key changes include the growth of digital skills-based occupations, the

reduction of manufacturing occupations due to technology changes, and the changes in occupations in the accommodation, transport, aged care, and agricultural sectors. As a result, the classification does not reflect the contemporary labour market.

Due to the need for content to be relevant across countries, ANZSCO is not sufficiently representative of a New Zealand context. The types of skills and qualifications required for occupations and how tasks are described in New Zealand and Australia are similar, but not identical. It affects skilled migration reporting, work visa and residency applications, and the quality of occupation data generally.

While it is feasible to continue using the current ANZSCO V1.3, it will become more out of date the longer it remains in place. There are already uniquely New Zealand occupations not adequately reflected in the current classification (such as adventure tourism operators, digital screen/video occupations, and a wide range of dairy farm related occupations). Furthermore, ANZSCO does not reflect te ao Māori or kaupapa Māori occupations, or include content written in te reo Māori.

#### Australia and New Zealand have differing needs and priorities

In 2021, the ABS undertook an Australian-targeted update on ANZSCO. Stats NZ chose not to participate in this, due to the potential impact of changing classifications for the 2023 Census and the relevance to New Zealand of the proposed changes. Since then, a 2022 targeted update has occurred in Australia, followed by the current comprehensive Australian ANZSCO review. This review is based on priority areas for the Australian labour market and is driven by government and stakeholder priorities in Australia. More information on this review is provided below and can be found on ABS's web page <u>About ANZSCO</u>. Stats NZ and the ABS will keep each other informed of their respective consultations.

## Joint classifications reviews are challenging and require substantial resourcing and effort

There are several factors contributing to the difficulty of maintaining a joint classification. These include:

- undertaking domestic consultation with stakeholders
- agreement on actions within and between agencies
- competing strategic drivers and needs both within the statistical agencies and across the national data systems, including legislative and political drivers
- conflicting or competing survey timelines, including different census cycles that result in conflicts in the availability of current and comparable census data
- tendency for revisions to align with Australian funding and timing; historically they are not initiated by New Zealand
- restricting our ability to make changes to address New Zealand-specific data needs, particularly in relation to te ao Māori.

## Modernised approach will realise benefits while maintaining comparability

Potential benefits and opportunities of developing a new occupation classification include a classification that is vastly more responsive, flexible, and much quicker, easier, and cost effective to update.

The proposed separate occupation classification will mean we can develop classifications that reflect New Zealand's labour market, while still aligned to international and Australian classifications. Maintaining alignment will ensure international comparability and continue to enable close comparisons across New Zealand and Australian labour markets.

#### What is your feedback on the proposal for a separate but aligned occupation classification?

#### **How ANZSCO informs data**

ANZSCO was created to inform the standardised collection, analysis, and dissemination of occupation data for Australia and New Zealand. It was intended to provide an integrated framework for storing, organising, and reporting occupation-related information in both statistical and client-oriented applications, such as matching job seekers to job vacancies and providing career information.

ANZSCO has a five-level hierarchy – major group, sub-major group, minor group, unit group, and occupation. The categories at the most detailed level of the classification are termed 'occupations'.

ANZSCO is a skill-based classification used to classify all occupations and jobs in the Australian and New Zealand labour markets. The conceptual model adopted for ANZSCO uses a combination of skill level and skill specialisation as criteria to design major groups that are meaningful and useful for most purposes.

The classification is structured as:

- 8 major groups
- 43 sub-major groups
- 97 minor groups
- 358 unit groups
- 1033 occupations.

#### The major groups are:

- Managers
- Professionals
- Technicians and Trades Workers
- Community and Personal Service Workers
- Clerical and Administrative Workers
- Sales Workers
- Machinery Operators and Drivers
- Labourers.

The current version is <u>ANZSCO V1.3</u>. This was last updated jointly by Stats NZ and the ABS in 2019 to refresh skill levels. No addition, deletion, or movement of any categories or codes within the classification were made.

