PHASE 2 WORKSHOP 1 & 2 FINAL REPORT ON:

THE PROJECT: THE DEVELOPMENT OF AN INTERIM FRAMEWORK
FOR THE NATIONAL LAND USE CLASSIFICATION STANDARD,
METHODOLOGY, AND SYMBOLOGY FOR SOUTH AFRICA.

26-27 June 2013 & 7-8 August 2013
Pretoria, Gauteng
ACKNOWLEDGEMENTS

The Chief Directorate Spatial Planning and Information (CD: SPI) of the Department of Rural Development and Land Reform (DRDLR) extends its sincere appreciation to all stakeholders who participated in the two workshops that led to the launch of the Working Groups which is expected to lead to the development of an interim framework for the national land use classification standard.

The workshops were organised successfully through the dedication of staff in the CD: SPI. Many thanks to Ms Remina Rashopola who led the process with valuable support from various colleagues including Mr Gavin Benjamin, Ms Zodwa Mabe, Ms Tshepiso Lentsoane, Mr Paul Strydom, Ms Abena Kwayisi and others. They all made vital contributions to the successful organisation of the workshop.

CD:SPI would also like to thank Matheri Kangethe and his team of facilitators for effectively guiding proceedings of the two workshops.

A special appreciation goes to the project sponsor: Mr Sunday Ogunronbi: the Chief Director for Spatial Planning and Information for his leadership and continuous support to the implementation of this project.
Contents

ACKNOWLEDGEMENTS ............................................................................................................. 2

ACRONYMS ............................................................................................................................. 5

EXECUTIVE SUMMARY ......................................................................................................... 6

1 INTRODUCTION ....................................................................................................................... 10

2 PHASE 2 – FIRST WORKSHOP ............................................................................................ 11

2.1 OBJECTIVE OF THE WORKSHOP .................................................................................... 11

2.2 PARTICIPANTS ..................................................................................................................... 11

2.3 WORKSHOP STRUCTURE ................................................................................................. 11

2.4 KEYNOTE PRESENTATIONS ............................................................................................. 11

2.4.1 Welcome Address and Introduction: Mr Sunday Ogunronbi, Chief Director Spatial Planning and
            Information ......................................................................................................................... 11

2.4.2 Key Findings of Phase 1: Ms. Remina Rashopola ................................................................ 13

2.4.3 An International Perspective: Ms. Cecilia Njenga ............................................................. 13

2.4.4 Land Use Classification for Agriculture: Mr. Paul Avenant .................................................. 15

2.4.5 Land Use Classification for Forestry: Mr. J. Bester ............................................................ 16

2.4.6 The Status of Land-Use Mapping: Ms. Julie Verhulp, Chief Directorate: National Geo-Spatial
            Information (CD: NGI) ........................................................................................................ 17

2.5 PLENARY DISCUSSION ..................................................................................................... 19

2.6 WORKING GROUPS BREAKAWAYS ............................................................................... 20

2.6.1 Guide to Working Groups Discussions ............................................................................. 20

2.7 PRESENTATIONS FROM WORKING GROUPS IN PLENARY ........................................ 21

2.7.1 Working Group 1: Framework ....................................................................................... 21

2.7.2 Working Group 2: Definitions ....................................................................................... 25

2.7.3 Working Group 3: Land Use Classification ..................................................................... 27

2.7.4 Working Group 4: Symbology/Notation ....................................................................... 33

2.8 POST PRESENTATIONS PLENARY DISCUSSION ......................................................... 36

2.9 RECOMMENDATIONS BASED ON FIRST WORKSHOP OF PHASE 2 ...................... 36

2.9.1 Policy and Legislation ................................................................................................. 36

2.9.2 Institutional arrangement for project Implementation ......................................................... 36

2.9.3 Awareness raising and Stakeholder Mobilization ................................................................. 37

2.9.4 Human resources capacity and Skills ............................................................................. 37

2.9.5 Implementation and funding .......................................................................................... 38

2.9.6 An integrated Approach ............................................................................................... 38

2.9.7 Role of Municipalities ................................................................................................... 38

2.9.8 Guidelines ..................................................................................................................... 38

3 PHASE 2 – SECOND WORKSHOP .................................................................................... 39

3.1 OBJECTIVE OF THE WORKSHOP ............................................................................... 39
3.2 WORKSHOP STRUCTURE ........................................................................................................39
3.3 REQUIRED COMPETENCIES AND STAKEHOLDERS IN WORKING GROUPS ..................39
  3.3.1 FRAMEWORK ..................................................................................................................39
  3.3.2 DEFINITIONS ...................................................................................................................41
  3.3.3 CLASSIFICATION ............................................................................................................41
  3.3.4 SYMBOLOGY ..................................................................................................................42
3.4 INTERDEPARTMENTAL STEERING COMMITTEE ..............................................................43
3.5 REFERENCE PANEL ............................................................................................................43
3.6 ROADMAP DEVELOPMENT PROCESS .............................................................................44
3.7 ROAD MAP DEVELOPMENT FACILITATION ......................................................................45
  3.7.1 VRM PHILOSOPHY OF PROGRAMME DESIGN AND EXECUTION ...............................45
  3.7.2 ROADMAP DEVELOPMENT PROCESS ........................................................................46
3.8 VALUE PROPOSITION AND WORKING GROUP PROJECT OUTCOMES ..........................47
3.9 WORKING GROUP ROADMAPS .........................................................................................48
  3.9.1 CLASSIFICATION FRAMEWORK ROADMAP .................................................................48
  3.9.2 LAND USE DEFINITIONS ROADMAP ...........................................................................49
  3.9.3 LAND USE CLASSIFICATION ROADMAP (review) ..........................................................51
  3.9.4 SYMBOLOGY ROADMAP ...............................................................................................53
3.10 WAY FORWARD AND RECOMMENDATIONS ..................................................................56
4 CONCLUSIONS ......................................................................................................................58
ANNEX 1: REFERENCES .............................................................................................................59
ANNEX 2: WORKSHOP PROGRAMME PHASE 2 – WORKSHOP 1 .............................................60
ANNEX 3: PHASE 2 - WORKSHOP 1 PARTICIPANT LIST ..........................................................62
ANNEX 4: WORKING GROUP GUIDELINES – PHASE 2 - WORKSHOP 1 ......................................65
ANNEX 5: WORKPLAN TEMPLATE ..........................................................................................68
ANNEX 5: WORKSHOP PROGRAMME - PHASE 2- WORKSHOP 2 .............................................76
ANNEX 6: PHASE 2 - WORKSHOP 2 PARTICIPANT LIST ..........................................................78
**ACRONYMS**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>CARA</td>
<td>Conservation of Agricultural Resources Act</td>
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<td>CD: NGI</td>
<td>Chief Directorate National Geo-spatial Information</td>
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<td>CD: SPI</td>
<td>Chief Directorate Spatial Planning and Information</td>
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<td>DEA</td>
<td>Department of Environmental Affairs</td>
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<td>DAFF</td>
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<td>GIS</td>
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<td>Integrated Development Plan</td>
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<td>LUC</td>
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<td>LUMF</td>
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<td>Land use schemes</td>
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<td>South African Bureau of Standards Sub-committee 71 E</td>
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<td>Standards South Africa Technical Committees</td>
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<td>WG</td>
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EXECUTIVE SUMMARY

The Chief Directorate: Spatial Planning and Information (CD:SPI) has called for assistance from the Planning and GIS community to participate in various Working Groups that are tasked to develop an Interim Framework for Land Use Classification. This is the 2nd phase of a 3-phase project called the National Land Use Classification, Methodology, Standardization, and Symbology for South Africa. The National Land Use Classification Framework (NLUCF) is expected to facilitate consistent collection and reporting of land use data and to provide the basis for the creation of a national data set for South Africa. The data set will consist of:

- A comprehensive list of unique land use classes and features
- Clear definitions for land use classification terms
- Creation of common symbols for features (Unique IDs)
- A meta language for land-use classification (LUC) driven by sector group (e.g. Eskom for energy etc.) and aggregated to appropriate national feature classes
- Style-sheet templates for land use maps

The benefits of such a framework would include:

- Empowering municipalities to know their assets & customers
- Improving planning and impact on productivity
- Providing huge economic benefits such as enhanced revenue
- Providing and/or supporting consistency in land use schemes
- Improving communication when issues of land use and related matters are addressed

The CD:SPI organized 2 workshops on the 26th and 27th of June, 2013, and 7th and 8th August 2013 in Pretoria to launch various working groups that are tasked to conduct phase 2 of the project. Phase 2 entails undertaking further research and analysis of existing land use classification systems in order to develop an interim framework for the national land use classification standard, methodology, and symbology for South Africa. The workshop brought together participants drawn from key stakeholder groups and institutions. The aim of the workshop was to provide inputs into the process that will run over the next 12 months. It also provided a platform for feedback on phase 1 consultation workshop that took place in November 2012.

The workshop developed the broad areas of work for the 4 proposed Working Groups (WGs) and made recommendations on a way forward for implementing Phase 2.
The four proposed WGs are:

- Framework;
- Definitions;
- Land use classification, and:
- Symbology.

Breakout sessions organized around the themes of the proposed WGs deliberated and agreed on the scope of work and action plans. A summary of the objectives of the WG as proposed from the workshop are briefly summarized below:

**Objectives of WG on Classification Framework**

- To design a framework for National Land Use Classification (NLUC)
- To propose methods for harmonizing existing land use classification systems
- To develop measures for phased/incremental transition to NLUC
- Provide overall coordination of all the other groups
- Undertake policy review - international, regional and national level - including RSA ratified conventions and treaties

**Objectives of WG on Definitions**

- To identify land uses and their definitions and categories, taking cognizance of existing land use legislation
- To collect and investigate the status quo of existing definitions
- To bring uniformity and common understanding of the concept of “land uses” for all sectors involved.
- To carry out research on all existing legislation to create definitions which are practical and user-friendly

**Objectives of WG on Land-Use Classifications**

- To consolidate the existing classes to a generic and widely acceptable land use classification system that is aligned to the principles of SPLUMA
- Consider existing rights, restrictions and responsibilities, in order to avoid negative impacts
- Involve and include all spheres of government
Objectives of WG on Symbology

- Review the symbology sets that have been developed and are in use in various spheres of government
- Review what is currently being used by cartographers and planners;
- Review current symbology techniques
- Recommend symbology set that is software independent and can be utilized at all levels
- Develop a set of guidelines for symbology building on the work already done by some stakeholders such as in KwaZulu-Natal and on SDFs in various provinces

The development of the South African Land Use Classification Framework (LUCF) is expected to take a period of at least 12 months. It will involve extensive consultations with a wide range of stakeholders throughout the process. The workshop made several recommendations necessary to advance the process. A summary of the recommendations across eight key areas is provided below:

- **Policy and legislation:** Carrying out a thorough review of spatial planning policy and legislation vis-à-vis the SPLUMA, taking into consideration all spheres of government including regional and international policies and legislation

- **Institutional arrangements for project implementation:** Establishment of an interdepartmental steering committee that will include “core” stakeholders, and a group to steer the process, provide guidance and ensure ownership. Establishment of WGs, the TOR’s and coordination mechanism are important part of the implementation process

- **Awareness raising and Stakeholder Consultations:** Raise public awareness of the SPLUMA as the Act’s guiding principles should inform the process towards the development of a NLUC framework

- **Human resources capacity and skills development:** Establish formal relationships with academic institutions and associations to develop training programmes for professionals in the GIS and planning fraternities on the development of land use classification systems.

- **Implementation and funding:** Allocate adequate budgets to support implementation

- **An integrated approach:** Involve all sectors and all spheres of government

- **Municipalities:** Establish a specific project for municipalities, to support the technical and capacity needs particularly of disadvantaged rural municipalities

- **Guidelines:** Develop a guideline document that describes the methods and procedures on how to develop and or use a land use classification system. The purpose of the guideline is to provide an overview to all those involved in land use planning from Ministers to municipalities commissioning land use schemes
The need to have a well-defined work for the WGs was emphasized. Additionally, coordination of the WGs and various stakeholders including the different spheres of government, national and local is essential to the success of developing an interim framework for land use classification.
1 INTRODUCTION

Presently, South Africa does not have a National Land Use Classification System, Methodology, and Standards. This current situation has led to situations where numerous incompatible and inconsistent classifications are used within the same institution and across various institutions and or sectors with little uniformity (DRDLR-CD:SPI, 2012). As a result of this, it is a challenge for the Minister of Rural Development and Land Reform to establish a uniform spatial planning system as well as to monitor compliance with the various requirements, including the uniform land use scheme as stipulated in the Spatial Planning and Land Use Management Act (SPLUMA).

The Ministry of Rural Development and Land Reform has therefore embarked on a process to develop a framework/standardized land use classification system, methodology, and symbology across all government spheres (National to Local) in order to achieve uniformity, consistency, and compatibility on issues of land use and related matters (DRDLR-CD:SPI, 2012). Previous attempts to develop a relevant framework for National Land Use mapping have made limited progress due to inadequate consultations and lack of coordination with relevant key stakeholders.

The Chief Directorate: Spatial Planning and Information (CD:SPI), within the Branch Spatial Planning and Land Use Management (SPLUM) is responsible for the implementation of (SPLUMA). The overall mandate of the branch as provided for in the Act is to provide Spatial Planning and Land Use Management support to provincial and municipal planning as well as to establish a coherent spatial planning system in the country. The CD:SPI has called for assistance from the Planning and GIS community to participate in various Working Groups (WGs) that are tasked to develop an Interim Framework for Land Use Classification.

The CD:SPI organized two workshops, which took place on the 26th and 27th of June, 2013, and 7th and 8th August 2013 to launch the WGs that are tasked to participate in phase 2 of the project which entails undertaking further research and analysis of existing land use classification systems in order to develop an interim framework for the national land use classification standard, methodology, and symbology for South Africa. The workshops provided inputs that will guide a 12-month process that will lead to the development of a draft interim land use classification framework and standards.
2 PHASE 2 – FIRST WORKSHOP

2.1 OBJECTIVE OF THE WORKSHOP
Workshop outputs included:
   a) Feedback on consultation workshops (phase 1) that took place in November 2012
   b) Development of the broad areas of work for proposed Working Groups
   c) Recommendations on a way forward for implementing Phase 2

2.2 PARTICIPANTS
The workshop brought together participants drawn from the associations representing planners, property valuers and GIS professionals. They were drawn from professional bodies such as the South African Council of Planners (SACPLAN), South African Planning Institute (SAPI), South African Institute of Valuers (SAIV) and the Geo-Information Society of South Africa (GISSA), Provincial and municipal planners, academics as well as representatives from the private sector.

