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INFORMAL SETTLEMENTS

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ANALYSIS (PEPA)



**The Presidency
National Treasury
National Department of Human Settlements
The Project Shop**

**Informal Settlements Service Delivery Rapid
Verification Study**

Draft Final Report

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Submitted by

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1 Introduction

This report outlines the methodology, results and findings from the rapid assessment undertaken into the Outcome 8 (Informal Settlements) delivery statistics for the Presidency, National Treasury and the National Department of Human Settlements.

1.1 Background

Government's understanding of the effectiveness of specific policy initiatives relies on performance monitoring and evaluation statistics and information flows. In principle, this information is the evidence base on which the allocation of resources to programmes and institutions rests. In practice, the set of monitoring tools for assessing the implementation of human settlements programmes and service delivery initiatives contain a number of potential inaccuracies that potentially affect the accuracy of these statistical outputs.

The South African Government has adopted an outcomes approach which requires all Government entities to work collectively to achieve defined outcomes that have been agreed within 12 areas of focus. One of these outcomes (Outcome 8) includes the upgrading of informal settlements. The target specified in respect of this outcome is '400 000 households provided with upgraded services (in situ or Greenfield) and security of tenure' to be achieved between April 2010 to February 2014.

Currently, the service delivery outcomes in relation to programmes implemented by government departments and delivery agencies relating to the upgrading of households living in informal settlements are not rigorously interrogated, either within each delivery programme, or with respect to programmes in relation to each other. This leads to an unclear and at times ambiguous understanding of informal settlement delivery claims. This in turn can affect planning for future phases of upgrading of services to more acceptable norms, as prior successes and failures are not clear. This lack of clarity can result from one or more of the following:

- **Unclear definitions** of targets and subsidy instruments, implying that delivery is not consistently measured against the same benchmarks;
- **Over-stated reporting** on delivery (for example actual delivery performance not matching reported figures);
- **Double-counting of delivery statistics reported within departments** at different levels for the same household (e.g. counting of serviced sites and houses in the USDG, IRDP UISP and Emergency Housing programmes as separate units of delivery);
- **Double-counting of delivery statistics between departments and agencies** (local government service delivery figures counting the same connections as Human Settlements delivery data, therefore offering a distorted sense of citizen satisfaction);
- **Delivery of service infrastructure without concomitant delivery of the consumption service** or acknowledgement of the performance norm associated with the progressions in programme definition (e.g. water reticulation systems and connections delivered, with no or insufficient water access that denies beneficiary with ability to benefit from installed

infrastructure or an ability / expectation to offer concomitant norms in surrounding areas).

These inaccuracies make clear monitoring of service delivery performance challenging, which in turn affects the South African Government's ability to track the efficacy of its core infrastructure programmes. For instance, the NDHS has relied to date on figures reported by Provincial human settlements departments and metropolitan municipalities for delivery against Outcome 8 targets. These include performance with respect to the Upgrading of Informal Settlements Programme (UISP), the Human Settlements Development Grant (HSDG) and the Urban Settlements Development Grant (USDG) to verify delivery performance. The quarterly reported performance for September, 2013 indicated that 93% of the target of upgrading services to 400 000 households in informal settlements had been achieved, which was a rapid shift upwards from a 63% performance in the previous quarter (June 2013). This has now increased to the end of November, 2013 to over the 400 000 household target.

The necessity to explain delivery performance with more clarity therefore requires a joint, robust scrutiny of the abovementioned funding instruments and programmes for the period under review in order to verify performances and satisfy Cabinet that these claimed performance figures are valid. In addition, disaggregation of these statistics in terms of different levels of service is also required, and where delivery relates to progressive improvement in service standards.

Given the above, Cabinet has requested that a rapid verification study is undertaken to ascertain more accurately the status of tenure and service delivery to households in informal settlements.

1.2 Aim and Objectives of the Rapid Verification Assessment

The Presidency, National Treasury (NT) and National Department of Human Settlements (NDHS) appointed Rhizome Management Services to undertake a rapid verification assessment of the status of tenure and service delivery to households in informal settlements.

The aim of the assignment is to verify service delivery statistics of the SA Government in relation to the upgrading of the estimated 400,000 households in the estimated 2,700 informal settlements in South Africa, over the period April 2010 to September 2013. The assignment aims to quantify the number of households directly impacted by government infrastructure, service and tenure upgrade programmes in response to the Outcome 8 target.

The objectives of the assignment are to:

- Create a framework for testing service delivery claims

- Compile and analyse data using this methodology to rapidly verify service delivery statistics / claims in order to determine as accurately as possible the actual delivery of basic services and tenure to the households living in informal settlements.
- Create a framework that can, over time, lead to a longer-term, more robust, defensible and replicable methodology for service delivery verification into the future.

In order to undertake the verification, a review will be undertaken of reported statistics by the three spheres of government (municipal, provincial and national). In addition the study aimed to address the following:

- The necessity to explain **overall service delivery performance**, which requires a joint, robust scrutiny of the the HSDG (UISP, IRDP and Emergency Housing programmes) and the UISP for the period under review in order to verify performances and satisfy Cabinet that this claimed performance figures are valid.
- Disaggregation of these statistics in terms of **different levels of service** and indicate where delivery relates to progressive improvement in service standards.
- Consider **an improved data collection verification process** that leads to a better recording of programme performance outcomes.