#### How do you currently use ANZSCO?

#### Options for an updated occupation classification

## Option 1: Create an independent New Zealand occupation classification that leverages existing content

We propose developing an independent New Zealand classification that is aligned to Australia. Stats NZ is actively exploring a new approach that leverages the work done by Tertiary Education Commission (TEC) in developing their new Online Careers Solution Platform – Tahatū. Tahatū will be a publicly available careers information service that includes a database of information about occupations, tertiary education, and training.

We propose to use digital technology to link occupations in the updated occupation classification to the content and information on Tahatū – minimising duplication and providing a direct link from occupations to careers information. Stats NZ would be able to make timely updates to the occupation classification, enabling new and emerging occupations to be added to the classification more frequently. It would require significantly less resource and time than the other options due to the work already completed in the development of Tahatū.

The existing ANZSCO skill levels would be retained.

This is our preferred option.

#### Option 2: Adopt the Australian revision of ANZSCO v1.3

The ABS completed targeted updates of ANZSCO in 2021 and 2022. They are now currently undertaking a comprehensive review of ANZSCO. This review is being undertaken to ensure classifications reflect the contemporary Australian labour market and is driven by government and stakeholder priorities in Australia. Australia intends to have an updated occupation classification in place in time for their next census (in 2026).

Given the review's focus on meeting Australia's needs, it is unlikely that the resulting update will be fit for New Zealand's labour force. Skill differences between the two countries, which have been evident for some time, could be magnified (for example, there are distinct differences in the skills required for New Zealand financial professionals, health and welfare support workers, and agricultural workers). If we were to adopt Australia's upcoming revision, we would be using the same classification as Australia, but it would not be fit for purpose for the New Zealand labour market. We would also continue to experience the same challenges of maintaining joint classifications.

## Option 3: Adapt the Australian revision of ANZSCO v1.3 to reflect New Zealand content in a joint classification

While Australia's comprehensive review of ANZSCO is focused on the Australian labour market, we have considered making further changes to Australia's revised classification to reflect New Zealand content and maintain a joint classification. This would need to occur after Australia's revision is finalised to avoid delaying their timeframes. We would need a significant amount of resource and funding to adapt the Australian revision to better reflect New Zealand's labour force, and to assess whether it could then be a joint classification. As a first step, we would need to assess and understand all the updates and changes Australia is proposing. We could then consider those updates for New Zealand, and work with the ABS to consider how to integrate each of our respective changes in the joint classification. Stats NZ needs to undertake further consultation with the ABS to understand the feasibility of this option. Even with an updated joint classification, we would continue to experience the challenges of maintaining joint classifications.

## Option 4: Update the current version of ANZSCO v1.3 for New Zealand-only classification

Stats NZ could undertake our own comprehensive review of the existing version of ANZSCO (v1.3) to update it for the New Zealand context and create a separate occupation classification. We would need to examine the overall structure of the classification, content, and definitions and engage with relevant stakeholders to ensure content reflected the contemporary New Zealand labour market. This approach would take time and require significant resources and funding. For example, the ABS is completing their review over two years and obtained AU\$24 million to achieve this.

What do you think about the four options outlined? What other options should we be considering?

#### **Benefits of Option 1**

The many benefits to this new approach include:

- more visibility of New Zealand content
- increased adaptability and flexibility
- minimal duplication
- more frequent change and use of emerging technology.

#### More visibility of New Zealand content

This approach will allow for:

- better representation of important sectors in the New Zealand economy and labour market
   for example, farming and forestry
- greater visibility to occupations relevant to small businesses for example, the Roofing Association of New Zealand has requested changes to ANZSCO since 2006 to reflect relevant occupations such as roofer
- better representation of occupations and skills that are uniquely New Zealand, such as disaster risk specialist, procurement officers, and a wide range of dairy farm occupations
- more visibility of kaupapa Māori occupations

- greater visibility of occupations that are on Immigration NZ's Green List for example endodontists
- better data to inform current policy and decision-making on skill gaps and growing skill needs across the labour market.