2.3 WORKSHOP STRUCTURE
The workshop was structured to have both plenary and breakaway sessions. Several presentations were made in plenary during the initial sessions of the workshop. The working group sessions were well facilitated and templates were prepared for each of the breakaway sessions to guide discussions and to enable responses received from workshop participants to be captured in a systematic manner.

2.4 KEYNOTE PRESENTATIONS
2.4.1 WELCOME ADDRESS AND INTRODUCTION: - MR SUNDAY OGUNRONBI, CHIEF DIRECTOR SPATIAL PLANNING AND INFORMATION

The Chief Director: Spatial Planning and Information welcomed the participants and provided a brief background to the project. He stated that the main objective of this project is to develop a National Land Use Classification Standard, methodology, and symbology/notation that will facilitate consistent collection and reporting of land use data and to provide the basis for the creation of a national data set for South Africa. He noted that the first phase of the project was a consultation process that took place in November 2012 to create awareness of the initiative as well as to gather more inputs from various stakeholders on how the process of developing a national land use classification standard can be carried out. The second phase of the project (current) is to develop an interim land use classification framework that can be used by all stakeholders, and to better define a way forward towards the third phase, which is the development of a national land use classification standard for South Africa.
The Chief Director highlighted the main focus of the CD: SPI as managing the process of developing and implementing relevant policies, principles, norms and standards, legislation as well as regulations for spatial planning and land use management in the country. This is articulated in the Spatial Planning and Land Use Management Act (SPLUMA). SPLUMA requires the Minister of the Department of Rural Development and Land Reform (DRDLR), after public consultation, to prescribe norms and standards for land use management and land development that are consistent with:

- SPLUMA
- The Promotion of Administrative Justice Act, 2000 (Act No. 3 of 2000) and
- The Intergovernmental Relations Framework Act

Under Norms and Standards, SPLUMA specifically says that the Minister can also standardize the symbology of all maps and diagrams at an appropriate scale. The Chief Director underscored the importance of Section 8(3) of the SPLUMA that states that the Minister may, in consultation with, or at the request of another Minister responsible for a related land development or land use function and after public consultation, prescribe norms and standards to guide the related sectoral land development or land use. It was in the context of consultation that the CD:SPI had called for technical assistance from the Planning and GIS community to participate in various WGs for the project.

The process is expected to lead up to the development of a guideline document with methods and procedures on how to use the classification system once finalized. The National Land Use Classification standard for South Africa is expected to have both direct and indirect benefits, such as:

- Empowering municipalities to know their assets & customers
- Improving planning and impact on productivity
- Providing huge economic benefits such as enhanced revenue
- Providing and/or support consistency in land use schemes
- Improving communication when issues of land use & related matters are addressed
2.4.2 KEY FINDINGS OF PHASE 1: - MS. REMINA RASHOPOLA

Phase 1 resulted in the following findings (DRDLR-CD:SPI, 2012):

- Various uncoordinated initiatives on land use classification in the country;
- Many “classification systems and symbols” within sector groups;
- Many types of notation/symbols representing similar features and similar notation/symbols used for completely different features by different organizations;
- Symbols development often left to the creativity of the map maker/cartographer leading to inconsistencies in land use feature classification and symbology;

It was noted that South Africa needs a national land use classification database consisting of:

- A comprehensive list of unique land use classes and features
- A meta language for LUC driven by sector group (e.g. Eskom for energy etc.) and aggregated to appropriate national feature classes (multiple levels if necessary)
- Clear definitions for land use classification terms
- Creation of common symbols for features (Unique IDs)
- Style-sheet templates for land use maps

The development of the LUCF will require collaboration amongst key stakeholders combining different skills and expertise to fulfill various areas of need. This has led to the call for the establishment of four WGs necessary to work towards the development of the South Africa LUCS. The four proposed WGs are:

1) Framework
2) Land use definitions
3) Land use classification
4) Symbology

2.4.3 AN INTERNATIONAL PERSPECTIVE: - MS. CECILIA NJENGA

The presentation focused on three key issues:

- Why develop a NLUC
- Land use classification – methods and approaches
- Emerging issues and summary
Although an international LUC standard does not exist, there are several efforts and attempts at the international level to develop common standards. These include efforts at the European Union (EU) level, the World Bank, Food and Agriculture Organization (FAO), United National Environment Programme (UNEP), etc. There have also been several international and regional resolutions, for example the AU resolution on land (grabs) and regional programmes such as the NEPAD, and Sustainable Land Management (SLM) program that are addressing this issue. Some of the key underlying issues and principles include trans-boundary resource management, sustainability and resource management issues, social equity, inclusivity, poverty, and land grabs.

It was noted that due to the high rate of urbanization, countries are experiencing rapid change in land use including annexation of rural land to municipalities. Many countries are faced with the challenge of creating a framework that can incorporate all the classifications that already exist in different sectors as well as the inconsistencies in land use categories and classification. The challenge is further exacerbated by dynamic processes of land transformation - for example transition from public to private land, a shift from commercial to small-scale farming and the discovery of minerals, oil and gas in many African countries. Also, the need for creating a balance between conservation issues and promoting sustainable livelihoods, preserving personal identity and the increased need for management of trans-boundary resources calls for an integrated land use management system. The presentation provided insights into the UK and Australia national land use classification frameworks. (See Table 1 below.)

**Table 1: UK and Australia Land Use Classification Frameworks**

<table>
<thead>
<tr>
<th>UK</th>
<th>Australia</th>
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| National Land Use data base: Land use and Land cover classification intended to:-  
  - provide a framework for harmonizing existing classifications  
  - to facilitate consistent collection and reporting of land use and land cover information  
  - to provide the basis for the creation of national data sets  
Designed to serve as a standard classification available for adoption by bodies involved in the routine collection of land use and land cover data | Australian Land Use and Management Classification Framework (ALUM) is a nationally agreed system for classifying land use.  
  - Hierarchical classification is based on land use, land management practices and other land occupation attributes.  
  - It has a 3-tiered hierarchical structure with primary, secondary and tertiary classes |
A standard approach to land use classification has the following characteristics:

- promotes communication between different users and sectors
- provides a basis for linking systems in common use
- enables wider use of data; and
- avoids differences in terminology that can mask detection or measurement of change

The key emerging issues from international experiences which are applicable to the South African context include:

- The challenge of designing a classification system that can respond to the needs of a variety of users, and where all possible end uses cannot be known a priori.
- There is no one ideal or universal classification of land use and land cover- classification is usually designed for a particular purpose, a particular geographical area or a particular user.
- Reasonably high degree of flexibility is needed to allow for (i) the integration and relation of different classification systems and taxonomies and (ii) the design of an ontology and a high level classification system for use with data collected from different sources including remote sensing and GIS.
- A clear institutional framework is required for land management. The clear identification of the roles of the different stakeholders including the public authority, community, private sector, local government, provincial and national government including the capacity development needs of institutions is important.
- An assessment of the technological need innovations would be required/

2.4.4 LAND USE CLASSIFICATION FOR AGRICULTURE: - MR. PAUL AVENANT

The main reasons for developing a Land use classification system in the agricultural sector are:

- Legislative requirements (SALA, CARA)
- To determine the current status of agricultural production in the country to ensure long term and sustainable food security
- To determine what agricultural products are being produced where
- To identify homogenous agricultural production regions
- To assess impact of different land use practices on the status of natural agricultural resources
- To support agricultural infrastructure (on-farm & off-farm)
- To identify available markets (demand & supply)
- To identify access routes
• To assess contribution of agricultural production to the GDP
• To understand population dynamics, opportunities for jobs creation and food security
• Very importantly, to ensure effective planning and decision making

The point of departure in developing a land use classification system in the agricultural sector is to understand the difference in the terminologies of *land cover* and *land use*.

The presentation defined the two terms as follows:-

- Land Cover = “the observed (bio)physical cover of the earth surface”
- Land Use = “arrangements, activities and inputs people undertake on a certain land cover type to produce, change or maintain it”

Several constraints and challenges exist in agricultural land classification including:-

- Overlaps between agriculture land use classes and town planning land use classes (and others) including direct & indirect linkages
- The need to consolidate various classes into one classification system for ease of use
- Repetition of classes between categories
- Land cover versus land use versus activity per land use class – the challenge of classification class or attribute
- Frequency of updating of maps
- Custodianship
- Description, interpretation of classes and correct use
- Central repository, particularly the flow of information & ease of access

### 2.4.5 LAND USE CLASSIFICATION FOR FORESTRY: - MR. J. BESTER

Differentiating between land cover and land use, the presentation described the methodology applied in the forestry sector for land classification. When determining land cover, primary questions from a forestry point of view would be, “is this forest land?” That is:

- Do woody plants cover more than 5% of the area?
- Is the cover indigenous or exotic?
- What species are there?
- What are their condition / status?

When determining land use, some key primary questions in the forestry sector are:
a) What kind of activity is practiced?
   - Consumptive use, that is for example production of timber and non-timber forest products
   - Storage / transport / processing and trade of primary / secondary products
   - Non-consumptive use / ecosystem services
   - Protection / maintenance functions
   - Conservation of forest ecosystems / species
   - Research and / or training

b) What is the scale at which the goods and services are produced, i.e. is it:
   - Commercial or subsistence?
   - Large or small scale?
   - Primary or secondary processing?
   - Are their specific/specialised products or services being produced?
   - Are their specific conservation objectives?
   - Is there a planned duration to the land use?

The presentation concluded by stating that land cover and land use are distinctly different in forestry:
   - Only one type of land cover is possible at any point in space and time
   - Multiple land uses may occur simultaneous on the same land
   - Same land uses may be possible on several forest land cover types
   - Forestry land use may dove-tail with other types of land use – e.g. conservation, agriculture and recreation / tourism; and
   - Non-forestry land use may occur on forest land: e.g. livestock grazing

Forestry management involves long time scales. Therefore, a land use classification system should be designed to accommodate and facilitate long planning horizons that are required in the forestry sector.

2.4.6 THE STATUS OF LAND-USE MAPPING: - MS. JULIE VERHULP, CHIEF DIRECTORATE: NATIONAL GEO-SPATIAL INFORMATION (CD: NGI)

The CD: NGI is mandated under the Land Survey Act to conduct topographical surveys. This has traditionally been done in the form of 1:50000 topographical maps and a series of shapefiles. In 2012, CD: NGI embarked on a national land cover and land use program with the intention of producing maps at a scale of 1:100000.
The presenter defined *land cover as the observed (bio) physical cover on the earth’s surface*. It refers to the vegetation, structures, or other features that cover the land. For example, is the land covered by grass, by trees, by water, or by large buildings surrounded by a lawn. Land use is characterized by the arrangements, activities and inputs people undertake in a certain land-cover type to produce, change or maintain it. For example, is the land being used for commercial purposes (stores, office buildings, apartments, etc.) or for industrial purposes (factories, assembly plants)? Alternatively, is the land being used for recreational or agricultural purposes?

Relationship between land cover and land use was defined:

- “Grassland/Graminoids” is a land cover term, while golf course, sports field, botanical gardens, game farm, or undeveloped lands refer to the use of a grass cover
- “Recreation and Leisure” is a land use term that maybe applicable to different land cover types: for instances and surfaces like a beach; a built-up area like a theme park

The presenter indicated that land use methodology was developed in 2009 and was:

- Vector based (made up of shape files)
- Polygons only (no points or lines, therefore no need for a standardized symbology)
- Not designed to be printed into a hard copy map
- Consists of 60 classes (14 main classes) – this needs to be refined as there is no standard classification legend
- Has the ability to contain attributes

CD: NGI has piloted the land use methodology in four areas including:

- King Sabata Dalindyebo & Qaukeni (Eastern Cape)
- Maluti-a-Phofung & Dihlabeng (Free State)
- Knysna West & Swellendam (Western Cape)
- Mogalakwena & Tubatse (Limpopo)

Some of the key land use problems encountered in the land use mapping piloting process included:

- Having more than one land use per polygon
  - e.g. a school with a hostel and sports fields or a farm with crops in a CBD area.
  - where the ground floor is a shop, then an office and a residential at the top
  - Water body that is both for irrigation and recreation
Where land has primary, secondary and tertiary land use, but how to allocate to each - importance/size

- Is not limited to scale
  - Mapped at various levels depending on whether its urban or rural
  - Too expensive to map at a large scale in rural areas
- Land use is more difficult than land cover to map because:
  - It is not identifiable from imagery
  - Information from council is often incorrect or outdated

The presentation concluded by recommending an urgent need to refine the methodology and system requirements. This would be critical for the development of a NLUC standard.

2.5 PLENARY DISCUSSION

Following the presentations, an open facilitated discussion was held. Key points arising are summarized as follows:

- There is need to pick up certain nuances in the use of land use terminologies. For instance, land use may be considered as what the land is being used for, whereas a legal aspect may refer to what it can be used for
- Zoning and schemes were highlighted as important instruments when it comes to municipal land use management and planning and should be considered in the design of a LUCS
- A comprehensive policy and legislation review would be necessary at the onset of the development of the LUCF. For example, the Spatial Data Infrastructure Act, Act 70 of agriculture or other existing frameworks such as SPYSIS, etc. SPLUMA will have to provide an overall framework in defining a LUCF and therefore this process must align itself to SPLUMA.
- The process of developing a land use classification system is complex. The system or framework developed depends on the data or maps fed into it. Therefore, it is important to assess from the outset what data exists, what maps exist, their scale, coverage, are the maps updated, what is their level of detail, etc.?
- Municipalities are central in the implementation of the LUCF. Therefore, they must be involved more closely in the development of the LUCF given their important role in spatial planning and land use management, development control and zoning at the local level. There are many different types of plans that are produced at the municipal level including spatial development plans, water plans, infrastructure plans, Integrated Development Plans (IDP's), etc. however, there
is no nationally agreed land classification system and therefore each municipality is producing their own plans based on their legislation and capacities.

- The framework should aim at providing some broad principles and building blocks that can provide guidance to the municipalities. The role of traditional leaders, who are in most cases custodians of the land in their respective places, should also be taken into consideration.

