Roadmap for the Implementation of a Skills Planning Unit

Marcus Powell and Vijay Reddy

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ABBREVIATIONS AND ACRONYMS

CEI	The Centre for Employment Initiatives – International
DHET	Department of Higher Education and Training
DoL	Department of Labour
DPME	Department of Planning, Monitoring and Evaluation
dti	Department of Trade and Industry
FAU	Finance and Administration Unit
FET	Further Education and Training
GDP	gross domestic product
HE	higher education
HEMIS	Higher Education Management Information System
HETMIS	Higher Education and Training Management Information System
HRDC	Human Resource Development Council
HSRC	Human Sciences Research Council
ICT	information and communications technology
JOI	Job Opportunity Index
LFS	Labour Force Survey
LMI	labour market intelligence
LMIP	Labour Market Intelligence Partnership
LMIRU	Labour Market Intelligence and Reporting Unit
LMIS	Labour Market Intelligence System
MoA	Memorandum of Agreement
MoU	Memorandum of Understanding
NSA	National Skills Authority
NSDS	National Skills Development Strategy
QLFS	Quarterly Labour Force Survey
RAU	Research and Analysis Unit
SDIS	Skills Development Information System
SDPU	Skills Development Planning Unit
SETA	Sector Education and Training Authority
SIP	Strategic Integrated Projects
SPLU	Skills Planning and Liaison Unit
SPU	Skills Planning Unit
SQMR	SETA Quarterly Monitoring Reporting System
TVET	Technical Vocational Education and Training
UCT	University of Cape Town
WSP	Workplace Skills Plan

PREFACE

The 2009 South African government administration, informed by a results-focused philosophy, identified 12 priority outcomes for the country. Government departments are committed to a 'joined-up' approach to deliver on each of the outcomes. Outcome 5 refers to 'a skilled and capable workforce to support an inclusive growth path', and the delivery of this outcome is being led by the Minister of Higher Education and Training.

Delivery Agreement 5 consists of three parts, with Output 5.1 committing the Department of Higher Education and Training (DHET) to establish a credible mechanism for skills planning, in collaboration with 20 national and provincial ministries. The DHET commissioned the Human Sciences Research Council (HSRC) to support the DHET in establishing a credible institutional mechanism for skills planning (Memorandum of Agreement between the DHET and the HSRC, February 2012).

To inform the architecture of the skills planning mechanism, the following reports have been written:

- Marcus Powell & Vijay Reddy (2014) *An Architecture for Skills Planning: Lessons and Options for Reform in South Africa*, Report 9
- Marcus Powell & Vijay Reddy (2014) *Roadmap for the Implementation of a Skills Planning Unit*, Report 10

- Marcus Powell, Vijay Reddy & Andrew Paterson (2014) *Approaches and Methods for Understanding What Occupations Are in High Demand and Recommendations for Moving Forward in South Africa*, Report 11
- Cuen Sharrock & Sybil Chabane (2015) *International Comparative Analysis of Skills Planning Indicator Systems across National Contexts*, Report 12
- Vijay Reddy & Marcus Powell (2015) *Indicators and Data to Support Skills Planning in South Africa*, Report 13
- Andrew Paterson, Mariette Visser, Fabian Arends, Menzi Mthethwa, Thembinkosi Twalo & Titus Nampala (2015) *High Level Audit of Administrative Datasets*, Report 14
- Fabian Arends, Sybil Chabane & Andrew Paterson (2015) *Investigating Employer Interaction with the Employment Services of South Africa (ESSA)*, Report 15
- Bongiwe Mncwango (2015) *Public Attitudes Towards Work in South Africa*, Report 16
- Xolani Ngazimbi & Marcus Powell (2015) *Information and Skills Planning for the Workplace: Case Studies of Companies in South Africa*, Report 17
- Lynn Woolfrey (2013) *South African Labour Market Microdata Scoping Study*, Working Paper 2
- Andrew Kerr (2013) *Understanding Labour Demand in South Africa and the Importance of Data Sources*, Working Paper 5

EXECUTIVE SUMMARY

Within the context of the Skills Planning Unit (SPU), this roadmap addresses the following issues:

- What are the **functions** of the SPU?
- What could be the most suitable **location** for the SPU?
- What **structures** will be required to establish the SPU?
- What **processes** are needed to allow the SPU to perform its intended functions?
- The development of an implementation plan.

Each of the above areas is dealt with in the present report. Much of the evidence to inform this report was obtained from earlier Labour Market Intelligence Partnership (LMIP) work that investigated the implementation experience of South Africa in the field of skills planning and Labour Market Intelligence Systems (LMISs), as well as what lessons could be learnt from how other countries have approached these issues.

What are the functions of the SPU?

Based on the evidence from the sources outlined above, the proposed functions of the SPU are as follows:

1. Developing a scarce-skills list;
2. Supporting the skills planning processes;
3. Monitoring the implementation progress of the different skills strategies;
4. Tracking trends in the labour market;
5. Understanding the supply of skills;
6. Providing indicative forecasts of future skills requirements;

7. Identifying the skills implications of the government's industrial and trade strategies;
8. Tracking recruitment vacancies;
9. Tracking regional dimensions to skills in demand;
10. Supporting ad hoc requests from government;
11. Developing a strategic research plan; and
12. Supporting career guidance.

What could be the most suitable location for the SPU?

The location of the SPU is an issue that is both complex and political in nature. There are probably a number of different institutions or departments that may wish to take responsibility for managing the SPU, particularly in relation to influencing how resources are invested in skills development and related activities.

A number of options for the location of the SPU are presented in this report. Each of these options has its advantages and disadvantages. Extensive consultation will need to take place with other government departments and stakeholders, including business, in order to reach consensus on the most suitable location. However, whatever decision is taken, two issues will need to be carefully considered. The first issue is whether the organisation responsible for the SPU has the political power to ensure that decisions taken by the unit are capable of being effectively implemented throughout government. This issue is at the heart of where the SPU should be located, and should inform any future decisions about location. The second issue that needs to be taken into consideration is the ability of the proposed

department where the SPU is located to support effective data collection, collation and analysis.

What structures will be required to establish the SPU?

The actual structures to enable the SPU to carry out the functions outlined above are relatively straightforward. The proposed new organisational structure for the SPU will need to take on board existing structures within which this structure will be located.

We propose that the SPU be made up of four subdirectorates or subunits, three of which will be responsible for core functions, with the other being a support unit.

The key unit operating under the SPU, and guiding the direction of the other units, will be the Skills Planning and Liaison Unit (SPLU). This will work closely with the other subunits in order to inform the development of skills strategies at the different levels. The Skills Planning Unit will work closely with the Sector Education and Training Authorities (SETAs) and other education and training providers so as to identify more clearly what skills are required in the workplace, as well as support employers and providers to enable them to work together in a more integrated manner for the purpose of delivering training.

Another key function of the SPLU will be the production of the next National Skills Development Strategy (NSDS) or the revision of the existing strategy. This new strategy will need to become more inclusive and cover skills development in the workplace and by formal providers. As part of this process, it will be necessary for the planning unit to forge links with other government departments, business and other stakeholders to ensure that their skills needs are taken into account in the planning process.

The first of the subunits would be responsible for research and analysis, and also produce key documents for the SPU. Among the key research activities will be the development of a research plan and managing its subsequent implementation. The

second subunit, the Labour Market Intelligence and Reporting Unit (LMIRU), would be responsible for the collection, collation and analysis of quantitative data. Other aspects would involve the Research and Analysis Unit (RAU), especially when labour market intelligence is being produced. This unit will also collect administrative data on job vacancies, as well as monitor the implementation of skills strategies and the impact of such strategies. The final subunit will support the administrative and finance functions.

What processes are needed to allow the SPU to perform its intended functions?

The next issue that must be dealt with before developing the implementation plan is to drill down deeper and define the specific processes that the units and subunits are expected to perform, all of which will enable the SPU to effectively perform the functions defined previously.

The most important processes to be supported by the SPLU will be how to facilitate the development of skills planning at the national, sectoral, occupational, institutional and enterprise levels. The type of support will depend on the level at which skills planning is taking place, and together, this process will constitute the skills planning mechanism.[1]

Given this shift in focus for the next skills development strategy, the SPLU will provide guidance on the strategy, including a new framework that facilitates employers and providers working together, as well as the roles played by SETAs and post-school education and training institutions in supporting this process.