1.3 Base Data for Assessment

The base data for undertaking the assignment are the non-financial delivery and finance expenditure reports for:

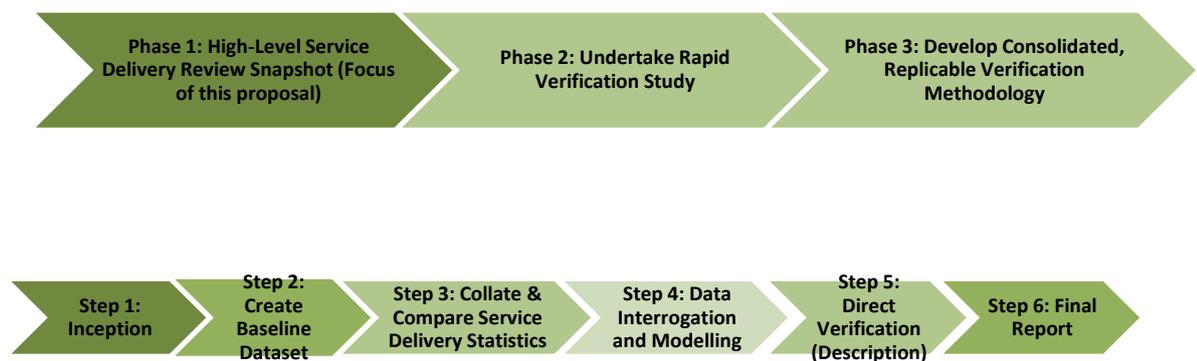
- **Human Settlements Development Grant** (both land and top structure portions)
- **Urban Services Development Grant**
- **Rural Housing Infrastructure Grant**
- **MIG- related transfers** like water via the WSA and municipal own budget commitments;
- **Other IGR transfers** and agencies like Eskom.

2 Methodology, Project Progress & Revised Approach

2.1 Methodology applied

This assignment was envisaged as a six-week, high-level desktop exercise intended to develop a level of clarity regarding the current status of service delivery statistics for informal settlement upgrading across key government programmes. The work was to be undertaken in three phases and comprised six steps as shown in the figure below.

Figure 1: Envisaged methodology for the assignment



The intent was to provide sufficient clarity on delivery statistics by mid-January, 2014 for submission to the Cabinet Meeting at the end of January, 2014.

2.2 Pragmatic Considerations

The Rapid Verification approach envisaged collation, analysis and measurement of service delivery for the identified services delivered by specific programmes on a disaggregated basis. Given the time frame and the time of year (the assignment was undertaken primarily between mid-December, 2013 and mid-January 2014), pragmatism was necessary regarding datasets that were available, and the extent to which the consultants could obtain, analyse and obtain feedback on outcomes¹.

Due to the inability to obtain necessary datasets and access the right people from specific government departments and State Entities given the holiday period, a revised approach was formulated². It was agreed that the study focus on core National Department of Human

¹ For instance, benchmarking available household-level statistics on levels of service delivery was deemed impossible (and un-useful) due to definitional, data access and pragmatic (time) considerations.

² The paucity of updated / consolidated programme information was an issue. Additional data beyond what was readily available and previously analysed could not be improved upon given time, availability and budget constraints.

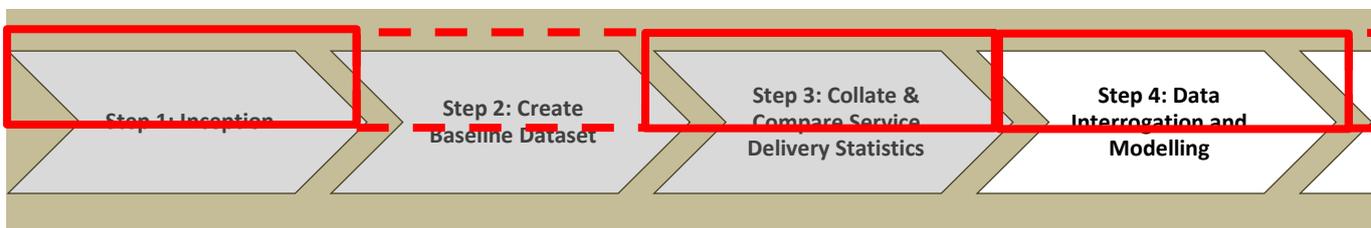
Settlements (NDHS) data, with cross-referencing where possible to other data as an interim step.

Specific liaison was undertaken with specific agencies to access other datasets and to correlate data with other relevant delivery agencies, such as the National Upgrading Support Programme (NUSP) and the Housing Development Agency (HDA). In addition, while limited other datasets were obtained and analysed, these proved unuseful to the analysis at this stage.

The extent to which the intended steps of the methodology proposed in the Terms of Reference was undertaken is as follows (also see **Figure 2** below):

- **Step 1: Project Inception:** Completed.
- **Step 2: Create Baseline Dataset:** Initial analysis and constraints required re-focus on delivery statistics specifically related to Outcome 8.
- **Step 3: Collate and Compare Service delivery Statistics.** Human Settlements Data sources collated, re-captured, aggregated and analysed. Completed in respect of Outcome 8 datasets.
- **Step 4: Data Interrogation & Modelling.** Delivery statistics interrogated in relation to definitional, methodological and statistical aspects. The Outcome 8 data was analysed and interrogated transversally, disaggregated and re-aggregated, as well as compared with other data sources where possible. Completed for available Outcome 8 data.
- **Step 5: Direct Verification.** Claimed delivery data and realistic delivery datasets have been subjected to limited verification against other datasets and existing, known, local level service coverage information datasets at a local or regional level (such as GIS and image data). Note however that only snapshot direct verification was undertaken to illustrate the approach and discrepancies identified, due to the constraints of current brief. This is however envisaged as a critical next step.
- **Step 6: Final Report:** The verification findings, based on the revised methodology, are written up in this report for submission to the Client.