- Generally, there is a need to map out the key stakeholders who must be involved in this process. A broad based stakeholder consultative process with the involvement of key stakeholders such as SALGA should be adapted. Such a process must be guided by some underlying principles as outlined in the SPLUMA including justice, inclusivity and equity. A key issue that needs to be addressed is how the developed framework will address the effects and inequities produced by past planning system.

- On land cover, there is need to place emphasis on the degraded and marginal land including protected areas. Rural areas differ from urban areas and therefore there is need to make some due consideration of rural land classification while defining the land use classification system.

- Other sectors that should be considered in determining land use classification system include mining, transport, human settlements, recreation, etc. A key question raised for consideration was whether when developing a land use plan, the focus should be on existing, desirable or future plans for the land?

### 2.6 WORKING GROUPS BREAKAWAYS

Four WGs were organized as follows:-

- Group 1: Framework
- Group 2: Definitions
- Group 3: Land use Classification
- Group 4: Symbology/Notation

Each WG was presented with a set of questions which they sought to answer. The workshop facilitators guided each WG to ensure deliberations focused on these key questions.

### 2.6.1 GUIDE TO WORKING GROUPS DISCUSSIONS

The WGs were tasked to address the following issues in the breakout sessions:-

1. Refine the purpose of the WG
2. Discuss and agree on focus areas/scope of work of the WG
3. Identify roles and responsibilities of institutions
4. Define the role of technology
5. Develop an action plan – what, who and when?
6. Recommend who/which institution must be part of the WG
7. Inputs required for curriculum development
8. Suggest inputs to the proposed guidelines

2.7 PRESENTATIONS FROM WORKING GROUPS IN PLENARY

2.7.1 WORKING GROUP 1: FRAMEWORK

The WG defined a “framework” as:

- Providing a platform to share and relate to experiences
- A system that is accessible and flexible and user-friendly
- A tool to address socio-economic costs and benefits
- An enabling mechanism/tool
- Stakeholder inclusion - Identifies the key role players- users, generators and custodians
- Clarifies definitions, systems and categories and classes
- Provides a time-frame
- Monitors trends, implementation and impact – adjustments
- Provides a coherent framework for policy and decision-making
- Takes cognizance of horizontal and vertical interactions – bottom-up or top down approach
- Harmonizes and integrates data sets
- Incorporates lessons from municipalities and provinces
- Protects forests and other natural land resources
- Dynamic
  - Addresses rural area specific challenges – for example, unsurveyed land
  - Gives specifications for the IT system and other technologies to be used
  - provides 100% coverage
  - provides for transitional and phased approach and indicates key milestones
  - Considers capacity of municipalities

The main purpose of WG 1 on Framework is:

- To design a framework for NLUC
- To propose methods for harmonizing existing land use classification systems
To develop measures for phased/incremental transition to NLUC
• Provide overall coordination of all the other groups
• Be proactive – drive the process
• Provide clarity on the system to use
• Undertake policy review - international, regional and national level - including RSA ratified conventions and treaties, be aware of core geographic areas- nature reserves, forests, etc.

Scope of the WG 1 is to:

• Develop a logical dedicated and costed structure to coordinate, consult, and facilitate cooperation and collaboration between national departments, provincial planning commissions, planning associations, SALGA provincial heads of planning, CD: SPI Provincial Directors, Parastatals, and private sector representative as well as any other relevant stakeholders
• Develop a full list of core stakeholders
• Identify other/existing structures where possible to enhance collaboration;
• Coordinate with other WGs to ensure alignment and cooperation on matters that are interrelated and to avoid duplication of efforts in all areas
• Define a framework for land use data management
• Identify and review current system of land use data management
• Develop methods for interoperability of existing systems of land use data management
• Provide guidance on migration to the new classification standard
• Develop a complete, consistent, detailed and up-to-date interim framework for land use classification including a dataset for the country
• Organize continual feedback sessions to stakeholders, in order to address various aspects of the National Land Use Classification system
• Explore the possibility of using a Land use Meta Language
• Identify technology and innovation necessary in accomplishing the development of a flexible and user friendly land use classification system for the country
• Develop an M&E framework to monitor and evaluate the implementation of the framework
• Collaborate and contribute to the other WGs

The group noted that in the development of the NLUC Framework, SPLUMA would provide a framework for accountability and spell out roles and responsibilities of key stakeholders. The WG outlined specific tasks under each purpose as follows:
a) Designing a framework for NLUC
   • Develop a conceptual framework to the framework including identifying what data is needed, who will collect data and how the data will be interpreted?
   • Define the problem statement
   • Define the process (road maps)
   • Define the components of the framework
   • Define the overseeing and coordinating functions of the other work groups
   • Align to SPLUMA
   • Undertake legislative review (rationalize and streamline alignment)
   • Identification of existing systems including international (LUCs and frameworks)
   • Assess the technology needs
   • Inventory (identify composite one)
   • Review existing land use classification systems

b) Propose methods for harmonizing existing land use classification systems
   The key activities to be undertaken are to:-
   • Identify current land use classification systems that are working (taking into consideration the 3 spheres of government)
   • Analyze how these systems will plug into the NLUC
   • Consider other sectoral approaches such as SPISYS
   • Identify who is using what, what data is out there, standard format, quality and quantity of data – coverage of what is existing and frequency of updating the data
   • Review the stakeholder list (Eskom, DPME, SACN, Rural LM, Environmental Affairs, Minerals and Energy, NPC)
   • Identify data custodians and their role (NGI has base data information and custodians)
   • Develop the time frames and milestones

c) Develop measures for phased/incremental transition to NLUC
   The key activities to be carried out include:-
   • Develop milestones/indicators for a phased and incremental approach for transition to the NLUC standard
   • Prioritize main classes of land use (e.g. agriculture) and sub-classes
   • Develop monitoring and evaluation system for the transition to NLUC standard
• Review municipal capacity and identify who can build the capacity
• Estimate costing of the process including the maintenance of the database
• Developing guidelines for the different data generators and users.

The Core Stakeholders identified include:-
• Data custodians (as proposed by CSI)
• Metros
• CSIR
• StatsSA
• Local municipalities
• Dept of Minerals & Energy
• DEA
• ESKOM
• Provincial planning commission
• Legislation institutions

Some of the key questions to be addressed by WG1 include:-
• Why is it necessary to have a NLUC standard as different spheres of planning use different sets of land use classification standards?
• Is there a need for a unified system?
• What level of detail would be required? 1st, 2nd or 3rd level?
• Which approach – top-down or bottom up? Or both?
• For whom is the framework? Decision-makers, users, planners, etc.
• Should the framework be an integrated system? Multi-dimensional, etc.

WG 1 made the following recommendations on institutional arrangements in the coordination of the WGs for consideration by the participants:-
• WG 1 to start work 1-2 months ahead – include members from all 4 groups for the initial meetings.
• Hold monthly meetings for each group
• Rotate meetings in all the provinces to cut down on travel costs but also to ensure buy-in from municipalities
• Incorporate a WG session and feedback session in each meeting
• Hold one coordination session for all working groups every 3 months
• Invitation letters to WG member should be sent from the Minister and should indicate the need for consistency in participation
• Use IT for communication
• Link the NLUC framework to spatial planning systems at all levels
• Develop a toolkit for municipalities to facilitate data collection and how to feed into the national system
• Facilitate training of municipal users on how to use the data system
• Develop a criteria on the ideal number of working group members including sub-working groups
• Ensure representation of key stakeholders in all WGs
• Organize monthly meetings for the WGs
• Develop a template for reporting and schedule meeting dates for each WG

2.7.2 WORKING GROUP 2: DEFINITIONS

1. Definition of land use: The purpose to which the land is committed (i.e. the current human activity associated with a specific land unit)

   - Test the existing definition of Land Use in terms of:
     • Legal aspects: Land Use should be governed either by existing schemes, title deeds or legislation
     • Legal Land Use vs. Illegal Land Use

2. Provide guidance on how users will distinguish between land cover and land use and how they move between the two concepts.

3. Define land use classes and categories

4. Liaise with the Working Group on land-use classification to harmonize definitions

5. Understand the Legal Implications of land use definitions:

   - Compliance with legal drafting conventions
   - Legal language check
   - Legal opinion on the Constitutional validity of the proposed Land Use Classification to determine in which way Municipalities can be required to use the standardised definitions.

The key questions addressed by WG 2 included:
• What concepts and principles are relevant for consideration in developing a land use classification framework?
• How to go about defining land use classes and categories?
• What legal implications are likely?
• How can lawyers be involved in this process or their opinion obtained to address/avoid legal implications?

The WG defined the purpose of WG 2 as:-
• To identify land uses and their definitions and categories, taking cognizance of existing land use classifications and legislation.
• To collect and investigate the state of existing definitions including SPLUMA.
• To study most recent land use management systems.
• To liaise with WG 3 with regard to classification of land uses.
• To bring uniformity and common understanding of the concept of “land uses” for all sectors involved.
• To carry out research all existing legislation to create definitions which are practical and user-friendly.
• To carry out a comprehensive review of the existing definitions contained in relevant and related legislation such as:-
  - Consolidated Johannesburg Town Planning Scheme 2011
  - Unified Cape Town Zoning scheme
  - DAFF
  - NEMA
  - Subdivision of Agricultural Land Act
  - Conservation of Agricultural Resources Act
  - Definitions from Department Mineral Recourses
  - South African Heritage Resources Agency
  - National Building Regulations
  - EThekwini Town Planning Scheme
  - Department of Water Affairs
  - Department of Safety and Security
  - Department of Defence
- All other relevant legislation, National Plans, Policies and Acts. Provincial, District, Local, Traditional and Parastatals

Although this WG will not need special technology to identify and develop the said definitions, consultants are required to assist with:

- Compilation of complete and broad list of definitions
- Liaison with the different institutions and role players

In order to develop the definition of key terminologies, the WG2 will:

- Be led by a group leader with a legal and planning background
- Collect the definitions available to team members to get a base for existing definitions.
- Compile a summarized/combined list of definitions – legal edited.
- Identify gaps and duplication in list of definitions
- Liaise with WG 1 and 3.
- Hold quarterly meetings
- Meet with Consultant/Group leader to agree on the role of consultant/group leader
- Require feedback from WG 3 with regard to classification
- Slot definitions into classification guidelines
- Address gaps/duplications/shortcomings
- Make provision for extensive consultation with all stakeholders
- Have representatives from Universities/Academics
- Make definitions open for review within a given timeframe

2.7.3 WORKING GROUP 3: LAND USE CLASSIFICATION

Focus Areas
- Develop an inventory of land uses (classes and broad categories) and land use classification systems and methods used in their development, including land use schemes and SDFs.
- Develop a hierarchical categorization of land use classes (primary, secondary, and tertiary classes)
- Develop categories to be explored further including undeveloped category
- Guide the integration of land uses classes or categories into land use scheme
• Ensure that the classification covers all land uses - the rural and urban land uses must be clearly defined and differentiated, taking indigenous land uses, cultural, and religious and traditional authorities into consideration
• Link to existing classifications for land cover, topography, Spatial Development Frameworks (SDF) including environmental management
• Collaborate and contribute to the other WGs

The main purpose of the WG3 is to provide inputs into the process that will run over the next year to produce the draft framework and standards. The working group set itself to answer the following questions:-

• What land use classifications currently exist?
• What methodology should be used when designing a classification system?
• How detailed should such a land use classification system be?
• Who is responsible for classifying land uses? Lawyers / Provincial Departments / Municipalities / Open Source Approach?
• What capacities are required by institutions “tasked” with managing land uses (municipalities) to use the classification?
• What supporting mechanisms should be put in place to support implementing institutions?

**Existing Land Use Classification Systems**

Every province’s ordinance has a land use classification system. The Northern Cape has an approved land use classification system that uses provisions in the SPLUMA as well as other ordinances and schemes. It contains 16 top-level classes. Many local authorities have their own land use classification system. Several departments such as DAFF have developed their own classification systems. NGI has also developed 14 top-level land use classes. Other countries have examples of land use classification systems that we can draw on such as Australia or UK.

Other provisions can be found in the following Acts legislative and policy documents:-

• SPLUMA
• Department of Water Affairs (DWA)
• Black Areas Act
• International Standard Industrial Classification (ISIC)
• National Environmental Management Act (NEMA), such as protection areas
• Spatial Development Frameworks (SDFs)
- The old Town Planning schemes provide a variety of choices for land use classification
- Heritage Acts
- Integrated Coastal Zone Act

Much of the legislative provisions for land use classification overlap and schemes can be very detailed. A key question therefore, is where should be the starting point of land use classification and should this be confined only to the high level categories?

**Designing a Land Use Classification System**

The process of developing a land use classification system should not aim to create a brand new system, but rather build on what already exists. The classification system must be realistic and use data that exists. Using provisions of legislation the land use classification system identifies the land use classes and correlates them. Generally, relevant Acts provide definitions for their respective classes. However, some contradict one another as most land use classifications have been done to respond to specific Acts.

It was therefore proposed that the WG on land use classification:-

- Consolidates the existing classes to a generic and widely acceptable land use classification system.
- Align the land use classification system to the principles of SPLUMA
- Considers existing rights, restrictions and responsibilities, because we cannot affect them negatively.
- Uses a bottom-up approach
- Involves and includes all spheres of government

Essentially, the methodology of developing a land use classification system involves collecting land use classification information, drawing comparisons, reviewing, analyzing, proposing and publishing. The definitions and classification schemes are dependent on one another, and the process of developing symbology is dependent on both. Therefore, the four WGs must work closely together. The classification must be practical and respond to the specific conditions of South Africa. DRDLR must lead extensive consultations with the stakeholders. There must be engagement between the national and provincial levels and the provincial and local levels. Land Use Classification within local authorities should be guided by provincial regulations.

**Level of detail of a Land Use Classification System**
The land use classification system should probably be detailed to the municipal level, from where it could be further detailed to address specific local needs. The WG should provide guidance and direction on how those local authorities who do not have the capacity to produce their own schemes can be supported. This could also be achieved through providing a national classification to the finest level. The classification system developed needs to deal with all classes likely to be used in three spheres of government. Notwithstanding current limitations including capacity gaps, land use classification should be developed in a comprehensive manner. The national land use classification system should cater for all information needs. The process may however be phased out to achieve the finer levels of detail.

**Roles and Responsibility for classifying Land uses**
The local authority is the implementing agency of the land use classification. There are however high-level roles and responsibilities for national and provincial government.