Closely connected to developing a new framework for skills development, the SPLU will liaise with other government departments and stakeholders at the national level, so as to take on board their skills requirements. To carry out this task, the SPLU will establish a coordination committee, consisting of

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1   Note: A formal definition of the skills planning mechanism will need to be developed for the legislation pertaining to the SPU. This will need to be a multidimensional definition that captures structures and processes.

representatives from the DHET and the Department of Trade and Industry (dti), as well as from other economic departments, to help translate industrial and trade requirements into those for skills development. This coordination committee should meet on a quarterly basis to ensure that planning can take on board future industrial priorities in a strategic manner. These processes could be facilitated by the Human Resource Development Council (HRDC).

The Labour Market Intelligence and Reporting Unit (LMIRU) must act as a service provider to the Research and Analysis Unit (RAU). The key activities of the LMIRU must focus on the development of timely and valid data. The type of data collected and the indicators developed will depend on agreements reached between the DHET and other government departments and stakeholders, including business, on the precise functions of the SPU. Nevertheless, based on the functions proposed in this report, it is possible to outline a number of indicators. These are outlined in the report, including how they can be developed, who can support this process, the format, etc.

Most of the data is already available from existing sources, particularly StatsSA, the SETAs, and education and training institutions. However, in some instances, a number of changes are required in the way that the data is collected, and new data will also need to be collected in other areas. This is also covered in the report, including who will be responsible for data collection.

The RAU can be regarded as the link between the LMIRU and the SPLU. The LMIRU will collate and produce the data, the RAU will analyse the data in order to produce intelligence, and the SPLU will utilise this intelligence to ensure improved decision-making processes regarding how resources are allocated for skills development.

Another equally important task to be performed by the RAU will be the development and implementation of the research plan. The content of this research plan will cover all qualitative and quantitative research related to skills and the labour market, including survey data that needs to be collected by the SPU.

A final, and equally important, task to be performed by the RAU will be monitoring and evaluation. This will involve support for the development of targets for skills development and the corresponding monitoring of implementation processes, including impact assessments.

The development of an implementation plan

The final part of the report turns to the practicalities associated with moving forward with an implementation plan. Given the large number of decisions that need to be made, it is only possible to provide a draft timetable that specifies:

- The end goals or output that is expected to be achieved;
- The sequence of events that will lead to the end goal;
- The relative time period in which these activities or events will take place; and
- The role played by the different partners in supporting the implementation process.

1. INTRODUCTION

The key area for current reform in South Africa is how to develop a more credible mechanism for skills planning and to provide the type of intelligence and signals that can help government, stakeholders, education and training providers, and students to make more informed decisions about how resources are invested in skills development, education and training.

The report, *Information Systems for Skills Planning: Lessons and Options for Reform in South Africa* (2014) by Powell and Reddy, concluded with a set of recommendations for the production of labour market intelligence and for setting up the decision-making processes in order to establish skills priorities so as to inform education and training in South Africa. The report recommended reforms relating to the following areas:

- The importance of articulating the philosophy underpinning the government's and stakeholders' approach to skills development;
- The structures, institutions and processes for producing labour market intelligence; and
- The decision-making process necessary to identify key areas for skills development (i.e. a skills planning process).

In its recommendations for developing a more credible skills planning mechanism, the above-mentioned study focused on how to build capacity within existing structures, as well as identify how other stakeholders external to the Department of Higher Education and Training (DHET) could be more effectively involved in the planning process. Where existing structures are not sufficient, the study investigated whether new structures could be established or subcontracting arrangements introduced.

This second report, *Roadmap for the Implementation of a Skills Planning Unit*, outlines the functions, location, structures, partners, and implementation plans for realising the establishment of the unit. In our reports, we understand the term 'Labour Market Intelligence System' (LMIS) as comprising the **technical** processes associated with the collection, collation, analysis and dissemination of information, and skills planning focuses on how labour market intelligence is utilised to inform **decision-making processes** about how **resources** are allocated for skills development, and how different actors influence this process. Together, the LMIS and skills planning decision-making process constitute the credible skills planning mechanism.

According to the *Oxford Dictionary*, a roadmap is a plan or guide for future activities.

In the context of the Skills Planning Unit (SPU)[2], the roadmap must address the following issues:

- What are the functions of the SPU?
- What could be the most suitable location for the SPU?

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2   Note that the White Paper on post-secondary education indicated that a centralised skills planning unit would be established within the DHET, and that this would be supported by a system of labour market intelligence. However, the precise details of how they fit together, or of their relationship, were not confirmed in the White Paper. Therefore, based on previous work undertaken by the Labour Market Intelligence Partnership (LMIP), it has been recommended that the two areas be combined under an SPU – see Powell & Reddy (2014).

- What structures will be required to establish the SPU?
- How will the new structure be established?
- What are the various stages in these processes?
- What role is the DHET, along with other partners, expected to play?

Given the above issues, it is necessary to develop an approach or methodology to guide the development of a roadmap (see Figure 1). The first part of this process involved making reference to the past implementation experience of South Africa, as well as to what lessons can be learnt from either high- or low-income economies. This helped confirm the proposed functions of the SPU, as well as the proposed structures and units operating under the SPU. However, what is more difficult to confirm is the actual location of the SPU. Further consultation needs to take place in order to reach consensus concerning this issue.

When the broad functions, location and structures have been confirmed, it will be possible to define the specific indicators and planning functions for which the SPU will be responsible.

Adopting such an approach helps provide the basis for developing a roadmap, including an implementation plan. However, it should be pointed out that many of the issues, such as the proposed functions and structures of the SPU, will require further consultation between the DHET and stakeholders before implementation of the roadmap can begin.

Figure 1: An outline of the method used to develop the roadmap
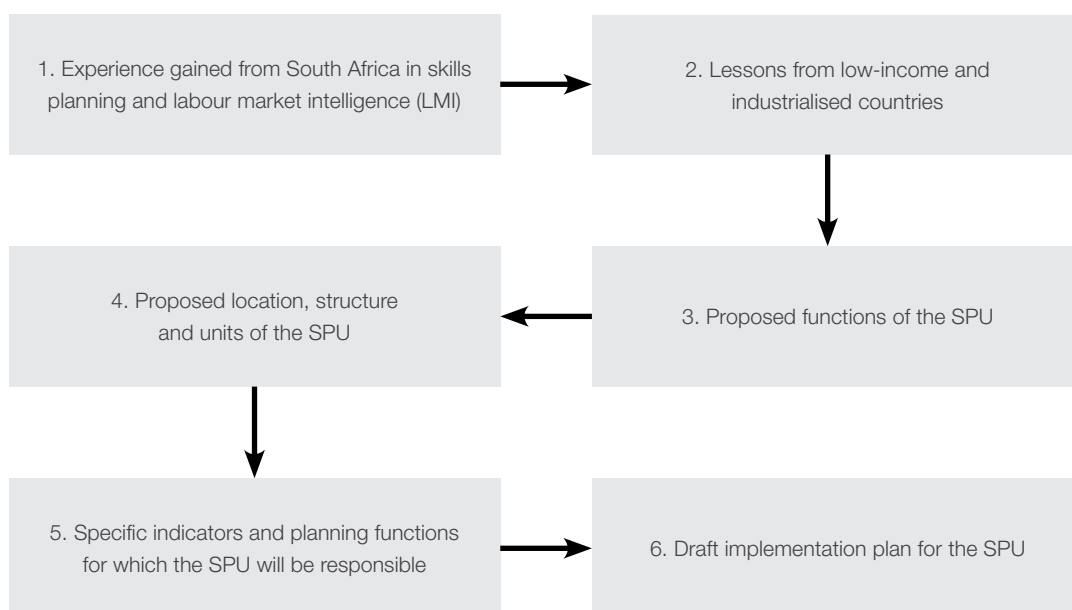
2. PAST EXPERIENCE OF A SKILLS PLANNING MECHANISM AND LABOUR MARKET INTELLIGENCE IN SOUTH AFRICA

Post-1994, the skills planning mechanism and labour market intelligence were initiated by the Department of Labour and were initially driven by the Labour Market Skills Development Programme. The original skills planning mechanism and the Labour Market Intelligence System (LMIS) were established in 2004/2005, and the functions were transferred to the Department of Higher Education and Training (DHET) in 2009. A brief look at the developments will help provide some lessons on ways forward for the proposed Skills Planning Unit (SPU).

The key structures that utilised labour market data were the National Skills Authority (NSA) and the Sector Education and Training Authorities (SETAs). The NSA was responsible for developing a national skills framework and a number of targets for priority areas. Currently, South Africa is in the process of implementing the third National Skills Development Strategy (NSDS). The SETAs are responsible for the identification of priority/pivotal skills areas and for the corresponding strategies to deal with such areas.