Figure 2: Methodology as applied



2.3 Data sources consulted

The following Human Settlements Programme data related to informal settlements service delivery were used as the core of this analysis:

- National Department of Human Settlements Data: This includes:

- NDHS consolidated and provincial **Practice Note** Reporting Data (HSDG non-financial and financial reporting to Treasury);
- **Outcome 8 Practice Note** Reporting Data (consolidated and provincial);
- **USDG Reporting Data** from metropolitan municipalities;
- **NDHS Housing Subsidy System** active projects data;
- and
- **BAS financial data.**
- Housing Development Agency (HDA) informal settlement and projects datasets, including:
 - **Lapsis** system
 - **StatsSA** 2011 data on informal settlement
 - **Housing Subsidy System spatial mapping.**
- National Upgrading Support Programme (NUSP) datasets (these are mostly vested with HDA as set out above)
- Limited **Provincial data** beyond information in O8 & PN reports was obtained (e.g. Northern Cape and Free State project lists)
- **COGTA non-financial service delivery** data for municipalities

The consultants were not able to obtain and analyse certain envisaged datasets in the time available including:

- Department of Water Affairs datasets
- Department of Rural Development and Land Reform
- CSIR information
- Township Establishment approvals, post office address registers, indigent registers
- Metro GIS datasets & informal settlement datasets (e.g. GP, WC and Ethekwini)

Table 1 below sets out the datasets identified to be analysed, whether the data sets was accessed, key issues identified with these and the assessment outcome.

Table 1: Datasets obtained and analysed

Dataset	Responsible Body	Current Progress	Issues Identified	Outcome
Census 2011	StatsSA	Dataset obtained, analysed.	Definitional concerns re Informal Settlement creates dissonance with other IS datasets.	Obtained, analysed but of limited applicability to analysis
Human Settlements: Practice Notes; Outcome 8 Reports; USDG Reports; Housing Subsidy System.	DHS	Multiple meetings and telecons held with Martie Van Der Berg, Lenie Visser, Victor Ramsumer. Updated PN, Outcome 8, USDG and HSDG data obtained and analysed.	Outcome 8 reporting datasets offer best route to interrogate methodological, reporting and statistical issues with respect to this assignment. This was the focus of analysis. HSS active projects data proved useful to analyse delivery types &	Obtained, analysed, and formed core of analysis. Additional insights and data sources obtained from DHS, specifically

Dataset	Responsible Body	Current Progress	Issues Identified	Outcome
		Additional datasets accessed via H.D.A and other sources.	trends and correlate projects geographically.	HSS database of active projects.
Housing Development Agency Informal Settlements Data	HDA	<ul style="list-style-type: none"> • Informal Settlements Database accessed • Census SA mapping database accessed • HDA informal Settlements identification database accessed. • Informal Settlement study data reviewed (online access to Lapsis) • NUSP Focus Municipalities obtained • HSS Projects data used to undertake limited snapshot geographic verification. 	Incomplete dataset, requires updating of certain information. Provides source of IS data. Assisted to obtain spatial mapping of informal settlements, define definitional concerns and undertake limited snapshot verification of project data.	Meeting with Johan Wallis / Hyren assisted to further informal settlement definitions, identification, mapping and limited HSS verification.
BAS: All Departments	National Treasury	Obtained first round, data verification analysis undertaken .	Very limited ability to obtain finer grained analysis than was obtained during EPR HS, specifically with reference to delivery focus of rapid analysis ToR.	Decision taken to focus on non-financial delivery, with exception of HSS active projects.
NUSP Data	National Upgrading Support Programme	Discussion with Steve Topham and Monty Narsoo held. Referred to H.D.A. Further follow up challenging due to contractual issues.	Limited statistical information available on NUSP projects in Focus Areas yet.	Data not obtained (except data included in HDA datasets).
COGTA: Basic Service Delivery Dataset	Cogta	Contacted and discussed with Vernon Heydenracht. Have and analysed uHABS dataset (2001).	uHABS dataset out of date. Unable to access datasets over holiday period.	Database obtained and analysed, but data rigour concerns halted cross-correlation of datasets.
Local Government Database	National Treasury	Dataset not obtained in time.	Dataset not obtained in time.	Dataset not obtained in time.

Dataset	Responsible Body	Current Progress	Issues Identified	Outcome
Department of Rural Development	Department of Rural Development	Dataset not obtained. Focus on Outcome 8 rural delivery data.	Decision taken to focus on human settlements data & metro areas as starting position.	Dataset not obtained.
Water & Sanitation Data	Department of Water Affairs	Contact made with Head: National Information System (Allestair Wensley) and Fred van Zyl.	Were not be able to effectively disaggregate informal settlements. Were referred to NDHS for data. Concerns from DWA re accuracy of datasets.	Data not obtained
Energy Reticulation	Eskom	Contact made. Discussions held re data, but datasets not obtained.	Accuracy and currency of data raised by Eskom as a concern, as well as ability to disaggregate informal settlement data. May however have spatial mapping.	Data not obtained

2.4 Service Elements included in the analysis

The service elements included in the analysis are shown in **Table 2** below. This identifies the specific elements that are fully or partially included in the definition of Outcome 8 or Outcome 9, and therefore fall within the ambit of this analysis.

Table 2: Services to be included in the analysis

Service Type	Included in Analysis	Included in Outcome 8: Sustainable Human Settlements (Outputs 1, 2 & 3)	Included in Outcome 9: Local Government (Output 2 & 4)
1. Tenure Security	Yes	Yes	No
2. Water Reticulation	Yes	Yes	Yes
3. Sanitation Reticulation	Yes	Yes	Yes
4. Public Lighting Reticulation	Yes	Yes	No
5. House (Top Structure)	Yes	Yes	No
6. Refuse Removal Service	Yes	Yes	Yes
7. Roads & Stormwater Reticulation	No	Yes	No
8. Electricity Access	No	Yes	Yes

3 Key Areas of Analysis

This section provides an overview of key areas of analysis undertaken for the Outcome 8 Rapid Verification Study. The following broad areas of analysis on which to focus the analysis were used. First, core data used to report on Outcome 8 performance from Provincial departments of Human Settlements was analysed. Second, the methodology for collating and disseminating information was interrogated (i.e. the flow of data from Project to Province to NDHS to Cabinet). Third, underlying assumptions used in compiling the Outcome 8 delivery statistics were reviewed. Finally, assessment and correlation of data was undertaken to test for anomalies (e.g. double-counting).