**Capabilities Required for Managing Land Use Classification**
Various capabilities are required for managing the land use classification. Sufficient staff with appropriate skills at all spheres of government will be required. The provincial legislation requires that land use classification be carried out by registered professional town planners. The tribunals for adjudicating planning issues which include specific professionals, such as engineers and lawyers will have important roles.

A key challenge is how to attract valuable capacities in rural areas as there are very few professionals willing to live and work in the rural municipalities, especially in the Northern Cape. It is recommended that a pool of professionals be established at the provincial and district levels to serve the under-resourced local authorities. This could also apply to tribunals at the local and provincial level. A key problem raised about shared services is that the mayors and councilors of local authorities feel like they are disempowering themselves. A conflict of interest may arise if appeals need to be moved to a higher level at which the tribunal may also be operating at.

The type and scope of the planning being done will determine the level of registered planner required (professional, technician, candidate, etc) as specified in the Planning Professions Act. Some of the questions that the LUCF development process may address are:

- Is there a surplus or a shortage of town planners?
• Are there enough universities providing quality education in town planning?
• Are there enough students studying town planning?
• Are there enough experienced planners to mentor the young planners joining the profession?
• What can attract students into the field, and encourage planners to work in rural areas?

The new crop of professional urban planners or urban engineers are equipped with new skills that could be useful. The problem is not so much the number of planners, but the need for experienced planners, which plays a huge role in providing the necessary capacities. There are fresh graduates in town planning who cannot get planning jobs, because they lack experience. Internships of one year are too short and interns are often not used effectively. DRDLR may consider seconding their intern planners to municipalities and retired planners could also help with mentoring and supplementing capacity. There needs to be better coordination and cooperation between the human resources departments of DRDLR and of the provinces and municipalities.

In general, this process of land use classification should not contradict or duplicate what exists especially with regard to definitions. Although the process will be taken forward by a team of project leaders, the team must involve the stakeholders periodically and regularly. The time frame for the project is 12 months, but because the definitions and symbology are dependent on the classification, this WG in reality therefore, has less than 12 months to complete its drafts.

**WG3: Action plan**

<table>
<thead>
<tr>
<th>Action</th>
<th>Indicator</th>
<th>Institution</th>
<th>Lead for reporting</th>
<th>Time frame</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1. Develop an inventory of land uses (classes and broad categories) and land use classification systems and methods used in their development, including land use schemes and SDFs, a critical component of a framework</td>
<td>Inventory lists, by the 3 tiers of government</td>
<td>DRDLR Framework group</td>
<td>DRDLR</td>
<td>1 month, as most of the systems are readily available in electronic form</td>
<td></td>
</tr>
</tbody>
</table>
3.2. Develop a hierarchical categorization of land use classes (primary, secondary and tertiary classes)

Consolidation of existing classifications. It should be circulated to the WG for inputs

Project leader appointed by DRDLR, with the WG and DRDLR

Project leader and DRDLR

2 months (3 months from project start)

This is just to consolidate all the candidate classifications, so that they can be compared and analysed, and not to actually develop the draft classification, which is done in actions 3.4, 3.5 and 3.6?

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**WG3: Action plan**

<table>
<thead>
<tr>
<th>Action</th>
<th>Indicator</th>
<th>Institution</th>
<th>Lead for reporting</th>
<th>Time frame</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.3. Develop categories to be explored further including undeveloped category</td>
<td>List of identified features that need to be incorporated into the classification</td>
<td>Project leader appointed by DRDLR, with the WG and DRDLR</td>
<td>Project leader and DRDLR</td>
<td>2 months (3 months from project start)</td>
<td>This is actually part of action 3.2. Examples could be the SKA, renewable energy, and rural development. (where will Land Reform fit and how??)</td>
</tr>
<tr>
<td>3.4. To guide the integration of land uses classes or categories into land use scheme</td>
<td>Draft classification system</td>
<td>Project leader appointed by DRDLR, with the WG and DRDLR</td>
<td>Project leader and DRDLR</td>
<td>5 months (8 months from project start)</td>
<td>Need to ensure that it is a clean, general and rationalised classification, and not just an aggregation of special cases</td>
</tr>
<tr>
<td>3.5. Ensure that the classification covers all land uses – the rural and urban land uses must be clearly defined and differentiated, taking indigenous land uses, cultural, and religious and traditional authorities into consideration</td>
<td>Draft classification system</td>
<td>Project leader appointed by DRDLR, with the WG and DRDLT</td>
<td>Project leader and DRDLR</td>
<td>5 months (8 months from project start)</td>
<td></td>
</tr>
<tr>
<td>3.6. Link to existing classifications for land cover, topography, Spatial Development Frameworks (SDF) including environmental management</td>
<td>Draft classification system</td>
<td>Project leader appointed by DRDLR, with the WG and DRDLR</td>
<td>Project leader and DRDLR</td>
<td>5 months (8 months from project start)</td>
<td></td>
</tr>
<tr>
<td>3.7. Collaborate and contribute to the other WGs</td>
<td>Meetings, workshops, electronic communication, etc</td>
<td>Project leader appointed by DRDLR, with the WG and DRDLR</td>
<td>Project leader and DRDLR</td>
<td>Ongoing, for the 12 months</td>
<td>Need workshops with the other WGs after each deliverable has been produced.</td>
</tr>
</tbody>
</table>
Key institutions in the Land Use Classification process

- SALGA
- Houses of traditional leaders
- Parastatals: Eskom, SANRAL, Transnet, Housing Development Agency, etc
- All national departments
- All provincial departments (it will need to be driven by the Premiers, to ensure participation)
- Universities
- The private sector can be invited, such as mining houses
- Consultants who do land use mapping
- Organized labour
- SANDF (which uses international military mapping standards from DGIWG)

Inputs to curriculum development

- Training materials and short courses for staff working in planning departments who are not trained as planners and/or who cannot register with SACPLAN (eg: for developing an IDP). They can be developed by SACPLAN, SAPI and/or universities
- Training for other officials in municipalities and for councilors
- SACPLAN should be involved as they are responsible for the accreditation for planners
- Short courses can be developed by institutions such as SACPLAN or SAPI to compliment formal training of planners and GIS experts
- SETA’s have huge amounts of funding which can be used to develop and deliver training programmes.
- The draft classification needs to be widely circulated to get inputs from stakeholders, including being publicly available from the DRDLR web site
- It will be necessary to get a legal opinion on the implications of the proposed draft classification

2.7.4 WORKING GROUP 4: SYMBOLOGY/NOTATION

Focus Areas

- Review the symbology sets that have been developed and are in use in various spheres of government
• Review what is currently being used by cartographers and planners
• Review current symbology techniques including colour coding using RGB with values, including the need for a white and black printing
• Recommend symbology set that is software independent and can be utilized at all levels
• Develop a set of guidelines for Symbology building on the work already done by some stakeholders such as in KwaZulu-Natal (guidelines for zoning schemes) and on SDFs in various provinces
• Collaborate and contribute to the other WGs

The key questions addressed by WG4 included:-
• Is a national land use classification system that is inclusive of symbology important to South Africa?
• What are the various thoughts about symbology creation?
• What methodologies are currently being used? How can coordination for a national land use classification (mapping methodology and map production) be facilitated?
• To what level of detail should the development of land use symbology go? How are land uses currently being reported (in Central Business Districts (CBDs) for example)?
• How are matters of multi-land-use in one location currently being addressed? And how are they defined and coded?
• Do we need guidelines to support the development of a national land use symbology set?
• What should be the roles and responsibilities of different institutions in developing standard symbology set?

The Working group on symbology/notation highlighted the following points:-
• Consensus on the need to develop a national symbology set:-
  - To satisfy SPLUMA requirements
  - To harmonize usage across different jurisdictions to improve common understanding
• The need to examine if advances in technology can provide new mechanisms to portray features
  - Use current methods of portrayal to develop a national set, and
  - Examine alternatives
• Examine key symbology sets across the country – seek commonalities and adopt and work towards consensus on the rest.
While acknowledging that a symbology set should be developed after land use classification and definition standardization is complete, the WG should continue with its work and continuously take cognizance of the other WG activities

- The working group should identify and co-opt key stakeholders immediately
- Key stakeholders identified should be on board and a first meeting be held within the next 2 months
- The Working Group should develop an action plan assigning responsibilities and time frames.
- Align WG discussions and meeting dates to other working groups work plans and time frames.
- Develop style sheets once symbols have been classified using technology Quantum CXML and ESRI style.
- Hold review meetings every 2 months with WG 1, 2 and 3 to harmonize symbols and collect inputs.
- Review alternative symbology portrayal mechanisms (SQL, Oracle) in 4 months
- Develop draft of symbology set (based on inputs from WG 1, 2 and 3) in 6 months
- Test symbology set in 2 months and further develop the interim symbology set in 2 months
- Rotate meetings to the different provinces (suggestion: 3rd meeting Free State, 4th meeting North West, 5th meeting Kwa Zulu Natal, 6th meeting Cape Town, 7th meeting Port Elizabeth/East London)

Curriculum development

- Academic institutions such as Stellenbosch, UP, Wits and UCT, technical colleges, professional bodies and networks such as PLATO, SALGA and SAQA should be involved in curricula development to incorporate symbology as is been developed through this process
- Curriculum should be developed for both technicians and professionals
- Awareness campaigns to promote these field of learning including using social media
- Focus should be placed on schools grade 10-12 and develop curriculum on map reading and interpretation. NGI should contribute to this.
- Establish a 5th working group on curriculum development
- Geomatics Bill should outline registration requirements for all levels of practitioners
- Number of hours – list of items to do with students symbology pillar
- Benchmark curriculum with what is available in some international leading schools, colleges and universities.
Guidelines
The guidelines should present the symbology set and explain different methodologies used to develop symbology set. Symbology terminology is dynamic and the tools developed should be easily adaptable to these changes.

2.8 POST PRESENTATIONS PLENARY DISCUSSION

The discussions that followed the Working Groups presentations highlighted the following key issues:

a) The need to identify and assess in a comprehensive manner who should be involved in the development of the LUCF
b) The need to consider the peculiarities in both rural and urban areas in developing the LUCF
c) The need to consider the different spheres of government, particularly the important role of municipalities in land use planning, management, development control and zoning, including an assessment of their capacities to integrate LUC system in their planning and implementation processes.
d) The implications for LUC in achieving national planning and development goals.
e) The need for an integrated and cross-sectoral approach in defining land use.
f) The implications for differentiating between land cover and land use in the development of the LUCF.
g) The need to embed the principles outlined in SPLUMA in the NLUC framework, for example justice, equity, participation, etc.

2.9 RECOMMENDATIONS BASED ON FIRST WORKSHOP OF PHASE 2

In addition to recommendations made in Phase 1 of this project further recommendations have been proposed as follows:

2.9.1 POLICY AND LEGISLATION

- CD:SPI should conduct a thorough review of spatial planning policy and legislation vis-à-vis the SPLUMA, taking into consideration all spheres of government including regional and international policies and legislation.
- DRDLR should lead a process of consolidating and harmonizing the land use classification sets developed by various departments and spheres of government (see recommendation below on establishing an inter-departmental steering committee).

2.9.2 INSTITUTIONAL ARRANGEMENT FOR PROJECT IMPLEMENTATION
• DRDLR should establish an *inter-departmental steering committee* that will include “core” stakeholders – data users and generators” as well as traditional leaders, academics and CSOs to steer the process, provide guidance and ensure ownership.

• The CD: SPI should put in place a road-map with clear milestones, sequencing the activities that need to be undertaken at local, provincial and national level leading up to the LUCF.

• The CD: SPI should establish a carefully selected small group of experts drawn from all spheres of government and other core stakeholders, which will guide and help shape the outcome of this process. This expert team will review the road map, milestones and the outputs of the various WGs on a regular basis to ensure quality.

• The experts should establish the operation and coordination mechanism of the working groups. The criteria for selection of WG members, their *modus operandi* as well as TOR’s, milestones and outputs should be well defined. The coordination mechanisms within and between the working groups should also be clarified to ensure smooth operation. Although it is proposed that the process be taken forward by a team of project leaders for each WG, the team must involve the stakeholders periodically and regularly.

2.9.3 **AWARENESS RAISING AND STAKEHOLDER MOBILIZATION**

• CD:SPI should seek to raise public awareness of SPLUMA as the Act’s guiding principles should inform the process towards the development NLUC framework. This could be done through a series of workshops and multi-media campaigns.

• CD:SPI through the proposed intergovernmental Steering Committee should ensure a continuous flow of information on the progress made in the process of developing the LUCF.

• CD:SPI should circulate draft land use definitions and proposed classification widely to get inputs from stakeholders, including making them publicly available on the DRDLR web site.

• CD: SPI should seek the necessary legal opinion on the implications of the proposed draft land use classification from organized legal and planning professions associations and groups.

2.9.4 **HUMAN RESOURCES CAPACITY AND SKILLS**

• CD:SPI should establish formal relationships with academic institutions and associations to develop training programmes for professionals in the GIS and planning fraternities on the national land use classification systems.

• CD:SPI should constitute a specific WG with representation from academic institutions, planning associations and other relevant stakeholders to develop curricula/courses to train planners at the graduate and post-graduate levels based on the process and outcomes of this project.
• The CD:SPI should organize country visits to gain exposure to other LUC Framework processes in both developing and developed countries. Several countries such as UK, Australia, Kenya and Ghana have exhibited some best practices and some key lessons in addressing land reforms and putting in place institutional mechanisms to address the land use classification challenges. Members of the intergovernmental steering committee, experts and representatives of working groups should also participate in these visits.

• CD:SPI should develop tool kits and training materials aimed at building capacity of all municipal staff including planners, engineers, social workers, etc.

2.9.5 IMPLEMENTATION AND FUNDING

• The WGs should articulate the roles and responsibilities of the different spheres of government in the implementation of the LUCF. This should be followed by the allocation of adequate budgets to support implementation. Each working groups should estimate the costs of implementing various activities that will be proposed in their action plans.

2.9.6 AN INTEGRATED APPROACH

• CD:SPI should organize cross sector forums to discuss and agree on some generic/land use classification issues including how to address informality and other ambiguous land uses in spatial planning. The outcomes of these forums would feed into the LUCF development process.