Under this former system, in order to support the NSA and the SETAs in carrying out their planning activities, the Department of Labour, in conjunction with partners, established a Skills Development Planning Unit (SDPU). One of the objectives of the SDPU was to support the SETA and NSA planning processes, as well as provide them with relevant intelligence in order to carry out their functions.[3]

Among the structures established under this system were the following:[4]

- **The Skills Development Information System (SDIS),** the core purpose of which was the collection, collation and analysis of a number of supply and demand indicators relating to the labour market. The system had a comprehensive collection of data relevant to the NSDS.
- **The Labour Market Intelligence System (LMIS)** was developed as a stand-alone system, the primary role of which was to store information from the SDIS relating to the key labour market indicators.
- **The Job Opportunity Index (JOI)** was an attempt to track the number of vacancies that were published in the national and provincial press. This has existed since April 2004, and the vacancies are recorded by occupational and industrial categories. The rationale behind this approach is that, over time, it is possible to determine whether demand for a particular occupation is falling or rising.

From the start, there were problems with the skills planning mechanism and how the information systems operated, particularly as regards the setting up of new systems. There were three main contributory factors. Perhaps the most significant of these was the fact that most of the staff working in the SDPU were relatively young and their training was geared more to routine administrative duties, as

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3   The SDPU was expected to perform these functions. However, there was a large gap between the expectations and the realities. These are spelt out in the Powell and Reddy report (2014).

4   Note that there was another information system called the SETA Quarterly Monitoring Report. However, this system was concerned more with the performance of SETAs and collected information relating to progress indicators.

opposed to analysing complex data sets and trying to support a new planning mechanism. Labour market analysis is a relatively scarce skill and it was unrealistic to expect young people to develop the skills in a very short space of time without extensive training.

A second factor contributing to the poor performance was that the SDIS was based on the systems that operated in other countries, without reference to the South African context or to what data was available. As a consequence, the systems that were developed were inadequate and failed to provide the end user (i.e. the SETAs) with the intelligence that they required. The systems were capable of providing broad, macrolevel national data, but they were not able to provide specific sector-level indicators that could inform planners how to make improved decisions regarding the way in which resources were to be invested in skills – particularly in relation to the difficulties in aligning national StatsSA data with the needs of SETAs, as well as the lack of detailed analysis of occupations beyond the second-digit level.

A final issue that needs to be noted is that the SDIS was a relatively new structure trying to act as a service provider to large bodies such as the NSA and SETAs, both of which had better capabilities and knowledge in the areas of skills development. In many instances, the NSA had to make decisions very quickly. Often, this meant that the SDIS was unable to provide the NSA with the anticipated services, and over time, the links between the SDIS and the NSA grew weaker. In part, this reflects the capacity of the SDIS, but also relates to the failure to forge strong links and build up a working relationship with the NSA.

While there was an understanding at the macrolevel of what the information requirements were, this did not translate into building an effective design for the SDIS and the underlying databases which would be easy to maintain and would be capable of sustainability over the medium term. Instead, reference models from other countries and international organisations (e.g. the International Labour Organization) were used to develop the databases. In some cases, the developed systems

were inadequate for providing the relevant data and reports for the consumers of those outputs.

Besides the organisational capacity constraints and political difficulties faced by the SDIS, there were also a number of specific and technical difficulties associated with each of the systems, including the following:

- **Skills Development Information System (SDIS):**[5] The information needed to be updated manually. Furthermore, there were no options to automatically import large data sets, which resulted in high data maintenance, with a corresponding impact on labour costs, as well as on the time taken to complete procedures. The system also had no formal links to other institutes or data providers. This resulted in the Department of Labour (DoL) having to manually request data from providers in order to periodically refresh the data sets. Data quality needed to be closely monitored, as there was no user authorisation built in, nor were there highly developed security features to enable logging of changes to the data. There were also inadequate reporting mechanisms built in for an effective management information system, for the system did not allow for flexible reporting requirements. This resulted in consumers having to export the data and manually manipulate the data sets to obtain the result that they required.
- **Seta Quarterly Monitoring Reporting System (SQMR):** This system was designed and programed in a programming language that was not commonly used in South Africa; hence it was difficult to find the human resources to maintain the system. The system architecture was also an issue, since it was designed as a two-tier client server system (the client being at the SETA and the central server version being at the DoL) in which client and server versions were not linked. This resulted in issues with the support function, since system support either

5   Note: The authors would like to express their thanks to Mr Shafraaz Abdola, senior information expert at The Centre for Employment Initiatives – International for providing this information about the information and communications technology (ICT) support systems.

had to be telephonic or required technical staff to be physically present at the SETA for troubleshooting purposes. Since the client and server versions were not linked, data interchange was a manual process in which files were emailed by the DoL to the SETA reporting managers for uploading onto the SQMR client. Also, every quarter when the DoL required the quarterly reports, SETAs had to submit files by email, which were then imported into the central server for consolidation. This was not an ideal situation, as different versions of the quarterly reports could not be easily tracked and data quality could be easily compromised.

- **Labour Market Intelligence System (LMIS):** Although designed on a web platform, the system contained static data sets, not dynamic data sets, which limited easy manipulation of the data. The system also had no electronic links to data providers. Consequently, consistency of information received was erratic, as it depended on human intervention to maintain the relevance of the data.
- **Job Opportunity Index (JOI):** The JOI was probably one of the most successful indicators developed by the DoL to track trends in the labour market. However, there were still limitations to this approach. The first relates to the source of data that was used to collect the information, namely national and regional newspapers. A look at the most recent analysis of the data shows that the greatest number of advertisements are in respect of higher education lecturers, suggesting that this is the top scarce skill. There is no doubt that this is a scarce skill, but other occupations in the private sector are probably scarcer. A second relative issue is that most jobs are now advertised on the web or via recruitment agencies, and the continued use of newspaper advertisements for jobs is probably an underrepresentation, particularly of professional jobs.

There were similar problems with the country's skills planning mechanism, and the most important issues included the following:

- The performance of the skills planning mechanism can be judged by the degree to which there was a failure to produce the right quality and quantity of skills for the labour market. Unfortunately, the rising number of scarce skills and the continued dependence on foreign workers raises questions about the degree to which the current mechanism and systems are working.
- The planning process for skills development involved two parallel systems, one of which focused on the workplace and the other which occurred at formal education and training providers.
- There has been a general failure in South Africa to align strategies for skills development with policies for industrial development and trade.
- The evidence also shows that there has been a general lack of effective links between skills planning that takes place at the national and sector levels, with skills planning taking place at the provincial and institutional levels.

A number of possible explanations can be put forward for the poor performance of the current skills planning mechanism in South Africa. Perhaps one of the most significant factors relates to the unrealistic assumptions underpinning the design of the skills planning mechanism. Closely related to the design issue was the lack of capacity within the DoL and SETAs to undertake tasks associated with planning. Another contributory factor is the structures responsible for producing data and intelligence on the labour market. A lack of valid data has made it difficult to develop accurate plans. A final, and equally important, issue relates to the philosophy underpinning the mechanism for skills planning and the difficulty experienced by the government in implementing a developmental (interventionist) state approach.

3. APPROACHES USED IN SKILLS PLANNING AND LABOUR MARKET INTELLIGENCE: LESSONS FROM OTHER COUNTRIES

A number of middle-income countries are in the process of developing, or have developed, labour market intelligence systems (LMISs) and a skills planning mechanism. The following is a common approach used by most countries:

- Techniques for measuring skill gaps or job opportunities at the national, sectoral, occupational and regional levels are identified.
- An LMIS is designed to collect and collate data that can track changes in the demand for occupations, in industry–sector trends, in wage levels, in skills levels, in outputs from the education and training system, etc.
- The data is organised within the LMIS according to a number of categories and is then collated. The categories or modules may vary from

country to country. A common approach appears to be to organise data according to supply and demand.

- Once the data has been populated according to the predefined modules, there is a need to develop a dissemination strategy to ensure that stakeholders, planners and employers, as well as learners, can make the best use of the LMIS outputs.
- Another assumed role for the LMIS is to monitor the implementation of such strategies and evaluate their subsequent impact.

Figure 2 is an idealised representation of the stages associated with developing an LMIS and how it can help improve decision-making processes.