A list of five specific topics were identified and used to frame the analysis, each of which is discussed in more detail in this section.

- **Outcome 8 (&9) Original Intent:** What was the target that was set in Outcome 8? Defining the purpose, intent and focus of Outcome 8 target.
- **Definitional Considerations:** How is Informal Settlements and households in informal circumstances defined in relation to meeting the Outcome 8 target? What is being measured?
- **Housing Funding & Programme Applications:** Which housing funding instruments and programmes are being applied to Outcome 8 targets, in which provinces?
- **Outcome 8 Reporting Framework:** How are statistics being collated? Where are the risks?
- **Statistical Framework & Assumptions:** What statistical enumeration issues are being used to define delivery?

3.1 Original Intent of Outcome 8 and Outcome 9 Delivery

Outcome 8 targets the upgrading of informal settlements. The performance indicator in the Delivery Agreement specified in respect of this outcome is:

“400 000 households provided with upgraded services (in situ or Greenfield) and security of tenure” to be achieved between April 2010 and December 2014”.

This definition has been subjected to alteration in its core intent as it has been implemented over the last five years. The following considerations are highlighted:

- **Households:** this was intended to refer to households predominantly within informal settlements, or facing informal circumstances (such as backyard dwellers).
- **Location:** Originally, the intent of Outcome 8 was to upgrade well-located, mostly urban informal settlements. Note that no mention is made of any control group of municipalities in the original agreement – this has national applicability.
- **In-Situ OR Greenfield:** whereas the definition is clear that both were permissible to meet the target, the intent was to focus on in-situ upgrading, using the Greenfields to cater for relocatees from informal settlements due to development requirements only.
- **Upgraded Services:** These are specified as water, sanitation, refuse collection, roads and public lighting, as well as domestic electrical supply. The intent was that were possible

each household would benefit from upgrades to all of these, where they were not already provided to an acceptable level of service.

- **Security of Tenure:** This is a core requirement (note 'and' in the wording, implying that tenure should be delivered along with service improvements). Intended to deliver any more secure form of tenure for occupants in informal settlement.
- **Unit:** reference is made to serviced site and/or site with top structure (i.e. either is acceptable).

The key focus of Outcome 9 is in relation to addressing poor infrastructure in rural areas and the proliferation of informal settlements in urban areas. The following sub-outputs are applicable³:

- Improve universal access to basic services by 2014 as follows:
 - **Water** from 92% to 100%;
 - **Sanitation** from 69% to 100%;
 - **Refuse** removal from 64% to 75%;
 - **Electricity** from 81% to 92%

3.2 Definitional Considerations

There are wide differences in the working definitions of, estimated number of and extent of informal settlements, as well as in relation to the acceptable levels of service to be applied to upgrading of informal settlements. As a result of this, it is still difficult to obtain consensus on the number of informal settlements requiring upgrading, and the level to which this must occur. The lack of definitional clarity also then affects the ability to collate and compare data on settlements upgraded and services included in these upgrades.

3.2.1 Understandings of Outcome 8 Terminology

Table 3 below sets out the clear definitions of terminology related to informal settlement from **Outcome 8**⁴. Project Lists to be attached to delivery agreements were also eluded to in Outcome 8, and these were intended to be the focus for the informal settlement upgrading effort. However, these lists are not currently available, and may not have been compiled.

Table 3: Definitions as applied in Outcome 8

³ Other sub-outputs include the following, but these are not directly relevant to this assignment: To consider the establishment of a Bulk Infrastructure Fund to better align and coordinate municipal infrastructure funding with a view to: unlock delivery of reticulation services; fund bulk infrastructure; procure well located land; align Provincial Infrastructure Grants and Municipal Infrastructure Grants with housing projects and grants and upgrade and rehabilitate bulk infrastructure (such as Waste Water Treatment Works); and to ensure effective infrastructure provisioning consideration should be given to the establishment of a special purpose vehicle (SPV) to provide specialised technical and financial support to municipalities. Such a mechanism will be developed in collaboration with other departments. In particular the SPV should support targeted municipalities to: appropriately structure capital funding and mobilise operational funding to strengthen municipal service provision; deliver new infrastructure to eradicate backlogs, rehabilitate existing infrastructure and provide for effective operation and maintenance of infrastructure.