2.9.7 ROLE OF MUNICIPALITIES

• CD:SPI should establish a specific project for municipalities, to support the technical and capacity needs particularly of disadvantaged rural municipalities. This includes developing a pool of experts and tools that will be easily accessible to municipalities.

2.9.8 GUIDELINES

• CD:SPI should develop a guideline document that describes the methods and procedures on how to develop and/or use land use classification system. The purpose of the guideline is to provide an overview to all those involved in land use planning from Ministers to municipalities commissioning land use schemes.
3 PHASE 2 – SECOND WORKSHOP

3.1 OBJECTIVE OF THE WORKSHOP

The objective of the workshop was to reconfirm the ToRs of each of the WGs, determine competencies necessary to deliver the objectives of each working group and gaps in competencies. The workshop also reviewed the stakeholders involved in the process of developing an interim framework for land use classification to determine those that may have been excluded.

It was also an objective of the workshop to identify relevant/core stakeholders that will form part of an inter-departmental Steering Committee provide guidance own the process while defining a selection criteria for the establishment of a Reference Group to provide oversight on WG outputs.

The workshop also commenced the process to develop a road map outlining the programme of action using stringent project management discipline to ensure that the development of an interim framework for land use classification is a success.

3.2 WORKSHOP STRUCTURE

The workshop was structured to have both plenary and breakaway sessions. The morning of the first day of the work shop was in a plenary session in which the context was set by Ms. Remina Rashopola (Director: Spatial Development Frameworks) and the facilitation team. Review of competencies necessary to deliver the objectives of each working group and stakeholder participation was also in this plenary session. The morning deliberations concluded by discussing the need for an interdepartmental steering committee and a reference panel to support the project.

The remainder of the workshop was mainly in breakaway sessions in which the roadmap development process was undertaken by various WGs. Two feedback sessions by WGs on their deliberations were held.

3.3 REQUIRED COMPETENCIES AND STAKEHOLDERS IN WORKING GROUPS

The participants identified the following as competencies and stakeholders required in each of the WGs:

3.3.1 FRAMEWORK

3.3.1.1 COMPETENCIES REQUIRED
Members should be multi-disciplinary and not just planners
Strong project management coordination skills
Academics and/or universities needed
Coordinators of other working groups to be part of the framework WG
 blend between indigenous and non-indigenous expertise

3.3.1.2 KEY STAKEHOLDERS REQUIRED

The first workshop of phase 2 identified the following stakeholders as key participants to this working group:

- Data custodians (as identified by CSI)
- Metros
- CSIR
- StatsSA
- Local municipalities
- Dept of Minerals & Energy
- DEA
- ESKOM
- Provincial planning commission
- Legislation institutions

The second workshop included the following:

- SALGA
- Department of Water Affairs
- Department of Agriculture
- Different spheres of government needed
- SABS
- NRCS (National Regulator for Compulsory Specifications)
- The Presidency
- Municipality representation
- International Expertise (Reference panel)
- DRDLR (NGI)
- Department of Defense
3.3.2 DEFINITIONS

3.3.2.1 COMPETENCIES REQUIRED

- Legal expertise
- Support for different languages

3.3.2.2 KEY STAKEHOLDERS REQUIRED

- SALGA
- Department of Water Affairs
- Department of Agriculture
- SABS
- NRCS (National Regulator for Compulsory Specifications)
- The Presidency
- Municipality representation
- International Expertise (Reference panel)
- DRDLR (NGI)
- Department of Defense
- Determine who needs to be in the WG and who needs to be consulted

3.3.3 CLASSIFICATION

3.3.3.1 COMPETENCIES REQUIRED

- Expertise in land use classification
- Individuals who have worked with a wide range of land uses
- Remote sensing expertise

3.3.3.2 KEY STAKEHOLDERS REQUIRED

The first workshop of phase 2 identified the following stakeholders as key participants to this working group:

- SALGA
- Houses of traditional leaders
- Parastatals: Eskom, SANRAL, Transnet, Housing Development Agency, etc
• All national departments
• All provincial departments (it will need to be driven by the Premiers, to ensure participation)
• Universities
• The private sector can be invited, such as mining houses
• Consultants who do land use mapping
• Organized labour
• SANDF (which uses international military mapping standards from DGIWG)

The second workshop included:
• Department of Water Affairs
• Department of Agriculture
• Department of Environmental Affairs
• Different spheres of government needed
• SABS
• NRCS (National Regulator for Compulsory Specifications)
• The Presidency
• Municipality representation
• International Expertise (Reference panel)
• DRDLR (NGI)
• Department of Defense

3.3.4 SYMBOLOGY

3.3.4.1 COMPETENCIES REQUIRED

• There was a debate regarding how to produce maps (colour or black and white)
• Highlighted that metros need to be part of this working group as they do this kind of work everyday
• Question: whether or not there are any international standards on symbology in terms of colour and symbols?
• Graphic communication is important keeping in mind colour blindness
• Accessibility to all South Africans must be considered as the information is important to all
• Question: is the map going to be produced for GIS?
• Requirement for monocracy symbols
• Horizontal and vertical aspects on maps should be drawn in distinct transparency
• Borrow or build upon work from KZN
• Reproduction/colour/shapes

3.3.4.2 KEY STAKEHOLDERS REQUIRED

• GCIS
• Metros
• Graphic designers
• Gauteng Economic Development
• Software and hardware vendors

3.4 INTERDEPARTMENTAL STEERING COMMITTEE

Some comments, suggestions and questions that arose from the session are as follows:

• Roles and responsibilities-interdepartmental
• Engagement with traditional leaders must be through the house of traditional leaders
• “Interdepartmental” needs clarification as there are stakeholders representing a wider consistency interested in the process
• Concerns were raised regarding the level at which the committee must be pitched. If this is high, it may be detached from the actual process
• It is key that the committee should not duplicate WGs roles
• Should the working committee provide a platform for continuous civic engagements?
• Is there a need for steering committee if there is a project management team?
• Questions were raised if the Steering Committee functions should be executed by existing committees (Spatial Information and SALGA as an umbrella for municipalities as key clients)
• The need for a steering committee function was confirmed and the DRDLR was tasked with establishing this committee

3.5 REFERENCE PANEL

Some comments, suggestions and questions that arose from the session are as follows:

• Working groups will be bouncing their ideas through this panel
• Number of experts that will be needed are approximately 5 to 6
• Should the people in this working panel still be part of working groups? A criteria needs to be developed (for objectiveness)
• Working groups will be led by consultants who are recruited through a competitive bid
• This group should always be available to consult with the process
• DRDLR was tasked with clearly defining the ToR and constitution of this panel

3.6 ROADMAP DEVELOPMENT PROCESS

The following process was applied to developing the roadmap with the workshop’s participants:

<table>
<thead>
<tr>
<th>Plan</th>
<th>Facilitate</th>
<th>Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Establish broad objectives</td>
<td>• Conduct facilitation</td>
<td>• Review outcomes</td>
</tr>
<tr>
<td>• Establish required outcomes of specific facilitation request</td>
<td>• Establish blockages to obtaining desired outcomes</td>
<td>• Establish gaps</td>
</tr>
<tr>
<td>• Review existing documentation</td>
<td>• Navigate blockages</td>
<td>• Recommend process and content requirements for meeting broader objectives</td>
</tr>
<tr>
<td>• Confirm required outcomes</td>
<td>• Steer group towards required outcomes</td>
<td></td>
</tr>
<tr>
<td>• Establish and select appropriate methodology for outcomes</td>
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</tr>
</tbody>
</table>
3.7 ROADMAP DEVELOPMENT FACILITATION

3.7.1 VRM PHILOSOPHY OF PROGRAMME DESIGN AND EXECUTION

To ensure a process that is both robust and clear, the approach/methodology adopted is one that applies principles of benefits realization. The Value Realization Management Framework (VRM) © was applied. This methodology synthesizes programme development using strategic management principles. Participants were taken through the rationale of VRM as a philosophy of programme design and execution.
3.7.2 ROADMAPPING DEVELOPMENT PROCESS

The workshops hosted to date have been critical in establishing a purpose or context for the envisaged programme. As such, the specific outcomes of the working groups were a collation of activities to be conducted and were not specifically articulated within a roadmap framework.

To commence the process of roadmap development, participants were provided with a template which highlighted the requirements that were to be completed. The template is shown below:

The individual WGs embarked on a process of roadmap development in breakaway sessions during the afternoon of 7th August and morning of 8th August 2013 resulting Value Proposition and WGs outcomes being clearly defined and development of roadmaps for each of the working groups.

Information obtained from previous workshops formed the basis of content used to populate the draft roadmap template provided to participants. The session hosted on the 7th and 8th August provided 7 contact hours with the working group within which a roadmap was required as an outcome. Due to the extensive deliberations held to confirm the project’s objective the 7 contact hours was not sufficient to holistically complete individual roadmaps. Recommendations for completing this process is provided in section 3:10.
3.8 VALUE PROPOSITION AND WORKING GROUP PROJECT OUTCOMES

The activities listed from previous workshops did not speak to a common value proposition as was evidenced by the extensive time spent articulating a single value proposition to which the four working groups individually and collectively contributed. The objectives derived from previous sessions were reworked to SMART goals and activities that had been listed were revised to align to specific goals.

The process that involved extensive but guided deliberations resulted in the project’s value proposition and WGs outcomes that will guide all activities leading to the development of an interim framework for land use classification.
### 3.9 WORKING GROUP ROADMAPS

#### 3.9.1 CLASSIFICATION FRAMEWORK ROADMAP

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Classification Frameworks</th>
<th>Time</th>
<th>R</th>
<th>A</th>
<th>C</th>
<th>I</th>
<th>Resources</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals</strong></td>
<td><strong>Priority</strong></td>
<td><strong>measurement / Indicators</strong></td>
<td><strong>Initiatives / Activities</strong></td>
<td><strong>Dependencies</strong></td>
<td><strong>Start Date</strong></td>
<td><strong>End Date</strong></td>
<td><strong>Duration</strong></td>
<td><strong>People / Stakeholders</strong></td>
</tr>
<tr>
<td><strong>Objective 1</strong></td>
<td><strong>To design a framework</strong></td>
<td><strong>for classification</strong> (to include the intent of SPLUMA) including differentiated feature classes (Feature classes are discrete or indiscrete objects effecting planning)**</td>
<td><strong>2013/08/08</strong></td>
<td><strong>2013/08/23</strong></td>
<td><strong>15</strong></td>
<td><strong>Working Group 1</strong></td>
<td><strong>DRDLR</strong></td>
<td><strong>Other Workgroups</strong></td>
</tr>
<tr>
<td><strong>To transform the current spatial pattern into a sustainable developmental state</strong></td>
<td><strong>Consensus on Framework</strong></td>
<td><strong>Design a methodology to include &quot;good practice&quot; from the various provinces, Outline the objective, review existing work/research / processes nationally and internationally, Distill a conceptual framework based on the research and analysis that is able to unlock relevant, flexible and scale specific and classification systems</strong></td>
<td><strong>Provide the lead for the other workgroups</strong></td>
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<tr>
<td><strong>Objective 2</strong></td>
<td><strong>To propose methods for aligning existing land use classification systems with designed framework for NLUC</strong></td>
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<tr>
<td><strong>Objective 3</strong></td>
<td><strong>To develop measures for phased /incremental transition to NULC</strong></td>
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<tr>
<td><strong>Objective 4</strong></td>
<td><strong>To provide overall co-ordination of all NLUC working groups</strong></td>
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<tr>
<td><strong>Objective 5</strong></td>
<td><strong>To undertake policy review - international, regional and national level - including RSA ratified conventions and treaties</strong></td>
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</tr>
</tbody>
</table>
### 3.9.2 LAND USE DEFINITIONS ROADMAP

<table>
<thead>
<tr>
<th>Key Performance Area</th>
<th>Land Use Definitions</th>
<th>Time</th>
<th>R</th>
<th>A</th>
<th>C</th>
<th>I</th>
<th>Resources</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong></td>
<td>A directory of land use definitions for the taxonomy of land use</td>
<td></td>
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<tr>
<td></td>
<td>Distinguish between land cover and land use</td>
<td>2013/09/01</td>
<td>30/1/2014</td>
<td>3 months</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>First clear definitions</td>
<td>2013/09/01</td>
<td>30/11/2013</td>
<td>3 months</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Identify existing land use and land cover definitions</td>
<td>2013/09/01</td>
<td>30/1/2014</td>
<td>3 months</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Service Providers for the footwork; Separate consultation with custodians and stakeholders</td>
<td>2013/09/01</td>
<td>30/11/2013</td>
<td>3 months</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Establish gaps in existing legislation; within the separate sectors; refining; Test existing definition of land use vs legal drafters/ town planner</td>
<td>2013/09/01</td>
<td>30/1/2014</td>
<td>3 months</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Establish all existing legislation, schemes; definitions used in govt institutions, obtain the most current information compare and contrast in broad categories. In an electronic format by 30/11/2013 for comments. Meet with WG 2; 1/20/2014</td>
<td>2013/09/01</td>
<td>30/11/2013</td>
<td>3 months</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Provide universal acceptable land use definitions</td>
<td>2013/09/01</td>
<td>30/1/2014</td>
<td>3 months</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
</tr>
<tr>
<td></td>
<td>Complete information/ 1st Draft</td>
<td>201/01/2014</td>
<td>21/01/2014</td>
<td>2 Days</td>
<td>WG2</td>
<td>WG2</td>
<td>SP</td>
<td>internal</td>
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<tr>
<td></td>
<td>Two-day Meeting with WG 2</td>
<td>20/01/2014</td>
<td>31/03/2014</td>
<td>20/01/2014</td>
<td>2moths</td>
<td>10 days</td>
<td>WG2</td>
<td>SP</td>
</tr>
<tr>
<td></td>
<td>Establish gaps in existing legislation; within the separate sectors; refining; Test existing definition of land use vs legal drafters/ town planner</td>
<td>201/01/2014</td>
<td>21/01/2014</td>
<td>2 Days</td>
<td>WG2</td>
<td>WG2</td>
<td>govt institutions, page 23 26-27 Aug workshop report</td>
<td>Low</td>
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<tr>
<td></td>
<td>Legal Drafters/ Town Planner</td>
<td>201/01/2014</td>
<td>20/01/2014</td>
<td>2moths</td>
<td>10 days</td>
<td>WG2</td>
<td>SP</td>
<td>Full team members for proper consultation/ not agree</td>
</tr>
</tbody>
</table>