Figure 2: Stages associated with the development of labour market intelligence for decision-making processes
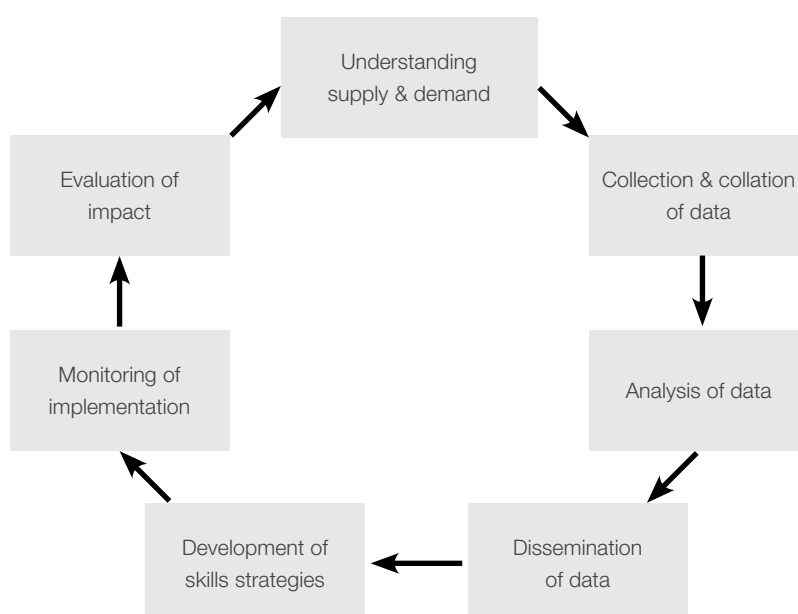
The assumptions underlying this approach and the links with decision-making processes for skills development appear logical and coherent. However, the gap between these assumptions and practice is large, and in most countries, the approach is unsustainable for the following reasons:

- Often, the conceptualisation of the approach to data collection is inaccurate and does not reflect the realities of data on the ground. For instance, an LMIS may be designed to capture regional labour market trends according to four-level occupational digits. However, it is not possible to populate the LMIS according to such criteria for the simple reason that such data does not exist. In the early days of the Skills Development Information System (SDIS) system in South Africa, there was little consideration of what data was available or how it could be collected.
- Difficulties often occur with the actual data-collection process, especially in relation to the production of the final data. It is not uncommon for labour force surveys to take two to three years before the final data is produced. As a consequence, much of the data is not timely and cannot be used to inform policy decisions.
- A related difficulty is how the data is analysed within the LMIS. The initial SDIS system assumed that household survey data could be collated and analysed by way of standard industrial or occupational classification and could be used by Sector Education and Training Authorities (SETAs) in their planning process. However, in most instances, the industrial coverage of the SETAs is different from that covered by the standard industrial classification. In practical terms, this means that the SETAs were unable to use the data analysed by the SDIS.
- The dissemination and utilisation of the outputs from the LMIS are one of the most significant failures of the LMIS system in low-income countries. At best, the majority of LMIS units produce coherent summaries of their country's labour market. These are useful documents for economists and researchers, but, in the majority of cases, only minimal attention is given to the policy implications of the findings. What is more critical is that there appear to be few examples of instances where employers use the outputs from the LMIS. At worst, the outputs from the LMIS consist of large statistical books that are of little use to anybody but doctoral students and international agencies doing comparative studies.
- Finally, factors that Figure 2 fails to take into account are the actual costs and capacity associated with the effective operation of an LMIS and an effective planning mechanism. As the lessons from the SDIS show, it takes a number of years to develop the capacity of staff working in such a unit. What is more significant is that LMIS units are resource-intensive, particularly in terms of the calibre of staff.

Given the issues identified above, the LMIS systems in many low- or middle-income countries are not sustainable over the medium term and fail to support informed decision-making processes for skills development. Part of the problem relates to the fact that they are unable to produce the basic type of information that can be used by stakeholders, and this undermines their longer-term legitimacy, as well as possible government funding. This creates a vicious circle in which the LMIS is unable to perform because it does not get the government support or budget, and subsequently, because of poor performance, its budget is cut even further.

Given the lack of sustainability of the LMIS in most low-income countries, it is important to look at what lessons can be learnt from how industrialised countries approach labour market intelligence and plan for skills development.

Based on a recent study conducted by Powell and Reddy (2014), the main approaches to Labour Market Intelligence (LMI) and skills planning are outlined in Table 1. In practical terms, there are three main approaches to how different countries approach their skills planning and labour market intelligence.

Table 1: An outline of the main approaches to utilising labour market information

Country and approach	Focus of the LMIS	Function of the LMIS and decision-making processes
UK/USA/Canada/New Zealand (market-based approach)	Extensive data collection takes place with regard to the demand for, and supply of, skills	Emphasis is given to understanding the labour market and to identifying blockages
Sweden, the Netherlands, Finland and Denmark (employer- or social partner-based approach)	More emphasis is given to understanding vacancies in the labour market and to job seekers	Government and social partners use information to determine how resources will be allocated to deal with skill shortages as well as priorities
Singapore, Taiwan and South Korea (developmental/intervention state model)	Includes the above data, plus trends concerning the economy, including trade and investment strategies	Government, in conjunction with partners, uses the LMI to ensure that alignment occurs between industrial strategy and strategies for skills development

Broadly, the first approach can be called 'the market-based approach', with emphasis being given to understanding trends in the labour market and to dissemination through web pages and publications.[6] The underpinning assumption is that this information will be used by providers, learners and employers to make more informed decisions about the labour market.

The second approach is called the 'employment approach', and the LMIS is primarily used to track advertised vacancies by employers for workers and job seekers. Within this approach, the data is used at the national or provincial level to help match supply and demand, with social partners playing a key role in deciding how resources can be invested in supply in order to help deal with the skills gap or scarce skills.

The final approach is the 'interventionist approach' in which data is collected about the labour market and future industrial policy. In the case of this third approach, the state uses this information to ensure that the skills strategy is in line with the country's industrial policy. This is a proactive approach to using labour market intelligence.

All of the above approaches have implications for moving forward, particularly with regard to the overall functions of the Skills Planning Unit (SPU).

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6   For instance, labour market reports produced by the UK's office of national statistics can be found at: http://www.ons.gov.uk/ons/publications/all-releases.html?definition=tcm:77-21589.

4. PROPOSED FUNCTIONS OF A SKILLS PLANNING UNIT IN SOUTH AFRICA

The proposed functions of the Skills Planning Unit (SPU) should be guided by the mistakes of the past, and by lessons from other countries identified above, as well as by the articulated skills planning approach for South Africa. Discussions at a workshop held in March 2014[7] with the Department of Higher Education and Training (DHET) and stakeholders pointed to the need for an SPU that is more interventionist in the decision-making processes relating to skills development, as opposed to the market-based approach where there are no specific uses for the labour market information (aside from understanding the supply of, and demand for, labour).

Unless the functions of the SPU are clearly defined, there is a danger that the production of labour market intelligence will become divorced from decision-making processes concerning skills development (as occurred under the former system in South Africa).

Therefore, the function of the SPU would need to be supported by legislation and appropriate guidelines in order to ensure adherence. The following is intended as a guide for a discussion on the functions to be performed by the SPU based on the evidence discussed above:

1. **Developing a scarce-skills/occupations-in-high-demand list.** One of the key functions of the SPU will be to support the development of a scarce-skills list. This is a contested issue in policy circles and the press, particularly as regards the nature and extent of such shortages and how they can be alleviated.

2. **Supporting the skills planning processes** at the following levels: national, sectoral, occupational, provincial, employer and provider. This is a complex task and attention must be given to the types of indicators that will inform the planning process at these different levels, and how the data can be collected, collated, analysed and utilised in the planning process. Related support will need to be provided for liaising with other government departments and other stakeholders over the nature of their skills requirements.

3. Another important function will be the **monitoring of implementation progress of the different skills strategies** mentioned above, as well as their final impact. This will require the development of a number of templates to guide the collection of data for monitoring the indicators.

4. The SPU must **track trends in the labour market**, particularly in respect of situations where the demand for specific occupations is rising and falling. Other indicators that will need to be tracked include whether wages are rising for specific occupations, turnover, and how these variables differ by sector and geographical region. Most of the existing focus on the labour market has involved household surveys and analysing trends from the perspective of workers according to their occupation. This must be supplemented with indicators obtained from enterprise surveys, ensuring that the demand perspectives of employers are also taken into account.

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7   See notes on Policy Roundtable 2.

5. The SPU must play a key role in the management of surveys.

6. An equally important function of the SPU will be to **understand the supply of skills** at the different levels, covering formal institutions, private training providers and the workplace. Most of the indicators at the post-school level will come from the DHET databases (the Higher Education Management Information System [HEMIS] and the Higher Education and Training Management Information System [HETMIS]). Additional data will be required on skill formation that is taking place at the workplace through workplace skills plans. These will require changes if they are to capture more valid data from employers.