⁴ Outcome 8 Delivery Agreement: Annexure A

Term	Definition (Outcome 8)
Site or unit	Refers to the provision of a serviced site and/or constructed house with secure tenure, to which a household is situated or relocated and/or is upgraded in terms of the projects lists attached to the Delivery Agreement
Informal settlement	An area with the following characteristics: <ul style="list-style-type: none"> • On un-proclaimed land, or occupied without permission of the landowner, public or private. • Located on marginal sites, where development is inappropriate or even dangerous. These include sites on unsuitable geological conditions, unsuitable topography, and heavy industrial infrastructure or within water, gas or electricity servitudes. • Typically have no or only rudimentary levels of services (such as water, sanitation and waste collection). • Private enterprises rarely rise above the levels of survivalist activities, spaza shops and the like. • Low levels of investment by households into their shelter which is usually made of informal building materials • High levels of poverty with high indices of poor health, unemployment and HIV/AIDs • High levels of crime, child abuse, alcoholism and domestic violence.
Upgrading	A staged process of improvement of quality of life in informal settlements, based on incremental provision of services and tenure . It should seek to maximise in-situ development in appropriate areas and minimise relocation. An effective improvement process is built on close community participation and cooperation, aiming to strengthen livelihoods strategies of the poor. Housing is provided by a variety of methods , including selfbuild, People's Housing Process, social housing or affordable rental, individual subsidy or consolidation subsidy.
Tenure	The provision of alternative forms of tenure (including permission to occupy, recognition through town planning scheme or by-law) through to formal freehold tenure of a stand in a formally established township. Incremental tenure mechanisms can similarly be related to the phased approach set out in the UISP, for example: <ul style="list-style-type: none"> • UISP Phase Two – tenure can start with administrative recognition (e.g. basic site plan; list of occupants; letter of occupation; basic rules, rights and obligations; communal levels of service) • UISP Phase Three – legal recognition (e.g. detailed site plan; register of occupants linked to stand number; simple lease, planned services with individual connections) • UISP Phase Four – township establishment (e.g. approved layout plan, township register as per Deeds Registry Act; title deed; full service levels)
Services	The provision of municipal services (both bulk and internal reticulation) from emergency level, basic services (RDP minimum standard – for example, communal standpipes, VIP latrines, gravel roads, communal waste collection) through to full services (on-stand water, water-borne sewerage, household refuse collection, tarred roads, street lights and household electricity connections).
Amenities	This covers the provision of social facilities including schools, clinics, good standard public open spaces and community halls.
Well located settlement	A well-located human settlement will have fairly good public transport and/or pedestrian access to economic opportunities and social amenities (in particular, schools and health facilities).

3.2.2 Alternative Definitions Used

Despite these clear definitions, across Provinces and Metros there are a number of inconsistent definitions of the above terminology. Therefore, Outcome 8 delivery statistics currently do not necessarily closely correlate with these core definitions, which were never rigorously enforced. A wider range of settlements, subsidy programmes and levels of service are therefore now included in the Outcome 8 reporting statistics. For instance, there is the wide inclusion of informal settlements with a rural character (traditional tenure).

To illustrate the definitional inconsistencies, Table 4 below provides a selection of definitions of informal settlements that are being applied by different entities⁵.

Table 4: Examples of different definitions of informal settlements being applied

Source	Definition
Statistics South Africa	<i>“An unplanned settlement on land which has not been surveyed or proclaimed as residential, consisting mainly of informal dwellings (shacks).”</i> Definition of an informal dwelling : <i>“A makeshift structure not approved by a local authority and not intended as a permanent dwelling”</i>
NDHS (2009 National Housing Code’s Informal Settlement Upgrading Programme)	Identifies informal settlements on the basis of the following characteristics: Illegality and informality; Inappropriate locations; Restricted public and private sector investment; Poverty and vulnerability; and Social stress
City of Johannesburg Metropolitan Municipality	The following working definition is used: An informal settlement comprises <i>“An impoverished group of households who have illegally or without authority taken occupation of a parcel of land (with the land owned by the Council in the majority of cases) and who have created a shanty town of impoverished illegal residential structures built mostly from scrap material without provision made for essential services and which may or may not have a layout that is more or less formal in nature.”</i>
City of Tshwane Metropolitan Municipality	<i>“Informal settlement means one shack or more constructed on land, with or without the consent of the owner of the land or the person in charge of the land.”</i> <i>“Shack means any temporary shelter, building, hut, tent, dwelling or similar structure which does not comply with the provisions of the National Building Regulations and Building Standards Act, 1977 (Act 103 of 1977), the regulations promulgated under that Act and the Municipality’s Building Control By-laws and which is primarily used for residential purposes.”</i>

3.2.3 Number of Informal Settlements Targeted

The differences in definition are one reason for the significant differences in the estimates of the number and extent of informal settlements. Other factors compound this, including different methods of identifying and classifying an area as an informal settlement. Whatever the causes, however, there are currently divergent calculations on how many informal

⁵ Source: Housing Development Agency: Informal Settlements – South Africa, 28 August 2013

settlements there are, and as a consequence, how many households reside in these and require upgrading.

For example:

- Outcome 8 originally estimated **1 600 settlements** housing 1,2-million households (StatsSA)
- The NDHS estimated **2 700 settlements** (official 2009 figure from delivery agreement)
- In terms of the StatsSA definition **5 900 informal settlements** are identified within enumerator areas (although settlements falling into two or more enumerator areas are counted as separate instances of informal settlement)
- In terms of the HDA definition⁶ **3 917 informal settlements** are identified.

3.2.4 Definitions of Levels of Service

Various different definitions and applications of what are considered acceptable levels of service that are applied to upgrading of informal settlements are also applied. As a result, the types and levels of service delivered differ substantially as do the standards of services and top structures delivered.

A second consideration is the varying definitions of what constitutes an upgrade of services to a specific household. In certain situations (such as through the rural housing programme), only sanitation is provided, along with a house. In other areas, this may include water, sanitation and secure tenure over a site, while in others, the full ambit of services are included (tenure, water, sanitation and electrification). This is further compounded by the inclusion (or exclusion) of top structures in the upgrading process. While Outcome 8 did not include the requirement of providing top structures, in most provinces not providing a top structure is not acceptable. Therefore secondary implementations of other human settlement programmes are used to add top structures to upgraded settlements. The consequence of this is the need to correlate statistics at a national and provincial level that differentiate between the delivery of 'sites' and 'houses'.

The outcome of this lack of clear definitions of acceptable levels of service is that alternative and different levels of service are correlated and counted towards reported Outcome 8 targets, with no or limited differentiation from each other in official statistics. So, for instance, a household receiving emergency services (communal standpipes and toilets), another receiving full services and a top structure, and a rural household receiving a VIP sanitation solution and a house may all be deemed to have received a serviced site, and in two cases, houses too.