#### Increased adaptability and flexibility

Option 1 provides greater flexibility to adapt and respond dynamically to the evolving nature of work and economic activities in the New Zealand labour market and economy while maintaining comparability with the Australian labour market. For example, new and emerging occupations could be added to the classification more frequently, driven by users.

As well as its adaptability, this approach enables greater depth of analyses through linkages to a broader range of information using application programming interfaces (APIs). This technology enables a more comprehensive integration of the factors influencing employment trends, providing a better evidence base for policy and service delivery decisions. It will be easier to assess, review, and update the occupation classification, removing barriers such as cost and resourcing. This will ensure that the data available on occupations in New Zealand is accurate, relevant, and up to date, and improve the usability of this data in understanding labour market trends.

#### **Minimal duplication**

Using the work already undertaken by TEC to develop Tahatū would constitute a large part of the work needed to establish the classification and reduce the amount of work Stats NZ would need to do to update ANZSCO or create a new classification from scratch.

#### More frequent change and use of emerging technology

With option 1 we could make changes more frequently, in response to New Zealand's needs, rather than through a joint process with the ABS. The technological infrastructure of Tahatū provides the opportunity for Stats NZ to use machine learning, algorithms, and APIs to share and integrate content. Automation of the process will reduce resource and funding required to update and maintain the classification.

Would this approach support your business/user needs? Please give examples of how this would or would not support them.

#### How option 1's occupation classification would work

We propose that the new classification will be a flat list of occupations. A flat list means there is no hierarchy built into the classification – instead, all occupations are presented in a single list at the most detailed level. Occupations will connect directly to Tahatū where appropriate to enable access to career information. The list will be flexible and new occupations can be added at any time, as required. These can be identified from Tahatū, job vacancy websites, known industry or stakeholder requests, or other sources. See <a href="DEMO of Occupation Category list V1.0.0">DEMO of Occupation Category list V1.0.0</a> in Ariā. We consider this approach best meets New Zealand's needs while minimising disruption with implementation.

#### **Categories and labels**

The new classification list is based off existing 6-digit ANZSCO occupations, with the existing ANZSCO skill levels 1–5 being retained.

Occupation names used in Tahatū have been assessed against the existing ANZSCO content to create the proposed new classification. The same titles from ANZSCO have been kept where possible. Some have been relabeled to reflect modern terms, for example, aged care manager and careers advisor. Some no-longer-relevant occupations have been deleted, for example, cotton grower and bookmaker, and many new emerging occupation titles have been added, such as influencer, podcaster, and data wrangler. A spreadsheet demonstrating these changes can be found in the Excel file, 'Indication of potential changes to the ANZSCO classification' available under <a href="Download documents">Download documents</a>.

What do you think about the proposed new classification list and the changes from ANZSCO 1.3? What additions, deletions, or changes are needed?

#### Links with Tahatū classification

Stats NZ's <u>Ariā</u> system (Stats NZs classification repository) will be linked to the Tahatū platform using application programming interfaces (APIs). APIs act as the language that allows different software applications to talk to one another. The occupation classification held in Ariā will have a link to the definitional content in the Tahatū platform where it exists.

Users will be able to utilise external public facing APIs from the Ariā system to access content. Ariā will use APIs to link to Tahatū to enable content to be read. Both systems have external facing APIs available and use comparable data models to enable system integration. User defined APIs for specific purposes may be at user cost. We understand that this will have implications for users of the classification. Stats NZ is keen to understand the cost of this for individual agencies through this consultation.