7. **Provide indicative forecasts of future skill requirements.** Economists recognise that it is not possible to predict future demand for skills with any degree of accuracy, particularly in the light of market volatility and the large number of influences affecting the process of skills formation. Nevertheless, it is possible to predict with some degree of accuracy where demand for occupations is rising, falling, and taking a long time to develop. This could provide valuable evidence for planning purposes.

8. **Identify the skills implications of the government's industrial and trade strategies,** as well as other government growth priorities and strategies that will impact on the demand for skills. The SPU will have to look at possible pro formas for capturing this intelligence, especially concerning what indicators and formats are required, and identify a formalised mechanism to support engagement. This may require legislation. This issue is outlined in more depth in later sections.

9. **Tracking of recruitment vacancies.** In many countries, the key role of a Labour Market Intelligence System (LMIS) is to track recruitment vacancies and to use this as one of the key signals relating to the demand for skills. Currently, the Department of Labour (DoL) is performing this function using national and regional newspapers. This is a good start, but more needs to be done to obtain an accurate picture of the number of vacancies being advertised. Improved data on vacancies should be obtained by forging links with private recruitment agencies and by obtaining the data on a regular basis according to specified occupations.

10. **Track regional/provincial dimensions to skills in demand**. A key signal that is often neglected is the regional dimension to skills in demand. A pilot survey must be developed to track demand for skills at the regional/provincial level. This must involve provincial-level government, skills providers and employers. Once a pilot survey has been conducted, this must be extended to other regions.

11. **Support ad hoc requests from government.** One of the often neglected roles of the SPU is responding to individual requests from different sources, including internal ones from government, and the external public. Sometimes, these requests are very important and will involve making a specific calculation in response to requests from, say, Parliament.

12. **Develop a strategic research plan** to help collect labour market intelligence on key areas for the DHET. We need a strategic research plan to ensure that indicators defined above are collected and that other qualitative or quantitative studies are conducted over the next five years. The SPU will not be able to undertake all of this research, but will have to advertise tenders and outsource to other providers and consultancy firms.

13. **Support career guidance** and provide learners with information about which qualifications are likely to result in productive employment, including details about the links between qualification attainment, work experience, and entry into specific occupations that are in high demand.

Many of the above issues will be cross-cutting ones and it might be difficult to disentangle one function from another. Similarly, there may be other functions that are not outlined above and which are implicit, particularly those relating to the production of publications and the dissemination of knowledge. This list provides the basis for further consultations and for determining the structure of the SPU and the proposed indicators that will be monitored, including what systems and procedures will be required to carry out these tasks.

5. PROPOSED LOCATION OF THE SKILLS PLANNING UNIT

One of the more complex decisions regarding the Skills Planning Unit (SPU) is where it should be located. There are probably a number of different institutions or departments that would wish to take responsibility for managing the SPU, particularly in relation to influencing how resources are invested in skills development and related activities.

Before a decision can be made regarding where the SPU should be located, it is necessary to consider two important issues. The first issue is whether the organisation responsible for the SPU has the political power to ensure that decisions taken by the unit are capable of being effectively implemented throughout government. One of the common criticisms of government departments in South Africa is that they are excellent at developing policies, but are not good at ensuring effective implementation. The ability to support effective implementation becomes even more complex when different government departments are involved (implementing joined-up government). Therefore, it will be important for the SPU to be located in a department that is politically strong, especially in terms of ensuring that strategies can be implemented across a number of different government departments. Unless this can occur, the SPU will be unable to influence decision-making processes and the long-term legitimacy of the structure could be undermined.

The second issue that needs to be taken into consideration is the ability of the proposed department where the SPU is to be located to support effective data collection, collation and analysis of skills planning information. This may be a secondary factor influencing the location of the SPU, but it is equally important. The department must have the capacity to enable the SPU to collect data and undertake complex analysis. Lack of capacity is a common problem experienced by many government departments in South Africa.

The risks identified could be reduced through the subcontracting of data collection and analysis processes. Nevertheless, there is still the need to manage these subcontracting processes, and there is a preference within government policy to build the capacity of public-sector institutions (instead of subcontracting or relying on the use of consultants).

So what are the options for the location of the SPU? Table 2 provides an overview of the possible options for the location of the SPU. Each of these has benefits and limitations. Extensive consultations will need to take place concerning the most suitable location.

However, when making a decision about the location of the SPU, it is also important to think about what role other structures outlined in Table 2 will play in supporting the SPU to carry out its intended functions effectively.

Among the most important roles associated with the SPU is the ability to understand the supply and demand of skills, and to support improved decision-making processes regarding how resources are allocated for skills development. In this respect, whatever the location of the SPU, the Department of Higher Education and Training (DHET) can be expected to play a key role in understanding the supply of skills. The Department of Trade and Industry (dti), along with the Economic Development

Table 2: An overview of the possible locations for the SPU

Location	Benefits	Limitations
Department of Higher Education and Training (DHET)	• Has experience of working in the skills sector • Is capable of influencing the supply of skills	• Does not have experience of skills demand issues • Has limited organisational capacity to support data collection and analysis • Has limited capacity to influence strategies in other government departments
Department of Labour (DoL)	• Had a labour market intelligence unit • Has past experience of supporting skills development	• Has a poor track record of implementation • It is difficult to justify the location of the SPU within the DoL given the recent transfer to the DHET
Department of Trade and Industry (dti)	• Has an excellent understanding of demand • Is capable of ensuring that a skills strategy is integrated with the strategy for economic development	• The area of skills development is not the core business of the dti • The dti may experience difficulties in developing supply-side policies, particularly when they involve other government departments
Economic Development Department	• Has a good understanding of demand issues • Is experienced in developing growth strategies	• The core business is economic development and not skills development • Has limited experience in supporting the development of supply-side strategies
Department of Planning, Monitoring and Evaluation (DPME)	• Has the political power to ensure that other government departments cooperate when developing strategies, particularly those involved in supply and those involved in demand	• The DPME (and Planning Commission) has not been extensively involved in skills development at the operational level • It would take a long time to establish new structures and appropriate links with other government departments and stakeholders
Human Resource Development Council (HRDC)	• Provides an excellent forum for bringing together relevant government departments	• Has limited powers to enforce decision-making processes or skills development or to influence skills development outcomes

Department, will need to provide signals relating to the changing nature of demand for skills (both now and in the future). Bringing together actors involved in supply and demand, and ensuring that one side is speaking to the other, is a more difficult task.

However, the Human Resource Development Council (HRDC) could facilitate this process by bringing together supply and demand actors, thereby supporting political decisions as to how resources are invested in skills development.

# 6. PROPOSED ORGANISATIONAL STRUCTURE OF THE SKILLS PLANNING UNIT

The proposed organisational structure of the Skills Planning Unit (SPU) is shown in Figure 3. The purpose of the SPU is to address the functions outlined in the preceding section. The structures need to be streamlined and must be capable of meeting the many demands that will be placed on this unit. Figure 3 depicts a proposed organisational structure for the SPU and attempts to avoid too much bureaucracy, yet ensure that the appropriate structures are in place, together with competent staff, to carry out the intended functions outlined in the preceding sections.

We have focused on the structure of the SPU and, depending on where it is located, the reporting line will be determined. The SPU will be made up of four

subdirectorates or subunits, three of which will be responsible for core functions, with the other being a support unit.

The key unit operating under the SPU and guiding the direction of the other units will be the Skills Planning and Liaison Unit (SPLU). This will work closely with the other subunits to inform the development of skills strategies at the different levels. The SPLU will work closely with the Sector Education and Training Authorities (SETAs) in order to identify more clearly what skills are required in the workplace, as well as support employers and providers so as to enable them to work together in a more integrated manner for the purpose of delivering training.