⁶ HDA / Census 2011 & Verification Study

A proposed framework of levels of service across the main service types included in informal settlement upgrading is set out in **Table 5** below. Note that only level 4: Full Level of Services is aligned with the current National And Provincial Norms And Standards.

Table 5: Definitions of levels of service

Service Type	Level 0: None / Not Applicable	Level 1: Emergency / Temporary Services	Level 2: Basic Level of Service	Level 3: Intermediate Level of Service	Level 4: Full Level of Services	Possible Alternative Levels of Service
Tenure	Illegal Occupation / Informal Settlement	Recognition / Pegging / Permission to Occupy	Basic Tenure recognition (e.g. settlement identified for upgrade)	Recognised Title / Rural or Communal Land Tenure	Transfer of Title Deed	Rental Tenure (Social Housing / CRU)
Water	No permanent water source	Water Tankers	Shared Standpipe within 200 m of stand	Site Connection	House Connection	Rural Standards? Wells & Boreholes? Rainwater Collection?
Sanitation	No permanent sanitation solution	Chemical Toilets / VIPs	Flush or VIP Communal/Shared sanitation facilities	Waterborne sanitation on site (or approved alternative e.g. VIP)	Waterborne sanitation into house	On-Site Septic Tanks
Public Lighting	No lighting	N/A	High-Mast / Street lighting	N/A	Street Lighting	N/A
Refuse Removal	No collection	N/A	Communal skip	Weekly collection from central sites	Weekly Street Level Collection	On-site recycling
House (Top Structure)	No house / Informal House / Existing Structure	Tents / Corrugated Iron Shelters / Relocation to Transitional Relocation Areas (TRAs)	Relocation to Transitional Relocation Areas (TRAs) / CRU / Social Housing facilities	Peoples Housing Process (incremental) delivery / Slab or Site development as per IRDP norm.	Shelter meeting national (and provincial?) minimum norms and standards (minimum of 42m ²).	Self-Build / Frame and Roof / Wet Core.

3.2.5 Implications for Outcome 8 Statistics

The differences in definitions of informal settlement and varying acceptable levels of service create confusion when attempting to compare informal settlement upgrading datasets between projects and provinces, and therefore contribute to unevenness in nationally aggregated datasets.

It is evident that there is currently no universal definition of 'informal circumstances' that is applied consistently in relation to informal settlement and backyarding. This is compounded by different definitions relating to levels of service and informal settlement being used by different key players (e.g. StatsSA, DHS, provinces, Metros, NUSP, HDA). As a result of this it is currently not accurately known how many informal settlements exist in South Africa. Therefore, we are currently unable to accurately ascertain how many households reside in such 'informal circumstances' nationally. It is however clear that there are many more than the originally estimated 1600 settlements mentioned in Outcome 8.

There is also a lack of universal definitions relating to types and levels of acceptable services for projects included in Outcome 8 statistics. While Outcome 8 is clear on the range of acceptable services, these are not specified in detail. It is therefore challenging to compare 'apples with apples' in official reporting statistics. The implication is that it is currently very challenging, even if there were accurate statistics, to ascertain expenditure on, or delivery of tenure, sites and services and top structures to households in or to households from 'informal circumstances'.

3.3 Housing Funding and Programme Applications

There are different generic types of delivery to households in informal settlements that are being applied to the achievement of Outcome 8 (upgrading of households in informal settlements) delivery and targets. This implies that a wide range of human settlements development methodologies are applied to upgrading, including:

- **Direct Delivery IN** informal settlements: This includes temporary delivery in the informal settlement, partial delivery in informal settlements being upgraded in situ and full, direct delivery in informal settlements being upgraded in situ;
- **Direct Delivery FOR** informal settlement residents: This includes relocating or 'Decanting' into greenfields settlements specific to upgrades (this was only added to statistics in September, 2013); and
- **Indirect Delivery TO** households in informal settlement environments. This includes other housing programmes that as a by-product deliver to residents previously within informal settlements.

The National Housing Programmes applied to Outcome 8 delivery statistics are indicated in the universal programme list developed for the Expenditure Performance Review of the six main Human Settlements programmes. This study focused on the following **Human**

Settlements Development Grant (HSDG) funded Human Settlements Programmes that are claimed in Outcome 8 delivery statistics:

- Incremental Interventions (II):
 - Upgrading of Informal Settlements Programme (II-UISP),
 - Integrated Residential Development Programme (II-IRDP), and
 - Emergency Housing Programme (II-EHP),
 - Peoples' Housing Process (II-PHP)
- Rural Interventions (RI)
 - Rural Housing Programme (RI-CLR & RI-FR)

In addition, the following **other Human Settlements development funds** are considered where these impact on service levels in informal settlements:

- Urban Services Development Grant (USDG)
- Rural Housing Infrastructure Grant (RHIG)⁷
- Disaster Relief Grant (DRG)

Other funding programmes impacting on service delivery in informal settlements include the following, which are not included in this analysis:

- Municipal Infrastructure Grant (MIG) related programmes; Other Municipal infrastructure programmes; and
- Service Delivery Programmes (such as Eskom and municipal household connection programmes).

Table 6 below outlines the application of these human settlements programmes to the upgrading of informal settlements.

Table 6: Application of housing programmes to informal circumstances

Programme	Intended Use	Use in Informal Settlement Upgrading	Use for Relocation	Use for Greenfields	Other
HSDG: II-UISP	Upgrading of informal settlements via four phase methodology.	Only WC consistently applies UISP.	Evidence of use for Greenfields in certain areas.	Not clear but possible 'Rollover' use in KZN.	Delivery stats for UISP very high in comp to application by provs
HSDG: II-IRDP	Greenfields integrated residential developments	Used as instrument for 'rollover, e.g. KZN	Greenfields developments used to Relocate informal households	Standard greenfields implementation instrument in most provinces	Phases used interchangeably to develop serviced sites and top structures.

