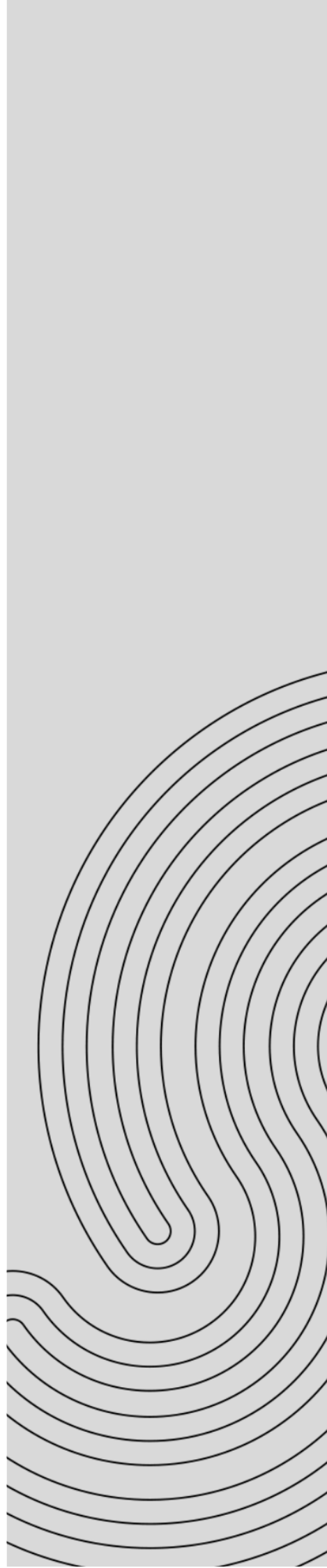


# National Skills Taxonomy

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## Introduction

The following comments are based on JSA's *National Skills Taxonomy Discussion Paper To inform the design of a National Skills Taxonomy*<sup>1</sup> (the Paper).

A National Skills Taxonomy (NST) is likely to be a key, and necessary, component of a national and common approach to skills in Australia, if not the 'cornerstone' of any national skills infrastructure.

A number of reforms will rely on a national and common language for skills, including:

1. The introduction and utility of a National Skills Passport.
2. Reform of vocational education and training (VET) in support of the VET qualification reform design agenda, especially Purpose 3 and Purpose 2.
3. Proposals included in the Australian Universities Accord to increase the skill relevance of degree outcomes to meet labour market needs.
4. The need to address barriers to greater labour mobility and reduce the transaction costs of labour market matching and mismatching of demand and supply.
5. The need for uplift of productivity and innovation in the economy.

The context is an Australian economy already digitalised, highly service orientated, and dominated by small and medium size businesses. In this context, a key purpose of a NST may be as an enabler for the demand side and the supply side of labour to more precisely communicate what is required to add value to businesses, including by better utilising technology adopted by the firm.

This has become even more apparent with the rise of artificial intelligence and its forecast impact on jobs and skills<sup>2</sup>; the growth in Australia's digital workforce<sup>3</sup>; and the need for firms to adopt greater levels of technology to remain competitive, including adoption of emerging technology.<sup>4</sup>

## Case for Change

Summary:

1. A NST should be primarily driven by the demand side of the labour market.
2. In addition to job related technical skills, employability or human/soft skills need to be a clear focus in the design of a NST as these are a key set of skills sought by the demand side across the labour market.
3. Skills identified by the demand side, which drive productivity uplift, may be complemented at some point by skills driven from the supply side, which may drive innovation.
4. It is often unclear what are the specific skills in shortage within occupational shortages, which are entrenched and growing, to enable identification of the common skills in shortage across these occupations.
5. A NST does not need to necessarily align with existing national administration taxonomies, as this risks reinforcing existing approaches to describing the labour market, which may no longer be fully fit for purpose.
6. A NST should address foundational skills.

We see a key value of a NST as being able to identify those skills demanded by employers to add value to their business and to enable labour mobility across the labour market.

Accordingly, as a starting principle the case for change should be driven by the demand side of the labour market for skills.

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<sup>1</sup> Jobs and Skills Australia, June 2024, *National Skills Taxonomy Discussion Paper To inform the design of a National Skills Taxonomy* [https://www.jobsandskills.gov.au/sites/default/files/2024-06/national\\_skills\\_taxonomy\\_discussion\\_paper.pdf](https://www.jobsandskills.gov.au/sites/default/files/2024-06/national_skills_taxonomy_discussion_paper.pdf)

<sup>2</sup> <https://www.futureskillsorganisation.com.au/impact-of-generative-ai-on-skills-in-the-workplace> and <https://www.futureskillsorganisation.com.au/building-an-ai-enabled-workforce-priority-framework>

<sup>3</sup> <https://digiworkforce.futureskillsorganisation.com.au/>

<sup>4</sup> <https://www.abs.gov.au/articles/development-composite-indicator-business-digital-intensity-australia-digital-intensity-index>

A key set of skills sought by the demand side across the labour market are employability or human/soft skills. If a NST is to have utility outside recognising technical skills covered in qualifications, then the inclusion of employability skills needs to be considered. Our research indicates that finance, technology and business services employers are increasingly focussed on employability (or human/soft) skills.