Figure 3: Proposed organisational structure of the SPU
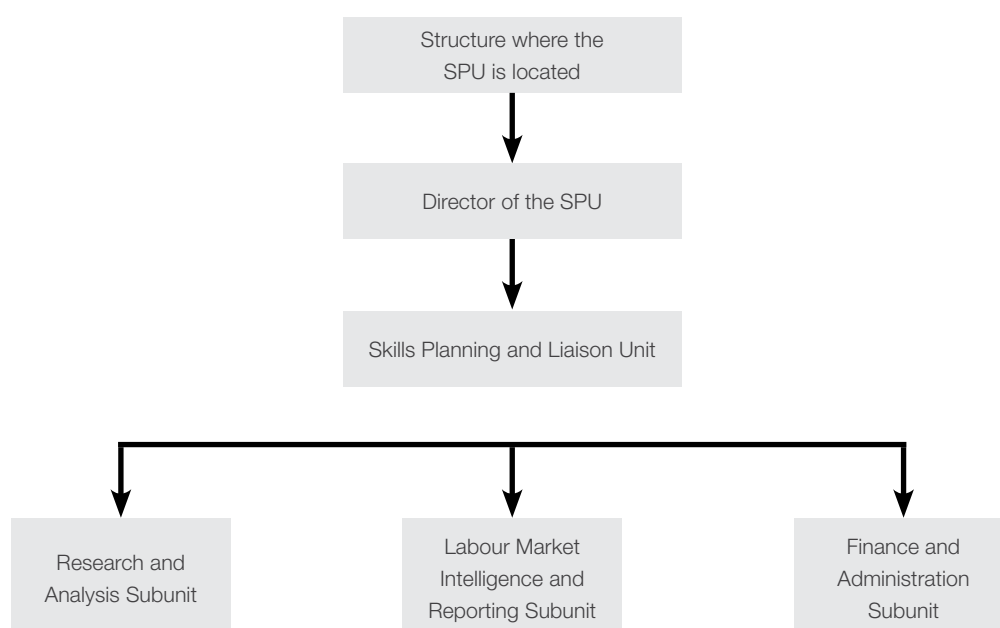
Another key function of the SPLU will be the production of the next National Skills Development Strategy (NSDS), or the revision of the existing strategy. This new strategy will need to become more inclusive and cover skills development in the workplace as well as formal providers. As part of this process, it will be necessary for the SPLU to forge links with other government departments, business, and other stakeholders to ensure that their skills needs are considered in the planning process. How the planning unit will approach this issue is discussed in the next section.

The first of the subunits, the Research and Analysis Unit (RAU), will be responsible for research and analysis and will produce key documents for the SPU. Among the key research activities will be the development of a research plan and the management of its subsequent implementation. Most of the management of the former activities will involve subcontractors. However, specific research activities will need to take place, particularly in respect of the SPU's key functions, such as the identification of scarce skills in South Africa.

The second subunit, the Labour Market Intelligence and Reporting Unit (LMIRU), will be responsible for the collection, collation and analysis of quantitative data. Some of this work will be the responsibility of the LMIRU, while other aspects will involve the RAU, especially when labour market intelligence is being produced. However, the core function of the LMIRU will be the collection and collation of data in order to track trends in the labour market, including data on supply and demand. This unit will also collect administrative data on job vacancies, as well as monitor the implementation of skills strategies and their impact.

The proposed new organisational structure for the SPU will need to consider existing structures within the organisation in which it is located. There are a number of structures that already support the SETAs and it will be important that any reforms build on existing structures and do not create new ones. Table 3 provides an overview of the SPU, of the different subunits, of their broad functions, and of possible staffing levels.

Table 3: Proposed functions of the different units operating under the SPU

Unit/Subunit	Key functions to be performed by unit	Proposed staffing
Skills Planning and Liaison Unit (SPLU)	• Supporting national, sector and institutional planning • Working closely with SETAs to help identify skill needs and forge improved links between providers and employers • Liaising with other government departments and stakeholders regarding skills requirements, particularly in respect of joined-up government thinking	• 1 senior policy expert • 1 senior manager/coordinator • 2 postgraduate researchers
Research and Analysis Unit (RAU)	• Producing scarce-skills list • Undertaking analysis of quantitative data • Developing research plan for labour market and skills development • Managing subcontractors • Responding to ad hoc requests	• 1 senior social scientist with a PhD and extensive research-management experience • 1 senior economist with a master's qualification and extensive research-management experience • 3 postgraduate researchers
Labour Market Intelligence and Reporting Unit (LMIRU)	• Collecting and collating quantitative data and statistics • Managing the implementation of surveys • Developing templates for data collection • Analysing administrative data • Quality-assuring data • Responsibility for developing a monitoring and reporting framework • Implementing the framework • Supporting information and communications technology (ICT) components, including databases and web-enabled systems	• 2 senior statisticians with project management experience • 2 postgraduate researchers with a quantitative background • 1 computer technician
Finance and Administration Unit (FAU)	• Procurement and tendering • Budgets and finance • Administration • ICT infrastructure	• 1 project manager • 1 finance administrator • 1 ICT specialist

7. SPECIFIC FUNCTIONS OF THE SKILLS PLANNING UNIT

The preceding sections outlined the broad functions of the Skills Planning Unit (SPU) and the proposed structures that will be necessary to produce timely and valid labour market intelligence, as well as provide support for an improved skills planning mechanism. The next issue is to drill down deeper and define the specific functions that the units and subunits are expected to perform.

Specific functions of the Skills Planning and Liaison Unit

The responsibility of the Skills Planning and Liaison Unit (SPLU) is to support the planning mechanism, and to liaise with other government institutions and external stakeholders concerning skills and labour market issues. This unit will guide the processes of data collection and analysis for the other subunits.

An overview of the tasks to be performed by the SPLU is given in Table 3. The most important tasks involve providing support for the development of skills planning at the national, sector, institutional and enterprise level. The type of support will depend on the level at which skills planning is taking place, and together this process will constitute the skills planning mechanism.[8] The SPLU will be responsible for putting together the next national skills development strategy (NSDS). This strategy may be different from previous NSDS, in that it must cover skills development in the workplace, as well as skills development and training that occur at formal education and training providers. This part of

the skills planning mechanism will play a key role in integrating Technical Vocational Education and Training (TVET), higher education – both private and public – and the provision that is currently being supported by the Sector Education and Training Authorities (SETAs), as opposed to having separate workplace and institutional streams. Given this shift in focus for the next skills development strategy, the SPLU will provide guidance on the strategy, including a new framework that facilitates employers and providers working together, as well as the roles played by SETAs in support of this process. Closely connected to developing a new framework for skills development, the SPLU will liaise with other government departments and stakeholders at the national level in order to address their skills requirements. This reflects the move towards a developmental/intervention state model and one in which government departments work together with stakeholders, ensuring alignment between the skills development strategy and the strategies for industrial development. In order to carry out this task, the SPLU will establish a coordination committee, consisting of representatives from the Department of Higher Education and Training (DHET) and the Department of Trade and Industry (dti) to help translate industrial and trade requirements into those for skills development. This coordination committee should meet on a quarterly basis to ensure that skills planning incorporates future industrial priorities in a strategic manner. As outlined earlier, this could be facilitated by the Human Resource Development Council (HRDC).

The SPLU will also have to translate the skills requirements of growth strategies and five-year plans of other government departments. This will

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8   A formal definition of the skills planning mechanism will need to be developed for the legislation surrounding the SPU. This will need to be a multidimensional definition that captures structures and processes.

require the development of a template that government departments will complete and send back to the Labour Market Intelligence and Reporting Unit (LMIRU). The analysis of the data from the templates will then be sent back to the SPLU for incorporation into its strategy.

At the sector skills strategy level, the role of the SPLU will be to assist SETAs to identify more accurately their skills requirements and to facilitate the SETAs in developing an improved relationship between TVET institutions and providers. For the first task, the SPLU will have to help develop improved templates to collect data at the employer level through revised Workplace Skills Plans (WSPs).

In addition, the SPLU will have to implement a firm-level skills survey to help confirm skills requirements and to validate the SETAs' WSPs. This enterprise survey is currently being piloted through a Labour Market Intelligence Partnership (LMIP) project being undertaken by the University of Cape Town (UCT),[9] and will provide the basis for ensuring that sector skills requirements are not put above national ones.

At the institutional level, the SPLU will have to ensure that providers are provided with intelligence in order to support enrolment planning. Therefore, the SPLU will have to ensure that providers obtain intelligence about those skills areas that need to be expanded over the short, medium and longer term. Intelligence will also need to be provided about those scarce and critical skills areas that will take a long time to develop and regarding those where falling demand is being experienced.

Specific functions of the Labour Market Intelligence and Reporting Unit

The Labour Market Intelligence and Reporting Unit (LMIRU) must act as a service provider to the Research and Analysis Unit (RAU). The key activities of the LMIRU must focus on the development of timely and valid data. The type of data collected and the indicators developed will depend on agreements

reached between the DHET, other government departments, and stakeholders, including business, regarding the precise functions of the SPU. Nevertheless, based on the functions proposed in this report, it is possible to outline a number of indicators.

Table 4 provides an overview of these indicators and related issues. The first column outlines the specific functions to be performed by the LMIRU. The second column defines the indicators that need to be collected, and the third column identifies what the indicators will measure. In the fourth column, the sources of these data are outlined. In some instances, there will be a need to collect new data (fourth column). The fifth column provides the format. The sixth column specifies what needs to be done, and the seventh column outlines the time frames. The final column identifies the responsibilities in respect of these processes.