⁷ Note that this programme has very limited funding, and does not contribute much to Outcome 8 delivery.

Programme	Intended Use	Use in Informal Settlement Upgrading	Use for Relocation	Use for Greenfields	Other
HSDG: II-EHP	Provision of basic services and shelter in emergency circumstances	Used as first phase service delivery in ISs, especially after disasters.	May be used to provide services in transit areas / temporary camps.	Not usually applied.	-
HSDG: II-EHP	Servicing and incremental development of shelters	Applied to upgrading of informal settlements by certain provinces.	Not usually used, but can be used for site and serviced and managed shelter development.	Used by some provinces for site & service and phased house construction.	Evidence of use for rural house development.
HSDG: RI-CLR	Upgrading of rural infrastructure & housing in communal land areas, with focus on sanitation and house.	Used by rural provinces to upgrade rural areas. Claimed in Outcome 8 (KZN, LP, EC)	Not clear, but unlikely.	Not clear, but unlikely unless de-densification required.	Used interchangeably to upgrade sanitation and/or top structures.
HSDG: Other	Various programmes used to provide shelter for residents of informal settlements & backyards.	Consolidation Subsidy	Individual subsidy, social housing.		Rural Housing Infra Grant (bucket eradication in rural areas)
USDG	Bulk and link infrastructure facilities and networks (water, sanitation, roads, transport)	Used to link informal settlements to networks & augment service cost	Used to provide bulks to relocation areas and augment service costs	Used to provide bulks to new areas and augment service costs	Used for wide variety of applications: service provision.

The table above clearly demonstrates that service and housing delivery claimed as part of Outcome 8 results from a wide range of human settlements programmes that both directly and indirectly contribute to service delivery to households in or from informal settlements. Multiple Housing Programmes are used to implement service delivery in informal settlements, and certain programmes are implemented in different ways by different provinces.

The Concurrent Competence in housing, and a lack of performance monitoring by the NDHS has also allowed Provinces to implement diverse interpretations of the same housing programmes, and to implement incorrect programmes for certain interventions (e.g. IRDP is routinely used for upgrades, yet the analysis indicates that UISP is only applied and reported on consistently by one province, the Western Cape, and in many cases UISP and IRDP are used

jointly for the same projects for servicing of sites and construction of top structures respectively). This is contrary to the intent of the Housing Code, and also creates difficulties in collating and reporting on statistics in a consistent manner.

There is therefore neither conformity nor enforcement of the application of specific Housing Programmes in specific circumstances by Provinces. There are also not yet universally applied acceptable official standards for types and levels of services provided in Informal Settlement Upgrading projects⁸.

3.4 Outcome 8 Reporting Framework

There is a complex systems and reporting framework that is used to gather and report statistics on Outcome 8 delivery. The Housing Subsidy System (HSS) is the legislatively required system that should be used by all provinces for registering and reporting on delivery progress and financial performance of all government-funded projects. Used correctly, this system provides a comprehensive record of project performance, and simplifies overall reporting requirements.

However, many provinces operate parallel project management or tracking systems to the HSS. A number of these provincial systems are not compatible with HSS, meaning that data must be ‘massaged’ to fit into HSS, or that HSS is not used effectively at all. A number of the provincial project tracking systems are simple and spreadsheet-based, which are difficult to maintain and open to statistical manipulation.

Financial performance and delivery data that is captured in provincial systems and/or the HSS by Metros and provincial departments of Human Settlements are then required to be reported in a wide range of formats to various government departments. **Table 7** below sets out the primary statistical reporting tools used in respect of Outcome 8 delivery targets. Note that this table indicates the primary reporting requirements, and is not comprehensive.

Table 7: Reporting tools used for Outcome 8 delivery

Report Tool	Intent	Project	Province / (Metro)	DHS	Cabinet / Presidency
Project Management Reporting	Project Progress updates to Provincial (or Assigned Metro) stakeholders.	Project management reporting.	Provincially defined and implemented	N/A	N/A
Provincial PN Report	Delivery Statistics update for NDHS	N/A	Report compiled from Provincial system and/or HSS	Received, collated and verified by DHS, summarised	N/A

⁸ It is understood that the City Support Programme, NDHS and the World Bank are working on this.

Report Tool	Intent	Project	Province / (Metro)	DHS	Cabinet / Presidency
Provincial Outcome 8 Report	Delivery statistics update for Outcome 8 deliverables	N/A	Report compiled from Provincial system and/or HSS	Received, collated and verified by DHS, summarised	Information collated and used in DHS reporting
Provincial Treasury (DORA) Report	Financial Statistics to National Treasury	N/A	Report compiled from Provincial system and/or BAS	N/A	Information collated and used in national Treasury reporting
USDG Reports	Financial and delivery statistics to DHS on USDG application	N/A	Report compiled from Metro systems (and/or BAS)	Received, collated and verified by DHS, summarised	Information collated and used in DHS reporting
Business Plans	Development of medium term strategy and budget plans	Implementation Plan	Business Plans & Outcome 8 Agreements	Business Plan & Outcome 8 Agreement	Ministerial Outcome 8 Agreement
Annual Reports	Formal publication of departmental results in performance area	N/A	Annual Report	Annual Report	Performance Reporting

It is clear that there are a multiplicity of reporting requirements on financial and non-financial human settlements performance for metros, provinces and the NDHS. These result in duplicated reporting requirements. Most of the report formats above differ, with some requiring delivery data, some financial data and others requiring both sets of data. Furthermore, delivery statistics are required to be disaggregated into different categories in different reports (such as between the Practice Notes and Outcome 8 reports). As a result there is significant overlap between data included in the Practice Note, Outcome 8 Report and financial reporting.