Linkages between existing and new occupation frameworks Stats 🚾 These arrows show how the occupations in the new framework fit into admin categories using applicati programming interfaces (APIs). Occupations in the framework will be linked for viewing purposes only. These arrows show how current occupations will fit into the new framework. Some 6-digit occupations will be included in the new framework. Cotton G for example, might not be included as it applies only to specific countries. **Existing Occupation New Occupation Admin Source Classification** Farming, Fishing, Framework Forestry, and mining ...▶ Aquaculture Farmer Farming, fishing, forestry, and mining includes growing and producing food and resources, extracting and processing minerals, and monitoring and protecting Admin Major Groups · Food Processing · Growing, Gardening, and Forestry Environment and Sustainablility Concordances · Farming and Fishing · Quarrying and Mining · Animal Health and Care US Standard Occupation Classification (US SOC) 20 Engineering, Technology, and Maintenance

Figure 1. Linkages between existing and new occupation frameworks

A PDF version of figure 1 is available under **Download documents**.

#### **Inclusions**

Only those occupations in the new classification that could be mapped to the content in Tahatū have been mapped. Tahatū is not an exhaustive list of all occupations. Examples that were included in the Stats NZ classification but not in Tahatū are Sex Worker, Traditional Chinese Medical Practitioner, Life Coach, or Land Economist. The purpose of mapping is to provide more information about individual occupations.

#### **Output views**

A flat list of occupations allows different output views to be created for different uses and gives more flexibility compared with the traditional, hierarchic structure. Stats NZ will provide an output view to the existing ANZSCO level 1-4. We also intend to provide a view that represents the search and discovery levels of Tahatū. Views could be created to represent different sectors such as hospitality, tourism, or construction for example. Users will be able to create views and hierarchies for their own.

What other potential views would you need?

## Roles and responsibilities in developing an independent classification

The roles and responsibilities of Stats NZ and TEC are clear in option 1, developing an independent New Zealand occupation classification.

The accountability for the new classification and the maintenance of that link to Tahatū lies with Stats NZ.

Stats NZ is responsible for developing and managing its occupation framework in Ariā, the relevant stakeholder engagement, and governance for its framework. TEC will continue to manage and develop Tahatū as a careers advisory platform using their content development and stakeholder engagement processes and their own governance structure. Stats NZ is a stakeholder in the Tahatū process.

Both agencies will inform each other of new content when it is developed or added. Stats NZ will notify TEC of new additions to its occupation classification list and will link them to content in Tahatū if it exists. TEC will advise Stats NZ of new content for Tahatū so that Stats NZ can consider whether any new occupations need to be added to its list.

Stats NZ will be responsible for providing definitions for occupations if they do not exist in Tahatū. We will use ANZSCO definitions, but if they do not exist, we will work with appropriate stakeholders to produce definitions.

Stats NZ and TEC will work through a high-level memorandum of understanding (MoU) and a relationship agreement with outlines:

- the relationship between the two agencies
- the detail about the platform integration
- roles and responsibilities
- governance and version control/release.

#### Management and updates

Stats NZ and TEC plan to have a joint, yearly, coordinated-version release of content on their platforms. There may be some situations where a yearly release does not happen, for example, if we have not identified any new or changed content. There may also be situations where Stats NZ releases a new version, but TEC does not. We propose to update the new classification annually, with all new content time-stamped so users can choose when they pick up a new version. An agreed process for how and when users need to be on the same version for data comparability will need to be decided.

We reiterate that ANZSCO is not being replaced by the occupational hierarchy that underpins the **Tahatū platform**. Instead, it is being replaced with a new occupational classification of which the Tahatū content is an important part.

What is your feedback around the management of the proposed new framework?

#### **Concordances**

Concordances provide the mapping of one classification (or version) to another. Concordances for data continuity and time-series analysis will be maintained by Stats NZ. These will exist from the current ANZSCO V1.3 (see <u>DEMO of Occupation Category list V1.0.0</u>) through to the changes made in the Australian targeted updates of 2021 and 2022, and to the new Australian classification when it becomes available. Concordances to the international standard and the United States classification which underpins the <u>US O\*NET</u> system will also be developed and maintained from the new classification by Stats NZ.

## Part B: Implementation considerations, concerns, and mitigations

#### Time series and international comparability

Concerns have been raised that a move away from ANZSCO will result in a break to time series and an inability to compare New Zealand labour market data with Australia and internationally.