This table provides a broad overview of the indicators and does not go into specific details. At this stage, emphasis has been placed on the purpose for collecting this data and on the main sources of the data. There is an implicit assumption that, in most instances, the data will be broken down by gender, occupation, sector, and geographical location where possible. However, it must be remembered that the larger the number of disaggregations, the less accurate the indicator will be.

Another general issue that needs to be highlighted is the fact that a decision will need to be made about the data format and how the data files will be recorded. This will need to be determined by the DHET, and will depend on the existing formats used to store and collate data.

Most of the data is already available from existing sources, particularly StatsSA and the SETAs. However, in some instances, a number of changes are required in the way the data is collected and new data will need to be collected in other areas.

For existing data sets, there may be a need to specify, for StatsSA, the formats required for the data, and in some instances, specific analysis may

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9   SETA Labour Market Survey.

Table 4: Proposed indicators for the Labour Market Intelligence and Reporting Unit (LMIRU)

Function to be performed by the LMIRU	Indicator required	What are we measuring?	Current source	Format	What needs to be done?	Time frames	Responsibility
Developing a scarce-skills list[10]	A number of indicators will need to be constructed to measure scarce skills. This is based on occupational trends, wage rises, and measures of scarce skills, as well as supply trends	Measuring those priority occupations where demand outstrips supply for the immediate and longer term	Quarterly Labour Force Survey (QLFS), SETA top-10 occupations, regional survey (see below), JOI (see below), and WSP (see analysis section)	Each of the former data sets will be required in a specific format that can be analysed by the RAU	Enterprise survey/SETA Labour Market Survey (UCT) Regional survey (see below)	Household surveys on a quarterly basis, SETA pivotal list annually, regional survey annually, JOI monthly and WSP annually	The coordination responsibility will rest with the LMIRU, with support from the other subunits. However, SETAs, employers and others will have defined responsibilities
Monitoring of implementation progress in respect of the different skills strategies	A reporting template must be developed to outline what data needs to be collected, and how	Progress towards predefined indicators for the NSDS III will need to be tracked. This might be supported by reference to other labour market data	Templates to be developed	The format should be in Excel to facilitate analysis	Templates to be developed	Progress towards predefined objectives will be measured on an annual basis	The responsibility for producing the data will depend on what is monitored. The LMIRU, with the support of the RAU, will coordinate this process
Track trends in the labour market	Data from the household will track unemployment/employment levels, occupational changes, and wage changes. Data from the enterprise survey will track recruitment vacancies, the time taken to fill vacancies, etc.	Measure how the demand for skills is changing. This will be done from the perspective of the individual worker and enterprises	Household/QLFS Quarterly Employment Survey Enterprise survey – SETA Labour Market Survey	The format of the data sheets will need to be defined and StatsSA will have to include new items	MoA with StatsSA for data. The firm-survey needs to be finalised	The household survey on a quarterly basis. The enterprise survey on an annual basis	The responsibility for the household survey rests with StatsSA. An MoA will have to be drawn up about the type of data runs required. UCT is responsible for the pilot enterprise survey. The LMIRU must coordinate these activities
Understand the supply of skills	Indicators on formal provision covering enrolment and graduation by subjects and levels	It will be important to measure skill formation over the short, medium and longer term	The key sources for formal provision will be HEMIS and HETMIS. Indicators on the workplace from the WSPs		The content of the WSPs will need to change considerably so that more accurate data is collected. Data also needs to be collected on private providers and TVET colleges	This data should be available annually	Responsibility for coordination of this process rests with the LMIRU. MoUs must be signed with HEMIS, HETMIS and SETAs concerning the production of this supply data
Provide indicative forecasts of future skills requirements	Indicators on manufacturing output, gross domestic product (GDP), and public finance (i.e. investment by government)	Attempts must be made to measure signals on future demand	StatsSA has data on GDP, manufacturing trends, and government investment		A mechanism will need to be set up to capture sudden changes in investment	This data should be available annually	MoAs will have to be signed with StatsSA. Formal linkages will need to be established with the dti and the National Treasury
Tracking of recruitment vacancies	Indicators on changing job advertisements, particularly by occupation	Another key signal in respect of demand is recruitment vacancies and how these change over time	Currently, the DoL has a JOI		Need to extend the data and to forge linkages with a private recruitment agency	This data should be available monthly	The DHET will need to sign an agreement with a private recruitment agency to get its online data
Regional skills pilots	Indications on priority occupations at the regional level	This will measure the regional dimension of skills demand	None		Develop a template and methodology	Annually	The DHET will have to sign an MoA with regional governments

10 A report has been prepared on the construction of a scarce-skills list. Marcus Powell, Vijay Reddy and Andrew Paterson (2014) Approaches and Methods for Understanding What Occupations Are in High Demand and Recommendations for Moving Forward in South Africa. This represents a survey and more details can be found in the report and in the annex.

need to be performed. However, in most instances, the format will depend on the type of analysis that will be conducted.

There are a number of instances where changes need to be made regarding how the data is collected. For instance, under the current WSPs, large employers have to complete over 20 tables. This process is very time-consuming, and according to the SETAs, they still obtain inaccurate information. Therefore, the format of the questions may need to be changed in two particular areas. Firstly, the WSPs need to collect data on employers' scarce skills or recruitment difficulties. Secondly, the WSPs must be able to track employers' decisions about future training or skills development.

Another area where significant changes are required is in respect of the Job Opportunity Index (JOI). Currently, the DoL is compiling the JOI using newspapers. However, this needs to be extended and it will be important that data on job advertisements continues to be recorded, but using a modified and more effective approach. One way to record the information is to obtain the data from a private recruitment company using a Memorandum of Agreement (MoA). In most countries, private enterprises are the key to providing such data. If possible, such an arrangement could be made with two or three recruitment agencies, thus helping to ensure that the data has greater validity.

There are two data-collection areas that are relatively new to South Africa, covering skills forecasting and provincial skills pilots. The area of skills forecasting will focus on possible future growth areas. This will need to be undertaken by external partners, possibly a university that has experience of econometric modelling. However, it is also important to recognise that, at best, we can predict those occupations in respect of which demand is likely to fall, those in respect of which demand is likely to rise, and those that will take a long time to develop.

The provincial skills pilots are a new area. A number of stakeholders at an LMIP policy roundtable in

March 2014 argued that there was a need to obtain signals on regional skills needs. This approach will require the development of a template to guide provincial governments on how to work with partners and providers in order to identify scarce skills in their localities. Once it has been piloted and assessed, it could be rolled out on a nation-wide scale.

Specific functions to be carried out by the Research and Analysis Unit

The Research and Analysis Unit (RAU) can be regarded as the link between the LMIRU and the Skills Planning and Liaison Unit (SPLU). Put more simply, the LMIRU produces the data, the RAU analyses the data so as to produce intelligence, and the SPLU utilises this intelligence to ensure improved decision-making processes concerning how resources are allocated for skills development.

The data analysis to be carried out by the RAU will also be derived through the overall functions of the SPU. There are three key tasks to be performed by the RAU, and these were outlined in Table 3. One of these will be to produce the scarce-skills list using the data that has been collected and collated by the LMIRU. As outlined earlier, this will involve triangulation of different data sources and the construction of a number of composite indices to help capture those occupations that are in high demand. This will be one of the key publications of the SPU, and it will be important to produce the list in a format that can be understood by different audiences. For instance, the document produced for learners leaving secondary school based on the scarce-skills list will be different from the one produced for the SETAs. The factual information will be the same, but the way in which it is packaged will be different.

Another equally important task to be performed by the RAU will be the development and implementation of the research plan. The content of this research plan will cover all qualitative and quantitative research related to skills and the labour market, including survey data that needs to be collected by the SPU. In practical terms, this plan will probably cover a whole planning cycle, lasting

for about five years, but will be updated on an annual basis. This will cover the data-collection and collation activities to be performed by the LMIRU. Other surveys and research studies that support the planning process will also need to be identified in the research plan.

The RAU will not be directly responsible for carrying out the different research activities outlined in this plan, because it will lack the capacity. Therefore, most of the studies and surveys will be contracted out to external bodies, including universities, research institutes and research companies. It might be preferable for a number of service providers to be identified, and each time a piece of research needs to be undertaken, it could be put out for tender. Adopting such an approach will help ensure that these bodies have the requisite skills, and the RAU will be responsible for managing implementation and quality assurance.

The RAU will also be responsible for analysing the outputs from the LMIRU in order to produce a research publication. Besides the scarce-skills list, the two other main publications will focus on the state of skills and post-school education and training in South Africa, and will report on the key indicators of skills planning. This would build on earlier publications on the state of skills, but will outline why certain scarce skills are being experienced and how this situation is likely to change over time, based on indicative signals and studies on the labour market. Other research publications will also need to be produced based on the expected research outputs identified in the five-year research plan.