Skills identified by the demand side, which drive productivity uplift, may be complemented by skills driven from the supply side, which may drive innovation. While we argue for a demand side driven focus on the skills required, such an approach may be complemented through identifying skills from the supply side. These types of skills can be the catalyst for innovation by firms and industries. A simple example of this are the skills of applied research for product, process, organisational, and marketing innovation.<sup>5</sup>

It is often unclear what are the specific skills in shortage within occupational shortages, which are entrenched and growing (the Paper, page 5), and therefore what are the common skills in shortage across occupational shortages. A skills taxonomy should help to identify skills in shortage across a range of occupations, so these may be addressed in preparing people for the labour market.

Further, the common skills driving shortages across a range of occupations are likely to be human (or soft/employability) skills. Human skills, including emerging skills such as ‘AI prompting’, are generally labour market wide skills. Accordingly, a NST should also focus on these skills as outlined above.

A NST does not need to necessarily align with existing national administration taxonomies, as this risks reinforcing existing approaches to describing the labour market, which may no longer be fully fit for purpose. A NST should reflect the demand side of the labour market. There should not be a concern if this does not automatically align with existing infrastructure such as the Australia and New Zealand Standard Classification of Occupations (ANZSCO) and the Australian Qualifications Framework (AQF). In doing so, a NST may act as the catalyst for change across existing arrangements to better reflect how the labour market operates.

We agree that ‘On its own a skills taxonomy is a structured list of skills. The true value is unlocked when combined with other taxonomies and information.’ (the Paper - page 9). Combining a NST with existing taxonomies already used in the labour market such as the Australian Digital Capability Framework (ADCF), the Skills Framework for the Information Age<sup>6</sup> (SFIA) or the LinkedIn Skills Graph<sup>7</sup> will result in greater impact of a national taxonomy, including international alignment, and likely greater uptake of an NST. This alignment to the labour market should be a first order principle, with sequential alignment to an NST over time by existing national administration taxonomies.

Therefore, the development of an NST should be a ‘green field’ approach, driven by the demand side needs of the labour market. This means existing national administration taxonomies, such as ANZSCO, AQF and, where appropriate the Australian and New Zealand Standard Industrial Classification, would then be adapted, where possible, to an NST.

Foundational skills should also be addressed in an NST. A skills description of the foundation level for language, literacy, numeracy, digital, and employability foundational skills will be useful. While we have referred to technical skills and human or employability skills above, there is a need for a NST to also address these foundational skills.

One view of foundational skills is those initial set of skills that allow for an individual to materially engage in the labour market on which they can build further skills. While we agree that language, literacy and numeracy are key foundational skills, in addition digital and employability skills are equally foundational. The level of capability of a foundational skill such as digital will depend on the level of capability needed by an employee to materially participate in a labour market already

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<sup>5</sup> [https://tda.edu.au/wp-content/uploads/2020/10/2020-10-19-SMEs\\_and\\_TAFEs\\_Collaborating\\_Through\\_Applied\\_Research\\_for\\_Growth-003.pdf](https://tda.edu.au/wp-content/uploads/2020/10/2020-10-19-SMEs_and_TAFEs_Collaborating_Through_Applied_Research_for_Growth-003.pdf)

<sup>6</sup> <https://sfia-online.org/en>

<sup>7</sup> <https://linkedataorchestration.com/2023/12/13/how-linkedin-is-moving-towards-a-skills-based-economy-with-the-skills-graph/>

digitalised and to self-propel their acquisition of further digital skills with minimal employer support. An NST needs to set out foundational digital skills, and other foundational skills, in those terms.

## Potential Use Cases

Summary:

1. Employers and industries, including the non-market sector, would seem to be the key driver in the uptake and use of a NST, so these should be priority use cases.
2. All levels of government taking up an NST would give it further validity, and provide valuable use cases, especially where those use cases relate to industry engagement.
3. Use cases for VET and higher education could be framed in the context of how they will meet the needs of employers and industries and government.

Employers and industry uptake is critical to achieving NST success. Adoption of an NST by a wide range of private, public, government and not-for-profit organisations for use in recruitment and workforce management is critical.

If the demand side of the labour market can see the value in using an NST, as the basis for recruitment and workforce management, then it is highly probably the supply side, including learners and employees, will adopt this common language. We do however suggest caution in using government levers to mandate the use of an NST by the private sector. Rather, we see the uptake of an NST by all levels of government is a more effective action to get widespread adoption.

## Consideration for design

Summary

1. A key question is whether an NST is developed as its own taxonomy, irrespective of existing taxonomies used in the labour market, or whether it's designed as an organising framework to account for these existing taxonomies.

We consider there is value in considering if a NST is primarily an organising framework not seeking directly to usurp, at least initially, existing taxonomies.