**Description**
- SP would develop definitions for sectors and consult
<table>
<thead>
<tr>
<th>Key Performance Area</th>
<th>Land Use Definitions</th>
<th>Time</th>
<th>R</th>
<th>A</th>
<th>C</th>
<th>I</th>
<th>Resources</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals</strong></td>
<td><strong>Priority</strong></td>
<td><strong>Indicators</strong></td>
<td><strong>Initiatives / Activities</strong></td>
<td><strong>Dependencies</strong></td>
<td><strong>Start Date</strong></td>
<td><strong>End Date</strong></td>
<td><strong>Duration</strong></td>
<td><strong>People / Stakeholders</strong></td>
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<tr>
<td>Objective 1</td>
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</table>

**Objective 1**  
A directory of land use definitions for the taxonomy of land use

Legal Aspect, legal vs illegal use; submit 2nd Draft for comments WG 1, 2, 3 on 31/03/2014

Feedback from WG 1, 3 regard to Classification Categories  
WG1, 3 share information  
2014/01/04  
14/4/2014  
2 weeks  
WG2  
WG2  
Broader group; WG 1, 3

Address gaps, duplication, Shortcomings; further refinements; complete final product 3rd Draft  
Feedback from all the groups  
15/4/2014  
30/04/2013  
2 weeks  
WG2  
WG2  
Departments if needed  
Broader group; WG 1, 3, 4  
30% budget  
Delay submission  
Low  
L  
Clear direction during previous phases/ or allow for an additional group meeting
### 3.9.3 LAND USE CLASSIFICATION ROADMAP (REVIEW)

<table>
<thead>
<tr>
<th>Performance Area</th>
<th>Land Use Classifications</th>
<th>Time</th>
<th>R</th>
<th>A</th>
<th>C</th>
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<th>Resources</th>
<th>Risks</th>
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<tbody>
<tr>
<td><strong>Goals</strong></td>
<td><strong>Measure of Success</strong></td>
<td><strong>Priority</strong></td>
<td><strong>Initiatives / Activities</strong></td>
<td><strong>Indicators</strong></td>
<td><strong>Dependencies</strong></td>
<td><strong>Start Date</strong></td>
<td><strong>End Date</strong></td>
<td><strong>Duration</strong></td>
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<tr>
<td><strong>Objective 1</strong></td>
<td>to consolidate existing classes to a generic and widely accepted land use classification system</td>
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<tr>
<td>Develop an inventory of land uses (classes and broad categories) and land use classification systems and methods used in their development, including land use schemes and SDFs.</td>
<td>An extensive database of all local land use classification systems</td>
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<td></td>
<td>identify all potential stakeholders and contacts; make contact with persons mentioned above; acquire their land use classification system/inventory of land uses</td>
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<td>Inventory lists, by the 3 tiers of government</td>
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<tr>
<td>investigate local and international land use classification systems and legends, concentrating on multiple land uses in one area</td>
<td>An analysis report on each classification system</td>
<td>2</td>
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<tr>
<td>Performance Area</td>
<td>Land Use Classifications</td>
<td>Time</td>
<td>Resources</td>
<td>Risks</td>
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<tr>
<td><strong>Goals</strong></td>
<td>Measure of Success</td>
<td>Priority</td>
<td>Initiatives / Activities</td>
<td>Indicators</td>
<td>Dependencies</td>
<td>Start Date</td>
<td>End Date</td>
<td>Duration</td>
</tr>
<tr>
<td>Objective 1</td>
<td>to consolidate existing classes to a generic and widely accepted land use classification system</td>
<td>3</td>
<td>Report</td>
<td>Salaries and travel</td>
<td>can easily become a mess, need a highly competent group to do this analysis who must be very knowledgeable on land use and need sufficient time to do this research</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

To analyse the existing classification systems in order to consolidate into a single standardized classification system.
### 3.9.4 SYMBOLOGY ROADMAP

<table>
<thead>
<tr>
<th>Key Performance Area</th>
<th>Symbology</th>
<th>Time</th>
<th>R</th>
<th>A</th>
<th>C</th>
<th>I</th>
<th>Resources</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review the existing land use symbology sets that have been developed and are in use in various spheres of government e.g. cartographers and planners</td>
<td>1 A national symbology set</td>
<td>conduct research (literature review, focus groups)</td>
<td>on available symbology sets</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>not getting access to all spheres and cartographers, insufficient resources</td>
</tr>
<tr>
<td>• Review international best practice and local best practice based on cognitive principles and multi-cultural sensitivity</td>
<td>2 international best practice report, national best practice report, contact focus groups and conduct literature review</td>
<td>on available documentation from national and international sources and interaction with focus groups</td>
<td>0</td>
<td>Anthony Pharao (IHO), Victoria Rautenbach (UP), Nancy Odendaal (UCT)</td>
<td></td>
<td></td>
<td></td>
<td>insufficient resources</td>
</tr>
<tr>
<td>• Review current symbology techniques including color coding using RGB with values, including the need for a white and black printing conforming to printing press standards for consistency between on-screen display and</td>
<td>4 review report</td>
<td>obtain printing specifications, source national printing standards, develop / source colour swatch with approved colours for land use, colour matching with approved SABS standard</td>
<td>on available printing specifications and national printing standards being available</td>
<td>0</td>
<td></td>
<td></td>
<td></td>
<td>incompatible programs, symbology, hardware and software limitations</td>
</tr>
</tbody>
</table>
### Objective 1

To formulate a uniform software independent and media independent land use symbology set, with built in semantics regarding the representation of the classification features at all levels.

<table>
<thead>
<tr>
<th>Key Performance Area</th>
<th>Symbology</th>
<th>Time</th>
<th>R</th>
<th>A</th>
<th>C</th>
<th>I</th>
<th>Resources</th>
<th>Risks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goals</td>
<td>Priority</td>
<td>Indicators</td>
<td>Initiatives / Activities</td>
<td>Dependencies</td>
<td>Start Date</td>
<td>End Date</td>
<td>Duration</td>
<td>People / Stakeholders</td>
</tr>
<tr>
<td>hardcopy output</td>
<td>To harmonize usage across different jurisdictions To improve common understanding</td>
<td>6</td>
<td>guidelines for land use symbology</td>
<td>on methodology as defined by working group 1, definitions from working group 2, and classification from working group 3</td>
<td>incomplete and inconsistent symbology definitions</td>
<td>low</td>
<td>high</td>
<td>WG 3 classification must provide required input</td>
</tr>
<tr>
<td>• Develop a set of guidelines describing the methodology for Symbology publication and maintenance</td>
<td>guidelines for land use symbology</td>
<td>6</td>
<td>minutes of interactive meetings, programme of interaction</td>
<td>email communication, attending meetings, workshops, electronic communication depends on other 3 working groups</td>
<td>meetings not taking place, insufficient inputs from other working groups</td>
<td>low</td>
<td>high</td>
<td>ensure meaningful meetings and inputs with substance</td>
</tr>
<tr>
<td>• Collaborate and contribute to the other WGs through constant interaction</td>
<td>minutes of interactive meetings, programme of interaction</td>
<td>5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Examine alternatives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Key Performance Area</td>
<td>Symbology</td>
<td>Time</td>
<td>R</td>
<td>A</td>
<td>C</td>
<td>I</td>
<td>Resources</td>
<td>Risks</td>
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<tr>
<td>Goals</td>
<td>Priority</td>
<td>Indicators</td>
<td>Initiatives / Activities</td>
<td>Dependencies</td>
<td>Start Date</td>
<td>End Date</td>
<td>Duration</td>
<td>People / Stakeholders</td>
</tr>
<tr>
<td><strong>Objective 1</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>determine initial user needs regarding land use symbology based on classification derived from working group 3</td>
<td>3</td>
<td>3</td>
<td>read reports from classification group and symbolize land use classification from working group 3</td>
<td>depends on inputs from working group 3</td>
<td>0</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

To formulate a uniform software independent and media independent land use symbology set, with built in semantics regarding the representation of the classification features at all levels.
3.10 WAY FORWARD AND RECOMMENDATIONS

The journey towards an interim framework for land use classification is articulated below with actions that are completed, have started, and those not started illustrated.

The roadmaps drafted in the 7 hours allocated are incomplete from a content perspective. It is key that work with specific teams needs to be undertaken to finalize the roadmaps. It is recommended that at least two to four key members be selected from each working group and be requested to lead the team effort to fill in the gaps in each group’s roadmap. A session can then be convened with these selected working group members to finalize and align the various roadmaps.

From a governance point of view, a Steering Committee should be convened with appropriate terms of reference to guide deliverables, and a special team (reference panel) be constituted to provide technical
guidance to the process. Time frames and lead times for holistic programme delivery should be realistically and tightly defined to ensure success.

It is further recommended that programme management capability is built in for this program. The focus of programme management will be centered around the concept of delivering value, when the value proposition is determined and a business case is derived. The criteria for value definition forms part of the planning process and is essential in defining amongst other things:

- the value to be ultimately realized (what key needs have been fulfilled)
- value to be implemented (where, what resources, by whom, by when)
- value to be measured (what has changed and how do we measure it)
- value to be owned by the stakeholders

Successful programs are managed by high performance programme teams. These comprise

- Project Manager
- Project Administrator
- Journey Manager (Communications / Change Manager)
- Project coordinator

These resources will augment the organization’s, capability and expertise in the field of project management with distinctive competency / characteristic in project management
4 CONCLUSIONS

The workshops contributed to advancing the process of moving towards the development of an interim LUCF for South Africa as outlined in the 2nd phase of the project. The focus areas of the four working groups have been further developed, key issues and activities identified and the way forward proposed. The need to have a well designed work-package for each of the WGs will be required. Additionally, coordination of the WGs and various stakeholders including the different spheres of government, national, provincial and local will be essential to the success of developing an Interim Framework for Land Use Classification. The workshop participants have also recommended the establishment of an additional working group that will specifically work on curriculum development.

Further focused discussions may be required to finalize the working groups’ terms of reference and a road map towards the development of an interim framework for the national land use classification standard, methodology, and symbology for South Africa.
ANNEX 1: REFERENCES

ANNEX 2: WORKSHOP PROGRAMME PHASE 2 – WORKSHOP 1

CHIEF DIRECTORATE: SPATIAL PLANNING AND INFORMATION
CAPITOL TOWERS, 224 CHURCH STREET, PRETORIA, TEL: 012 312 9371, FAX: 012 - 321 6808.

CHAIR: DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM
DAY ONE – WEDNESDAY 26TH JUNE 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Responsibility</th>
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<tbody>
<tr>
<td>08:00 -09:00</td>
<td>Registration</td>
<td>All</td>
</tr>
<tr>
<td>09:00-09:30</td>
<td><strong>Opening Session</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Welcome</td>
<td>Mr. Sunday Ogunronbi</td>
</tr>
<tr>
<td></td>
<td>• Introductions</td>
<td>Chief Director: SPI</td>
</tr>
<tr>
<td></td>
<td>• Purpose of workshop</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• DRDLP perspective/setting the scene</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Presentations</strong></td>
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<tr>
<td>09:30 – 10:00</td>
<td>Project overview</td>
<td>Ms. Remina Rashopola</td>
</tr>
<tr>
<td>10:00 – 10:20</td>
<td>International Perspective</td>
<td>Ms. Cecilia Njenga</td>
</tr>
<tr>
<td>10:20 - 11:00</td>
<td>Land Use Classification: Agriculture</td>
<td>Mr. Paul Avenant</td>
</tr>
<tr>
<td></td>
<td>Land Use Classification: Forestry</td>
<td>DAFF</td>
</tr>
<tr>
<td></td>
<td>NGI Classification</td>
<td>Ms. Julie Verhulp</td>
</tr>
<tr>
<td>11:00 - 11:30</td>
<td>Tea break</td>
<td></td>
</tr>
<tr>
<td>11:30 – 12:10</td>
<td>Discussion</td>
<td>Facilitation Team</td>
</tr>
<tr>
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<td>Introduction to Working Groups</td>
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<tr>
<td>12:10 – 13:00</td>
<td>Lunch</td>
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<tr>
<td>13:00 -14:30</td>
<td>Working Groups Break-away Session One:</td>
<td>All</td>
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<tr>
<td></td>
<td>• Define TOR’s</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Purpose &amp; Scope of work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Roles and responsibilities</td>
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<tr>
<td>14:30-14:50</td>
<td>Tea Break</td>
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<tr>
<td>14:50 – 17:00</td>
<td>Break Away Session Continue</td>
<td>All</td>
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<tr>
<td>17:00-17:30</td>
<td>Reflections for Day one</td>
<td>WG Facilitators</td>
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DAY TWO – THURSDAY 27TH JUNE 2013

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Responsibility</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:00 – 09:15</td>
<td>Recap</td>
<td>Facilitation Team</td>
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<tr>
<td>09:15 – 10:15</td>
<td>Working Groups Feedback session</td>
<td>All Groups</td>
</tr>
<tr>
<td>10:15 -11:15</td>
<td>Discussion</td>
<td>Facilitation Team</td>
</tr>
<tr>
<td>11:15- 11:30</td>
<td>Tea</td>
<td></td>
</tr>
<tr>
<td>11:30 – 11:45</td>
<td>Introduction to WG Session 2</td>
<td>Facilitation Team</td>
</tr>
<tr>
<td>11:45 – 13:00</td>
<td>WG Session Two: Break Away</td>
<td>All</td>
</tr>
<tr>
<td></td>
<td>• Develop draft action Plan</td>
<td></td>
</tr>
<tr>
<td>13:00 – 14:00</td>
<td>Working groups feedback session and discussion</td>
<td>Facilitation Team</td>
</tr>
<tr>
<td>Time</td>
<td>Activity</td>
<td>Location</td>
</tr>
<tr>
<td>----------</td>
<td>-------------------------------</td>
<td>----------</td>
</tr>
<tr>
<td>14:00 – 14:30</td>
<td>Way forward and closure</td>
<td>CD:SPI</td>
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<tr>
<td>14:30 -</td>
<td>Lunch &amp; Departure</td>
<td>All</td>
</tr>
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</table>
## ANNEX 3: PHASE 2 - WORKSHOP 1 PARTICIPANT LIST