A final, and equally important task to be performed by the RAU is monitoring and evaluation. This will involve support for the development of targets for skills development, and the corresponding monitoring of implementation processes, including impact assessments.

Specific functions of the Finance and Administration Unit

The final subunit, the Finance and Administration Unit (FAU), will provide support for the other units and will be responsible for, among other matters, budgeting and staffing.

One of the first functions to be carried out by the FAU will be the development of job descriptions for the proposed staff working at the SPU.

Most of the FAU's time will be spent on supporting subcontracting and tendering. As outlined earlier, a number of research studies and surveys will need to be undertaken. Most of these will be subcontracted out and the FAU will have to work with the SPLU to manage the implementation, ensuring that government procurement and logistics guidelines are followed.

A final responsibility of the FAU will be the development and implementation of an information and communications technology (ICT) plan for the SPU. This will build on existing systems, but will provide a platform for the collection, collation, analysis and dissemination of statistical data. This will be a complex task that will probably have to be subcontracted out to a specialist ICT firm.

8. THE DEVELOPMENT OF A DRAFT IMPLEMENTATION PLAN

A final part of the roadmap, and perhaps the most important, is the development of an implementation plan. At this stage, it is only possible to provide a draft timetable that specifies:

- The end goals or output expected to be achieved;
- The sequence of events that will lead to the end goal;

- The relative time period during which these activities or events will take place; and
- The role played by the different partners in supporting the implementation process.

In taking on board the above issues, a draft implementation plan has been developed for further consultation. This is shown in Table 5.

Table 5: Draft implementation plan for establishing the SPU[11]

Activity	Responsibility	Time period
Establish the structures for the SPU, including: • The Skills Planning and Liaison Unit; • The Research and Analysis Unit; • The Labour Market Intelligence and Reporting Unit; and • The Finance and Administration Unit. Much of the initial activity will involve the establishment of institutional structures and offices for the SPU and building on existing structures within the DHET. Other important activities will consist of confirming the management and governance structures, as well as the reporting lines.	DHET	Month 1 to Month 4
Recruitment of officials to work at the SPU, including: • Confirmation of the roles and functions of officials; • Development of job descriptions; • Recruitment and selection of officials; and • Induction of recently recruited officials.	DHET	Month 1 to Month 2
The development of a strategic and operational plan for the SPU: • The operational plan of the SPU will be made up of the individual operational plans of the various units and subunits; • Each of the subunits will be required to develop its own plans, following a similar template (to facilitate the putting together); and • Synergies will need to occur with the collation of the individual plans.	DHET	Month 4 to Month 7
The development and implementation of the operational plan for the Skills Planning and Liaison Unit: • Start the process of planning for the next National Skills Development Strategy; • Plan for the development of a revised and improved sector skills plan; • Identify government national priorities for skills development; • Establish a coordination committee for skills development, involving the dti and other government departments; and • Implement a national skills survey.	DHET, dti, stakeholders and other partners	Month 5 to Month 6
The development and implementation of an operational plan for the Labour Market Intelligence and Reporting Unit: • Confirmation of indicators that need to be collected; and • Development of a data-collection plan, drawing on the indicator plan outlined earlier in the text, especially regarding (a) the development of a scarce-skills list, (b) monitoring the implementation progress of different skills strategies, (c) tracking trends in the labour market, (d) understanding the supply of skills, (e) supporting intelligence for career guidance, (f) providing indicative forecasts for future skills requirements, (g) tracking of recruitment vacancies, and (h) identification of provincial skills requirements.	As above	As above
The development and implementation of an operational plan for the Research and Analysis Unit: • The production of a scarce-skills list; • The development of a 5-year research plan for the SPU, covering the surveys and sources of data mentioned in this report; • The implementation of this research plan, including the management of subcontracts; and • The development of a dissemination strategy for the SPU, especially regarding what publications will be produced and the identification of media for circulation purposes.	As above	As above
The development and implementation of operational plans for supportive ICT infrastructure: • The development of an appropriate, web-enabled system to import data; • Establishment of an appropriate system for data storage and support for collation/transfer to other users; • Obtaining appropriate software to support analysis of data; and • Identification of appropriate mechanisms and media for the dissemination of intelligence.	As above	As above
The development of underpinning legislation for the SPU that must recognise: • The new structure of the SPU and the different reporting lines; • The functions of the SPU and the requirements of other partners to submit data; and • Guidelines that are accepted and understood by partners must be developed to support effective implementation.	DHET	Month 4 to Month 10

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11 Note: This outlines the planning phases and does not cover the implementation.

9. MOVING FORWARD: WHAT HAPPENS NEXT?

The rationale for the roadmap to effect a skills planning mechanism has been presented. This has attempted to outline the specific functions and structures necessary to make the Skills Planning Unit (SPU) operational. What needs to occur next to move forward with implementation?

There are two interrelated issues that need to be addressed. The first issue concerns consideration of the recommendations regarding the functions and structures of the SPU. This will require consultation with staff working at the Department of Higher Education and Training (DHET), as well as commitment on the part of other stakeholders in the sector. The purpose of these discussions is twofold. The first is to reach an agreement on the content of what is being proposed, particularly among those working in the DHET. The second is to ensure that

resources are available and that consensus is reached before moving forward with the next phase of implementation.

The second major issue that needs to be dealt with concerns the implementation plan. This is more complex and will require wider consultation with those involved in producing data and in the actual implementation processes. This requires reflection on the proposed indicators for the SPU and regarding the frameworks for skills planning at the different levels. All of these issues will have to build on existing structures and planning cycles within the DHET and other government partners. It is important that consensus is reached on the proposed implementation plan. The DHET must provide the necessary budget to ensure successful implementation.

ANNEXURE

Data sources or methods to collect data	What data is required?	Calculations required to develop indicators	What will the indicator measure?	Criteria for placing occupations on list
Global surveys of occupations in high demand	Look at global talent lists or indices produced on what occupations are in demand across the globe	Only broad data will be available on the demand for occupations	The indicator will help understand the global demand for skills	Needs to be decided
Household or Labour Force Survey	Occupational structure of labour force Numbers employed and unemployed Wage levels of people in different occupations	Absolute growth in employment by occupation/industry Changes in the share of occupations relative to employment and unemployment Changes in the wage level by occupation and sector	These measures provide an indicator of the volume of demand for a specific occupation at the national level The wage indicators help understand where price rises occur due to a perceived increase in demand for an occupation	Needs to be decided
Employer-based survey	Response to questions about hard-to-fill vacancies and also vacancies, as well as turnover	Analysis of hard-to-fill vacancies Analysis of hard-to-fill vacancies as a percentage of total employed Analysis of turnover	Provides an indication of imbalances in the labour market at the national level for specific occupations	Needs to be decided
SETA top-10 list of occupations	Data collected from Workplace Skills Plans	Analysis of hard-to-fill vacancies Analysis of hard-to-fill vacancies as a percentage of total employed	Provides an indication of imbalances in the labour market at the sector level for specific occupations	Needs to be decided
JOI	Data collected on vacancies and also on hard-to-fill vacancies	Analysis of hard-to-fill vacancies	Provides an indication of imbalances in the labour market at the national and sector levels	Needs to be decided
Regional pilots	Data on hard-to-fill vacancies at the regional level	Analysis of hard-to-fill vacancies	Provides an indication of imbalances in the regional labour market	Needs to be decided
WSPs	Data on firm-training	Analysis of employer commitment to train in specific occupational areas	Provides an indication of the volume of skills formation in the workplace	Needs to be decided
HE/TVET levels (HEMIS & HETMIS)	Data on enrolment levels and graduation by subject area	Analysis of graduate completion rates in specific subject areas	Provides an indication of the volume of skills formation among formal providers	Needs to be decided
Strategic Integrated Projects (SIPs); special government growth strategies	Information on occupations required across each phase of each project and of those occupations that are hard to fill	Occupational breakdown for prototype of each project over time and estimation of which occupations are hard to fill List of planned projects against which prototypes can be compared and estimation of skills for all projects/plans	Priority occupations for government's growth strategies	Needs to be decided

Roadmap for the Implementation of a Skills Planning Unit

About the LMIP

The Labour Market Intelligence Partnership (LMIP) is a collaboration between the Department of Higher Education and Training, and a Human Sciences Research Council-led national research consortium. It aims to provide research to support the development of a credible institutional mechanism for skills plannning in South Africa. For further information and resources on skills planning and the South African post-school sector and labour market, visit http://www.lmip.org.za.