To do this, a NST for each identified skill could point to a best-in-class taxonomy for that skill. Wherever possible, it may be useful for that taxonomy to be a global taxonomy. For example, for digital skills, a NST may point to SFIA or to Digital Competence Framework for Citizens (DigComp) developed for the European Commission.<sup>8</sup>

If this was the case, while recognising not all skills within an NST may be able to point to an existing taxonomy, it may mean the demand side would more readily adopt any NST. Also, it would be the existing taxonomies that will be maintained by their holders and from which a NST would refer to in its organising framework.

Accordingly, a NST would be driven by the market updating the taxonomies to which an NST points. The frequency and comprehensiveness of these updates would be determined by the market, as they are already subject to market user demand, and the cost of maintaining and updating would mainly be borne by the market.

The work undertaken by the Australian Public Service Commission for its APS Career Pathfinder tool is an example of the use of a taxonomy as an organising framework.<sup>9</sup>

In cases where there is no existing or suitable taxonomy to which an NST could point, government could either develop the skill descriptor or work with appropriate organisations to develop a taxonomy to fill the need for that industry. The latter approach would be preferred.

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<sup>8</sup> <https://publications.jrc.ec.europa.eu/repository/handle/JRC128415>

<sup>9</sup> <https://www.digitalprofession.gov.au/career-development/aps-career-pathfinder-tool>

We therefore consider the Principle of ‘Interoperable’ as relating to existing skill taxonomies used by the demand side of the labour market, such as SFIA, rather than with seeking to fit a NST with existing national skills administration infrastructure, such as ANZSCO. Many of our sector stakeholders seem to more readily identify with SFIA, for example, than with ANZSCO.

Further, we do not see ‘Comprehensive’ as a key NST principle which needs to be immediately fulfilled. Rather it is aspirational to aim to ‘Effectively describe skills for all occupations across the Australian labour market’ (the Paper page 12). It may be better to stand up a NST that is fully supported by the demand side, while not comprehensive, and succeed and then evolve from there. An alternative Principle may be an accepted critical mass of skills described, or skills described for certain sectors of the labour market such as for the technology sector and for the finance sector, rather than ‘Comprehensive’.

There are a number of considerations for the seven principles of page 12 of the Paper.

- ‘Comprehensive’ is an aspirational principle. To effectively describe skills, it may be worth ‘pointing’ to existing taxonomies used in the labour market for a best-in-class description of the skill rather than seeking to develop and maintain skills in a newly developed taxonomy.
- ‘Interoperable’ may be considered in terms of the existing labour market taxonomies, recognising some of the national administration taxonomies such as the AQF or ANZSCO are either undergoing reform or may need at some point to adapt to the current labour market of skills.
- Both our view on comprehensive and interoperable supports the ‘Evolutionary’ principle, by building on existing skills systems and by focusing on key sectors to achieve early success.
- We support the ‘Integrative and ‘Accessible’ principles as key benefits of an NST should be to improve labour mobility and improve the matching of skills demand and supply.
- We have noted the benefit of an approach to a NST of an organising framework for existing taxonomies used in the labour market. SFIA seems to be already used extensively, as an example. This is an international taxonomy, and any local contextualisation may need to be balanced by the needs of Australians to be able to participate in the global workforce, and by cross border organisations sourcing Australian talent either in-country (which can be a determinant of foreign investment in Australia) or for overseas employment. There is also benefit in a NST being validated for skills needed across our region and by our trading partners (at least).
- In the workshops for the design of a NST there has been a lot of focus on the principle of ‘Dynamic’. This can be an advantage of an NST being an organising framework that points to best-in-class skills taxonomies, as these taxonomies are likely to be maintained at appropriate time intervals by the holders of each taxonomy, driven by market signals from their users. Greater use of metadata will also assist with transparency on updates to taxonomies.

## Consideration for development and implementation

It is our view success of a NST is tied directly to the widespread use of a NST by firms and industries. This is for both for recruitment and for use within an organisation’s workforce.

Given that, Jobs and Skills Councils (JSCs) should be tasked with working with their industry sectors and the Commonwealth and State and Territory Governments on the development and implementation of an NST.

## Conclusion

We recognise the Paper sets out the initial scope of thinking to be undertaken on an NST. Further, this will be a long process with compromise needed at times. The key points we have made are:

1. The need for any approach to be demand side driven - firms, industries, and the non-market sector, with JSCs able to play a key role for their sectors.
2. Consideration may be given to a NST as an organising framework for existing taxonomies used in the labour market rather than starting by seeking to align with existing national classification arrangements, such as the AQF and ANZSCO.

3. Engagement and uptake by governments will also be critical, including for governments' engagement with industries.
4. If there is demand side use of an NST, the supply side of the labour market will be able to respond to that, though there is value in supply side engagement especially around skills that may drive innovation in the economy.
5. Alongside technical skills for a job role, employability skills that sit across the labour market should be one of the first sets of skills included in an NST.
6. Seeking to be comprehensive should be aspirational over time.

## About the FSO

**Future Skills Organisation is the Jobs and Skills Council for Australia's finance, technology and business sectors.**

Our role is to make vocational training a preferred choice for learning finance, technology and business skills by partnering with industry and the vocational training sector to fast-track innovative training solutions, which meet the demand for the most important skills.

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### **Future Skills Organisation**

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