Time series and international comparability can both be maintained through concordances, even with a move away from ANZSCO. An example of a concordance of the new list and ANZSCO v1.3 can be seen at <a href="DEMO of Occupation Category list V1.0.0">DEMO of Occupation Category list V1.0.0</a>. Stats NZ will ensure that concordances are created between the new list and all relevant classifications, now and into the future. We acknowledge that there is work involved in adopting a new occupation classification for agencies both for updating systems and implementing into datasets. We are keen to understand these implications and how we can provide support.

Continuity and comparability of data is important, which is why we understand the concerns regarding time series and international comparability. We have addressed this with the creation of concordances. Is there anything we have missed that you would like to add?

#### IT system changes

To help mitigate issues with IT system changes, Stats NZ will be retaining the ANZSCO 6-digit code pattern for the flat classification list.

In the past, changing classifications in IT systems has been an expensive and time-consuming exercise. In future, IT systems should be integrated with Stats NZ's Ariā system to read and consume content, using version control measures and appropriate data model linkages. While there may be an initial setup cost, the use of dynamic APIs can minimise risk and cost for agencies and does not require wholesale IT system change.

Do you have any other feedback around the <u>implementation of the new framework</u> for your organisation, including what costs and changes it would involve?

#### Seeking feedback

Thank you for taking the time to give your feedback. How to provide feedback outlines your options.

See questions for more guidance on feedback we are seeking.

#### Please complete your submission by 5 pm, 9 August 2024.

#### Privacy statement

We will collect personal information from you, including your contact information and any information you supply in your submission. This information helps build a better understanding of the views on the proposal. We will analyse the information to understand the views of different groups and the range of people we have reached.

We keep your personal information secure by protecting it from outside sources, making regular back-ups of our data, and using strong security systems.

You have the right to ask for a copy of any personal information we hold about you, and to ask for it to be corrected if you think it's wrong. If you'd like to ask for a copy of your information, or to have it corrected, please contact us at <a href="mailto:occupations@stats.govt.nz">occupations@stats.govt.nz</a>.

A findings paper summarising the submissions we receive will be published on <a href="www.stats.govt.nz">www.stats.govt.nz</a> later in 2024. We intend to use direct quotes from submissions to illustrate our findings. We do not intend to identify or name individuals in our findings through use of direct quotes, but may name groups.

Stats NZ Tatauranga Aotearoa may be asked to release submissions under the Official Information Act 1982. This Act has provisions to protect sensitive information given in confidence, but Stats NZ Tatauranga Aotearoa can't guarantee the information can be withheld. If you don't want information contained in your submission to be released, you need to tell us which information should be withheld and explain why. For example, you might want some information to remain confidential because it's personal or commercially sensitive.

For more information about your privacy please see <a href="https://www.stats.govt.nz/help-with-surveys/privacy-security-and-confidentiality-of-survey-data/">https://www.stats.govt.nz/help-with-surveys/privacy-security-and-confidentiality-of-survey-data/</a>

#### Questions

- 1. Who is making this submission?
- 2. This submission is made:
  - o by an individual
  - o n behalf of a group or organisation
  - other (please state).
- 3. Are you happy for us to contact you?
- 4. What is your feedback on the proposal for a separate but aligned occupation classification?
- 5. How do you currently use ANZSCO?
- 6. What do you think about the four options outlined? What other options should we be considering?
- 7. Would this approach support your business/user needs? Please give examples of how this would or would not support them.
- 8. What do you think about the proposed new classification list and the changes from ANZSCO 1.3? What additions, deletions, or changes are needed?
- 9. What other potential views would you need?
- 10. What is your feedback around the management of the proposed new framework?

- 11. Continuity and comparability of data is important, which is why we understand the concerns regarding time series and international comparability. We have addressed this with the creation of concordances. Is there anything we have missed that you would like to add?
- 12. Do you have any other feedback around the <u>implementation of the new framework</u> for your organisation, including what costs and changes it would involve?
- 13. If you have any other comments on anything in this proposal, please share these with us.