<table>
<thead>
<tr>
<th>NAME &amp; SURNAME</th>
<th>ORGANISATION</th>
<th>WORKING GROUP</th>
<th>Days Attended</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Mr Zain Ally</td>
<td>City of Johannesburg</td>
<td>Definition</td>
<td>Day1</td>
</tr>
<tr>
<td>2. Mr Adefemi Adebye</td>
<td>DRD&amp;LR</td>
<td>Definitions</td>
<td>Both</td>
</tr>
<tr>
<td>3. Mr Paul Avenant</td>
<td>DAFF</td>
<td>Classification</td>
<td>Both</td>
</tr>
<tr>
<td>4. Mr Jeremy Benjamin</td>
<td>Dept of Environ Affairs and Dev Planning</td>
<td>Classification</td>
<td>Both</td>
</tr>
<tr>
<td>5. Mr Gavin Benjamin</td>
<td>Dept of Rural Dev and Reform</td>
<td>Framework</td>
<td>Both</td>
</tr>
<tr>
<td>6. Mr Johan Bester</td>
<td>DAFF-Forestry</td>
<td>Framework</td>
<td>Both</td>
</tr>
<tr>
<td>7. Ms Lerato Buthelezi</td>
<td>DRD&amp;LR</td>
<td>Symbology</td>
<td>Both</td>
</tr>
<tr>
<td>8. MrThembeni Boyana</td>
<td>DRDAR EC</td>
<td>Symbology</td>
<td>Day1</td>
</tr>
<tr>
<td>9. Ms Martha Chauke</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>10. Ms Tsakani Chauke</td>
<td>Planning and LED</td>
<td>Classification</td>
<td>Day1</td>
</tr>
<tr>
<td>11. Dr Derek Clarke</td>
<td>Dept of Rural Dev and Reform</td>
<td></td>
<td>Day1</td>
</tr>
<tr>
<td>12. Mr Piet Conchar</td>
<td>City Of Johannesburg</td>
<td>Classification</td>
<td>Both</td>
</tr>
<tr>
<td>13. Mr Antony Cooper</td>
<td>CSIR</td>
<td>Classification</td>
<td>Both</td>
</tr>
<tr>
<td>14. Dr Maria Coetzee</td>
<td>CSIR</td>
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<td>Day1</td>
</tr>
<tr>
<td>15. Mr Enock Mhlanga</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>16. Mrs Pat Luckin</td>
<td>COGTA</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>17. Prof Mark Oranje</td>
<td>Academic: UP</td>
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<td>Day1</td>
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<tr>
<td>18. Mr Craig Schwebe</td>
<td>Afriscope</td>
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</tr>
<tr>
<td>19. Mr Stephanus Minnie</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>20. Ms Helena Fourie</td>
<td>Department of Water Affairs</td>
<td></td>
<td>Day1</td>
</tr>
<tr>
<td>21. Ms Anneliza Collett</td>
<td>DAFF</td>
<td></td>
<td>Day1</td>
</tr>
<tr>
<td>22. Hein Lindeman</td>
<td>DAFF</td>
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<td>Day1</td>
</tr>
<tr>
<td>23. Mr Kuhnert Wally</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
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</tr>
<tr>
<td>24. Mr Hildergard Rohr</td>
<td>iConsulting</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>25. Mr Emmanuel Makamu</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>26. Ms A van Dyk</td>
<td>Department of Water Affairs</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>27. Ms Mpho Mashau</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>28. Mrs Liezel Ahjum</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
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</tr>
<tr>
<td>29. Mr Dubazane Mthetheleli</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
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</tr>
<tr>
<td>30. Mr Tshepiso Monnakgotla</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>31. Mr Ngwako Mamepele</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td></td>
<td>Both</td>
</tr>
<tr>
<td>32. Mr Louise Cremer</td>
<td>City Planning, Ekurhuleni Metro</td>
<td>Classification</td>
<td>Day1</td>
</tr>
<tr>
<td>33. Ms Nolusindiso Davids</td>
<td>Buffalo City Metropolitan</td>
<td>Framework</td>
<td>Both</td>
</tr>
<tr>
<td>34. Ms Kelebogile Dilwane</td>
<td>IDP Coordinator</td>
<td>Symbology</td>
<td>Both</td>
</tr>
<tr>
<td>35. Mr Neels du Toit</td>
<td>Gauteng Office of the Premier</td>
<td></td>
<td>Both</td>
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<tr>
<td>36. Mr Sam Dagane</td>
<td>DRD&amp;LR</td>
<td>Symbology</td>
<td>Day2</td>
</tr>
<tr>
<td>37. Mr Onice Diko</td>
<td>Mfolozi Local Municipality</td>
<td>Classification</td>
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<tr>
<td>38. Mr Gerhard De Bruin</td>
<td>Dept of Rural Dev and Land Reform</td>
<td>Framework</td>
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<tr>
<td>39. Ms Michell Denner</td>
<td>DRD&amp;LR</td>
<td>Classification</td>
<td>Day1</td>
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<tr>
<td>40. Ms Annemarie Fish</td>
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<tr>
<td>41. Mr Werner Fourie</td>
<td>I@Consulting</td>
<td>Classification</td>
<td>Day1</td>
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<tr>
<td>42. Mr Patrick Futshane</td>
<td>Rural Dev and Agrarian Reform</td>
<td>Symbology</td>
<td>Both</td>
</tr>
<tr>
<td>43. Ms Tshepiso Fose</td>
<td>Bojanala Platinum District Manucipality</td>
<td>Symbology</td>
<td>Both</td>
</tr>
<tr>
<td>44. Mr Schalk Grobbelaar</td>
<td>COGHSTA(NC)</td>
<td>Classification</td>
<td>Both</td>
</tr>
<tr>
<td>45. Ms Relebogile Goitsemdimo</td>
<td>DRD&amp;LR</td>
<td>Symbology</td>
<td>Both</td>
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<tr>
<td>46. Mrs Maggy Hadebe</td>
<td>Ekurhuleni Metropolitan Manucipality</td>
<td>Framework</td>
<td>Both</td>
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<tr>
<td>47. Mrs Ronel Jacobs</td>
<td>COGHSTA(NC)</td>
<td>Definitions</td>
<td>Both</td>
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<tr>
<td>48. Mr Ryno Jacobs</td>
<td>Gert Sibande Manucipality</td>
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</tr>
<tr>
<td>49. Mr Glyn Kelly</td>
<td>City of Ekurhuleni Manucipality</td>
<td>Classification</td>
<td>Day1</td>
</tr>
<tr>
<td>50. Ms Abena Kwayisi</td>
<td>Dept of Rural Dev and Reform</td>
<td>Definitions</td>
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<tr>
<td>No.</td>
<td>Name</td>
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<tr>
<td>51</td>
<td>Mr Lungile Keto</td>
<td>Mhlontho Local Municipality</td>
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<tr>
<td>52</td>
<td>Mr Martin Lewis</td>
<td>SACPLAN</td>
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<td>53</td>
<td>Ms Tshepiso Lentsoane</td>
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<td>Classification</td>
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<tr>
<td>54</td>
<td>Ms Colleen Lekgau</td>
<td>Mogalakwena Municipality</td>
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<td>55</td>
<td>Mr Sedzesani Magelegeda</td>
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<td>56</td>
<td>Mr Mmakgabo Maheyha</td>
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<td>Mr Timothy Maleta</td>
<td>Limpopo Office of the Premier</td>
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<td>58</td>
<td>Mr Ndelefani Mararakanye</td>
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<td>59</td>
<td>Ms Patience Mathebula</td>
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</tr>
<tr>
<td>60</td>
<td>Ms Constance Mathomu</td>
<td>Vhembe District Municipality</td>
<td>Classification</td>
</tr>
<tr>
<td>61</td>
<td>Ms Khanyisa Matshume</td>
<td>COGTA</td>
<td>Symbology</td>
</tr>
<tr>
<td>62</td>
<td>Mr Brain Mdakane</td>
<td>DRDLR</td>
<td>Symbology</td>
</tr>
<tr>
<td>63</td>
<td>Mrs Stefanie Mills Chetty</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td>Symbology</td>
</tr>
<tr>
<td>64</td>
<td>Mr Molefe Mooke</td>
<td>NWDEDECT</td>
<td>Symbology</td>
</tr>
<tr>
<td>65</td>
<td>Ms Mamonyane Mokoena</td>
<td>DDLR</td>
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<tr>
<td>66</td>
<td>Mr Tshisikwawe Mphaphuli</td>
<td>Eskom Holdings SOC Limited</td>
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</tr>
<tr>
<td>67</td>
<td>Mr Wisdom Mpfu</td>
<td>GSDM</td>
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</tr>
<tr>
<td>68</td>
<td>Ms Nonkululeko Myeza</td>
<td>Local Government and Local Affairs</td>
<td>Definitions</td>
</tr>
<tr>
<td>69</td>
<td>Ms Ntombizodwa Mabe</td>
<td>Dept of Rural Development &amp; Land Reform</td>
<td>Symbology</td>
</tr>
<tr>
<td>70</td>
<td>Mr Kobus Munro</td>
<td>Dept of Environ Affairs and Dev Planning WC</td>
<td>Symbology</td>
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<td>71</td>
<td>Ms Dumisani Maluleke</td>
<td>Dept of Water Affairs</td>
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</tr>
<tr>
<td>72</td>
<td>Mr Tilfred Mabuza</td>
<td>Mangaung Metro Municipality</td>
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</tr>
<tr>
<td>73</td>
<td>Mr Anthony Mapuzi</td>
<td>DRDAR EC</td>
<td>Symbology</td>
</tr>
<tr>
<td>74</td>
<td>Mr Tshogo Mutlaneng</td>
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</tr>
<tr>
<td>75</td>
<td>Mr Tladi Msibe</td>
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</tr>
<tr>
<td>76</td>
<td>Ms Naledzani Mudau</td>
<td>SANSA</td>
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</tr>
<tr>
<td>77</td>
<td>Mr Percy Mudau</td>
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<tr>
<td>78</td>
<td>Ms Lungi Nkosi</td>
<td>DRDLR-SPS Mpumalanga</td>
<td>Symbology</td>
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<td>79</td>
<td>Mr Simanga Nkosi</td>
<td>DRDLR</td>
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<td>80</td>
<td>Ms Nongceeba Ngwenya</td>
<td>DRDLR</td>
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<td>81</td>
<td>Mr Matuludi Nkosinathi</td>
<td>Makhuduthamaga Local Municipality</td>
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<td>82</td>
<td>Mr Patrick Nkadimeng</td>
<td>Makhuduthamaga Local Municipality</td>
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<td>83</td>
<td>Ms Nomza Ndubane</td>
<td>OTP Mpumalanga</td>
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<td>84</td>
<td>Mr Phumlani Ngwenya</td>
<td>DRDLR</td>
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<td>85</td>
<td>Ms Noncele Ngwenya</td>
<td>Mvelase Architects</td>
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<td>86</td>
<td>Mr Tshifiwa Nkhwewha</td>
<td>COGTA</td>
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<td>87</td>
<td>Mr Itumeleng Ngoane</td>
<td>SAPI Gauteng</td>
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<tr>
<td>88</td>
<td>Mr Derick O’Brien</td>
<td>City Of Tshwane</td>
<td>Classification</td>
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<tr>
<td>89</td>
<td>Ms Isabel Olivier</td>
<td>Randfontein Local Municipality</td>
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<td>Mr Chukwuemakemane Osuigwe</td>
<td>LTE Consulting, Town Planner</td>
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<td>91</td>
<td>Ms Lucile Peterson</td>
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<td>92</td>
<td>Ms Lisa Pretorius</td>
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<tr>
<td>93</td>
<td>Ms Victoria Rautenbach</td>
<td>University of Pretoria</td>
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<tr>
<td>94</td>
<td>Mr Theo Rebel</td>
<td>WC Municipality, Town Planning</td>
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<tr>
<td>95</td>
<td>Mr Gert Roos</td>
<td>Kwa Zulu Natal COGTA</td>
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<td>96</td>
<td>Mr Raymond Schaller</td>
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<td>Mr Thomas Shilenge</td>
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<td>98</td>
<td>Mr Patric Setsibe</td>
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<td>99</td>
<td>Mr Annette Stoltz</td>
<td>DAFF</td>
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<td>100</td>
<td>Mr Cuthbert Sebeng</td>
<td>DRDLR</td>
<td>Symbology</td>
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<td>101</td>
<td>Mr Hennie Stander</td>
<td>Mangaung Metropolitan Municipality</td>
<td>Classification</td>
</tr>
<tr>
<td>102</td>
<td>Mr John Tlale</td>
<td>Grazivision Architects and Urban Planners</td>
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</tr>
<tr>
<td>103</td>
<td>Ms Asishhu Tshikovhi</td>
<td>DEA</td>
<td>Classification</td>
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</table>
| No. | Name                  | Organization/Role                                    | Department | Date
|-----|-----------------------|------------------------------------------------------|------------|------
| 104 | Mr Mpho Tsekwa        | SALGA Gauteng                                        | Classification | Both
| 105 | Ms Rabelani Tshiswaise| Limpopo Office of the Premier                        | Classification | Both
| 106 | Ms Palesa Tjebane     | Sekhukhune District Municipality                     | Symbology   | Day1
| 107 | Mrs Cornelia Van der Bank | The South African Planning Institute                | Definitions | Both
| 108 | Mr Ben Van der Walt   | Office of the Premier                                |            | Day2
| 109 | Ms Julie Verhulp      | Dept of Rural Development and Land Reform            | Classification | Both
| 110 | Ms Helene Verhoef     | Stats SA                                             | Classification | Both
| 111 | Ms Maartje Weyers     | SAPI EC Western Region                               |            | Both
| 112 | Mr Jeffrey Williams   | City of Cape Town                                    | Classification | Both
| 113 | Mr Tony Walker        | City of Tshwane                                     | Classification | Both
| 114 | Mr Andre Vancoillie   | Chief town and Regional Planner                      | Definitions | Both
| 115 | Ms Nelisiwe Qayiso    | Bojanala Platinum District Municipality              | Symbology   | Both
| 116 | Emmaculate Cindi      |                                                     |            | Day1
| 117 | Mr Paul Strydom       | DRDLR                                                | Symbology   | Both
| 118 | Ms Portia Raphala     | Madibeng Local Municipality                         | Classification | Day2
ANNEX 4: WORKING GROUP GUIDELINES – PHASE 2 - WORKSHOP 1

WORKING GROUP 1: Frameworks, Methodology and Land use meta-language:

Purpose

- To develop a framework and methodology for land use data collection and interpretation
- To harmonize existing land use classifications (e.g. land cover, topographic) using a multi-dimensional approach

This WG will therefore:

- Develop a logical coordination/dedicated and costed structure to coordinate, consult, facilitate cooperation and collaboration between national departments, provincial planning commissions, planning associations, SALGA provincial heads of planning, CD: SPI Provincial Directors, Parastatals, and private sector representative as well as any other relevant stakeholders
- Develop a full list of stakeholders
- Identify other/existing structures where possible to enhance collaboration;
- Coordinate with other WGs to ensure alignment and cooperation on matters that are interrelated and to avoid duplication of efforts in all areas
- Define a framework for land use data management
- Identify and review current system of land use data management
- Develop methods for interoperability of existing systems of land use data management
- Provide guidance on migration to the new classification standard
- To develop a complete, consistent, detailed and up-to-date interim framework for land use classification including a dataset for the country
- Organize continual feedback sessions to stakeholders, in order to address various aspects of the National Land Use Classification system
- Explore the possibility of using a Land Use Meta Language
- Identify technology and innovation necessary in accomplishing the development of a flexible and user friendly land use classification system for the country
- Develop an M&E framework to monitor and evaluate the implementation of the framework
- Collaborate and contribute to the other WGs

Questions

- How do we go about developing a logical coordination mechanism to enable the harmonization of land use management systems in South Africa?
- What resources are required for the implementation of the NLUC framework?
- What approaches should be followed to enable the different methodological approaches for land use management, SDF’s and land use mapping to be integrated?
- If a land use meta-language (LUML) is to be used, how should this be implemented and what are the key steps?
- What technological innovation should be put in place to facilitate this coordination?
- What activities need to be undertaken to develop the framework for a land use classification system?
WORKING GROUP 2: Land Use Definitions

Concepts, definitions and principles: Concepts and principles underpin the development of the land use classification system and provide guidance on how it is to be implemented. Definitions for land use classes need to be effectively developed for a land classification framework. SPLUMA has identified a number of principles for the implementation of land use management systems in the country at all spheres of government.

Purpose

- To identify land uses and their definitions and categories, taking cognizance of existing land use classifications and legislation.

The working Group will:-

- Provide guidance on how users will distinguish between land cover and land use and how they move between the two concepts.
- Define land uses classes and categories
- Liaise with legal experts to develop a consensus on land use definitions based on current legislation
- Liaise with the Working Group on land-use classification to harmonize definitions
- Collaborate and contribute to the other WGs

Questions

- What Concepts and principles are relevant for consideration in developing a land use classification framework?
- How do we go about defining land use classes and categories?
- What legal implications are likely?
- How can lawyers be involved in this process or their opinion obtained to address/avoid legal implications?

WORKING GROUP 3: Land use Classification

A land-use classification is a classification providing information on land use, and the types of human activity involved in land use. It may also facilitate the assessment of environmental impacts on, and potential or alternative uses of, land.

Purpose

- To provide information on land cover and the types of human activity involved in land use.
- To develop a set of rules that will allow land uses in different classifications to be translated into a national land use classification.

The Working Group will:-

- Develop an inventory of land uses (classes and broad categories) and land use classification systems and methods used in their development, including land use schemes and SDFs, a critical component of a framework
- Develop a hierarchical categorization of land use classes (primary, secondary, and tertiary classes)
• Develop categories to be explored further including undeveloped category
• To guide the integration of land uses classes or categories into land use scheme
• Ensure that the classification covers all land uses - the rural and urban land uses must be clearly defined and differentiated, taking indigenous land uses, cultural, and religious and traditional authorities into consideration
• Link to existing classifications for land cover, topography, Spatial Development Frameworks (SDF) including environmental management
• Collaborate and contribute to the other WGs

Questions:-
• What land use classifications currently exist?
• What methodology should be used when designing a classification system?
• How detailed should such a land use classification system be?
• Who is responsible for classifying land uses? Lawyers / Provincial Departments / Municipalities / Open Source Approach?
• What capacities are required by institutions “tasked” with managing land uses (municipalities) to use the classification?
• What supporting mechanisms should be put in place to support implementing institutions?

WORKING GROUP 4: Symbology / Notation

Purpose
• The development of a national symbology set.

This working group will:-
• Review the symbology sets that have been developed and are in use in various spheres of government
• Review what is currently being used by cartographers and planners
• Review current symbology techniques including color coding using RGB with values, including the need for a white and black printing
• Recommend symbology set that is software independent and can be utilized at all levels
• Develop a set of guidelines for Symbology building on the work already done by some stakeholders such as in KwaZulu-Natal (guidelines for zoning schemes) and on SDFs in various provinces
• Collaborate and contribute to the other WGs

Questions
• Is a national land use classification system that is inclusive of symbology important to South Africa?
• What are the various thoughts about symbology creation?
• What methodologies are currently being used?
• How can coordination for a national land use classification (mapping methodology and map production) be facilitated?
• To what level of detail should the development of land use symbology go? How are land uses currently being reported (in Central Business Districts (CBDs) for example)?
• How are matters of multi-land-use in one location currently being addressed? And how are they defined and coded?
• Do we need guidelines to support the development of a national land use symbology set?
• What should be the roles and responsibilities of different institutions in developing standard symbology set?
# ANNEX 5: WORKPLAN TEMPLATE

<table>
<thead>
<tr>
<th>No</th>
<th>Priority Area</th>
<th>Action</th>
<th>Indicator</th>
<th>Lead Institution for implementation</th>
<th>Lead for Reporting</th>
<th>Time Frame¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>NATIONAL LAND USE CLASSIFICATION FRAMEWORK</td>
<td>To develop a framework and methodology for land use data collection and interpretation and to harmonize existing land use classifications using a multi-dimensional approach.</td>
<td>Example: key institutions identified and listed</td>
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<tr>
<td>1</td>
<td>National Land-Use Classification</td>
<td>1.1 Develop a logical coordination/dedicated and costed structure to coordinate, consult, facilitate cooperation and collaboration between national departments, provincial planning commissions, planning associations, SALGA provincial heads of planning, CD: SPI Provincial Directors, Parastatals, and private sector representative as well as any other relevant stakeholders.</td>
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<td>1.2 Develop a full list of stakeholders</td>
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<td></td>
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<td>1.3 Identify other/existing structures where possible to enhance collaboration</td>
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<td></td>
<td></td>
<td>1.4 Coordinate with other WGs to ensure alignment and cooperation on matters that are interrelated and to avoid duplication of efforts in all areas</td>
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¹ Timeframe is based on a 12 month period
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<tr>
<td>1.5</td>
<td></td>
<td>Define a framework for land use data management</td>
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<td>1.6</td>
<td></td>
<td>Identify and review current system of land use data management</td>
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<td>1.7</td>
<td></td>
<td>Develop methods for interoperability of existing systems of land use data management</td>
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<td>1.8</td>
<td></td>
<td>Provide guidance on migration to the new classification standard</td>
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<td>1.9</td>
<td></td>
<td>To develop a complete, consistent, detailed and up-to-date interim framework for land use classification including a dataset for the country</td>
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<td>1.10</td>
<td></td>
<td>Organize continual feedback sessions to stakeholders, in order to address various aspects of the National Land Use Classification system</td>
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<td>1.11</td>
<td></td>
<td>Explore the possibility of using a Land use Meta Language</td>
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<td>Identify technology and innovation necessary in accomplishing the development of a flexible and user friendly land use classification system for the country</td>
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<td>1.13</td>
<td>Develop an M&amp;E framework to monitor and evaluate the implementation of the framework</td>
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<td>1.14</td>
<td>Collaborate and contribute to the other WGs</td>
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</table>
LAND USE DEFINITIONS
To identify land uses and their definitions and categories, taking cognizance of existing land use classifications and legislation.

2. **Land-Use Definitions**
   2.1 Provide guidance on how users will distinguish between land cover and land use and how they move between the two concepts.
   2.2 Define land uses classes and categories
   2.3 Liaise with legal experts to develop a consensus on land use definitions based on current legislation
   2.4 Liaise with the Working Group on land-use classification to harmonize definitions
   2.5 Collaborate and contribute to the other WGs

Example: national legislation reviewed for land use definitions

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2 Timeframe is based on a 12 month period
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<td><strong>LAND USE CLASSIFICATION</strong> To provide information on land cover, and the types of human activity involved in land use and to facilitate the assessment of environmental impacts on, and potential or alternative uses of, land.</td>
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<td>3</td>
<td><strong>Land-Use Classification</strong></td>
<td>3.1 Develop an inventory of land uses (classes and broad categories) and land use classification systems and methods used in their development, including land use schemes and SDFs, a critical component of a framework</td>
<td>Inventory lists, by the 3 tiers of government</td>
<td>DRDLR Framework group</td>
<td>DRDLR 1 month, as most of the systems are readily available in electronic form</td>
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<td></td>
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<td>3.2 Develop a hierarchical categorization of land use classes (primary, secondary, and tertiary classes)</td>
<td>Consolidation of existing classifications. It should be circulated to the WG for inputs</td>
<td>Project leader appointed by DRDLR, with the WG and DRDLR</td>
<td>Project leader and DRDLR</td>
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<td>3.3 Develop categories to be explored further including undeveloped category</td>
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<td>This just to consolidate all the candidate classifications, so that they can be</td>
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<td>3.4 To guide the integration of land uses classes or categories into land use scheme</td>
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<td></td>
<td>3.5 Ensure that the classification covers all land uses -</td>
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3 Timeframe is based on a 12 month period
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<td>the rural and urban land uses must be clearly defined and differentiated, taking indigenous land uses, cultural, and religious and traditional authorities into consideration</td>
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<td>3.6 Link to existing classifications for land cover, topography, Spatial Development Frameworks (SDF) including environmental management</td>
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<td>3.7 Collaborate and contribute to the other WGs</td>
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**SYMBOLOGY**  
The development of a national symbology set

| 4.  | **Symbology** | 4.1 Review the symbology sets that have been developed and are in use in various spheres of government | Example: A listing of symbology sets used by municipalities prepared |                       |                   |                 |
|     |               | 4.2 Review what is currently being used by cartographers and planners |                                    |                       |                   |                 |
|     |               | 4.3 Review current symbology techniques including colour coding using RGB with values, including the need for a white and black printing |                                    |                       |                   |                 |
|     |               | 4.4 Recommend symbology set that is software independent and can be utilized at all levels |                                    |                       |                   |                 |
|     |               | 4.5 Develop a set of guidelines for Symbology building on the work already done by some stakeholders such as in KwaZulu-Natal (guidelines for zoning schemes) and on SDFs in various provinces |                                    |                       |                   |                 |

<sup>4</sup> Timeframe is based on a 12 month period
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<td>Collaborate and contribute to the other WGs</td>
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ANNEX 6: WORKSHOP PROGRAMME - PHASE 2 - WORKSHOP 2

WORKSHOP PROGRAMME: NATIONAL LAND USE CLASSIFICATION STANDARD, METHODOLOGY AND SYMBOLOGY/NOTATION
VENUE: IRENE COUNTRY LODGE
DATE: 7-8 AUGUST 2013
CHAIR: DEPARTMENT OF RURAL DEVELOPMENT AND LAND REFORM

<table>
<thead>
<tr>
<th>DAY ONE – WEDNESDAY 7th AUGUST 2013</th>
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<tbody>
<tr>
<td>Time</td>
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<tr>
<td>08:00 -09:00</td>
<td>Registration</td>
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| 09:00-09:30 | Opening Session  
- Welcome  
- Introductions  
- Purpose of workshop  
- Project overview | Mr Timmy Shilenge  
Ms Remina Rashopola |
| 09:30 – 10:00 | Background and overview of first and second workshop outcomes | Facilitation Team |
| 10:00 – 11:15 | Proposed WGs  
- Terms of reference  
- WG members  
- Key stakeholders  
- Required competencies  
- Gaps | Facilitation Team |
| 11:15 – 11:30 | Tea Break |  |
| 11:30 – 12:15 | Interdepartmental Steering Committee  
Membership & ToR | Facilitation Team |
<p>| 12:15 – 13:00 | Reference Panel Membership &amp; ToR | Facilitation Team |
| 13:00 – 14:00 | Lunch |  |
| 14:00 – 14:15 | Roadmap development framework | Facilitation Team |
| 14:15 – 15:30 | Roadmap - Value Planning | Facilitation Team |
| 15:30 – 15:45 | Tea Break |  |
| 15:45 – 17:00 | Roadmap - Value Implementation | Facilitation Team |
| 17:00 - 17:30 | Reflections for Day one | Facilitation Team |</p>
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<tr>
<th>Time</th>
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<tr>
<td>09:00 – 09:15</td>
<td>Recap</td>
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<td>09:15 – 10:45</td>
<td>Roadmap - Value Ownership &amp; Actualisation</td>
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<td>10:45 - 11:00</td>
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<td>11:00 – 12:00</td>
<td>Roadmap Confirmation</td>
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<td>12:00 – 12:30</td>
<td>Way forward and closure</td>
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<td>12:30 – 13:30</td>
<td>Lunch</td>
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<td>Interdepartmental Steering Committee Meeting</td>
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<tr>
<td>1. Ms Remina Rashopola</td>
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<td>2. Ms Liezel Ahjum</td>
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<td>3. Mr Adefemi Adegeye</td>
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<td>4. Mr Paul Avenant</td>
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<td>5. Mr Jeremy Benjamin</td>
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<td>6. Mr Johan Bester</td>
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<td>7. Mrs Maria Coetzee</td>
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<td>8. Dr Serena Coetzee</td>
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<td>9. Mr Antony Cooper</td>
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<td>10. Ms Anneliza Collett</td>
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<td>11. Mr Mthetheleli Dubazane</td>
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<td>13. Mr Gerhard De Bruin</td>
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<td>20. Ms Pat Luckin</td>
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<td>22. Mrs Stefanie Mills Chetty</td>
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<td>23. Mr Enock Mhlanga</td>
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<td>31. Mr Craig Schwabe</td>
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<td>32. Mrs Cornelia Vander Bank</td>
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<td>33. Mr Ben Van der Walt</td>
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<td>37. Ms A van Dyk</td>
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<td>38. Mrs Martha Chauke</td>
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<td>39. Ms Katlego Semono</td>
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<td>40. Mr Tshepiso Monnakgotla</td>
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