These multiple reporting requirements also create a significant institutional burden, and contribute to 'reporting fatigue' within the human settlements sector. In addition, the multiple overlapping reporting requirements create the space for statistical reporting errors, as well as many points in the reporting process where discrepancies in statistics can occur. It is also concerning that almost all reporting is manually compiled by manipulating data from different datasets and systems, rather than from being produced by a universal tracking system. The quality and detail of reports also differ significantly. Some provinces submit high-level data only. Data quality varies, requires corroboration and is often changed post-close out and submission. There is for instance evidence of data discrepancies between different reports sent using the same data to different audiences (e.g. reports intended for NDHS, Provincial Treasury, National Treasury do not contain consistent information).

Periodic changes to reporting formats also affects 'backward compatibility' of reports, and also requires NDHS to review data to make it 'fit' revised formats. Further, reporting periods differ depending on need and financial years between the Metros, Provinces and National Government.

3.5 Statistical Framework & Assumptions

The lack of enforcement of the use of core data systems (BAS and HSS specifically) by the NDHS has lead to a parlous state of information systems at Provincial level. Systems collect very different levels of information at very different levels of accuracy, and this is exacerbated by limited institutional and human resource capacity and expertise in many Provinces. This, when combined with the withdrawal of national capacity to assist with systems and reporting at provincial and metropolitan level has created a vacuum in systems use and reporting.

The corroboration (verification) of provincial data (at times down to project level) is undertaken by the NDHS. Data submitted from Provinces and metros is very uneven in reporting detail and accuracy, albeit that report formats are prescribed by the NDHS. While significant verification and cleaning of data is undertaken, this is affected by resource limitations and an inability to do direct project verification in provinces on a regular basis, and the lack of a consistent systems environment for reporting. Known data issues exist in the statistical framework, including exclusion (and therefore undercounting) of certain delivery due to initial definitional issues in the early implementation of the Outcome 8⁹ as well as indications of double counting of sites and houses, over-counting of delivery data and other reporting inaccuracies.

'Unofficial rules' are applied at various points in the data collation process. For example in respect of NDHS, 'services' are not counted if only electricity or sewerage is provided, but this may be difficult to ascertain if these are claimed by provinces as 'sites' in the statistics. DHS verification therefore can lead to a re-definition of provincial statistics and levels of service delivered in respect of the categorization into 'sites' and 'houses' by NDHS.

There are also aspects of service delivery that are extremely difficult to ascertain with the current information. For example service connections (infrastructure) may have been delivered and claimed in reporting, but there may be no or erratic service supply (water and electricity as an example). USDG delivery statistics may claim sites delivered using a combination of UISP or IRDP funding, augmented by USDG funding, which may result in double counting of sites or service connections. Programmes are used interchangeably for different interventions (phase 1, 2, 3 and 4 of UISP and Phases 1&2 of IRDP), or separately

⁹ The focus was on the provision of services, not services plus houses, which were therefore excluded. Reporting in 'sites' and 'houses' formats disguises nuances in delivery outcomes.

(Phase 2 IRDP in informal settlement upgrades, or separate numbers claimed for Phase 2 and 3 of UISP).

4 Rapid Verification Key Findings

This section presents high level findings in respect of the Rapid Verification study.

4.1 Outcome 8 Provincial Delivery Targets & Reported Performance

The Outcome 8 delivery target of 400,000 households to be upgraded between 2010 and 2014 is allocated across the provinces as set out in **Table 8** below, in relation to the conditional grant allocation percentage for each Province.

Table 8: Allocation of Outcome 8 target by province

Province	Number of Households Targeted
EC	59,440
FS	26,400
GP	96,760
KZN	76,200
LP	31,200
MP	26,480
NC	9,320
NW	28,840
WC	45,360
Total	400,000

The reported delivery performance data in respect of the Outcome 8 target up to October, 2013 is shown in **Table 9** below. Firstly, serviced site and house delivery are collated separately based on provincially reported statistics that are verified and re-categorised by NDHS. Secondly, a factor (60%) is applied to the number of houses based on the assumption that the remaining houses are constructed on serviced sites, and therefore should not be 'double counted' in respect of the households they apply to. Thirdly, the site and revised house delivery figures are combined to obtain overall Outcome 8 delivery performance.

Reported serviced site delivery	198,016 sites
60 % or reported housing unit delivery (209,310 units)	125,591 units
Total claimed site and house	323,607
Add USDG	69,547
Total claimed delivery	393,154

On the basis of this data it is claimed that the Outcome 8 delivery target was almost met by the end of the October, 2014 reporting period. Detailed statistics per province, per year are outlined in **Table 9** below.

Table 9: Reported Outcome 8 delivery iro target¹⁰

Sites serviced

	2014 TARGET	2010/11	2011/12	2012/13	2013/14				Total: 2013/14	TOTAL
					1	2	3	4		
EC	59,400	8,286	5,060	9,254	874	1,599			2,473	25,073
FS	26,400	3,217	7,144	7,928	941	1,598			2,539	20,828
GP	96,800	16,990	19,639	7,733	829	236			1,065	45,427
KZN	76,200	8,213	5,087	6,966	386	255			641	20,907
LP	31,200	2,334	12,487	5,803	85	0			85	20,709
MP	26,480	3,410	4,750	4,180	1,774	3,275			5,049	17,389
NC	9,320	5,080	3,407	3,242	90	0			90	11,819
NW	28,840	4,071	8,886	872	71	0			71	13,900
WC	45,360	3,028	7,898	8,940	694	1,404			2,098	21,964
TOT	400,000	54,629	74,358	54,918	5,744	8,367	0	0	14,111	198,016

74,308 54,875 fs

Housing units

	2010/11	2011/12	2012/13	2013/14				Total: 2013/14	TOTAL	2014 TARGET	Sites & Units (total)	%
				1	2	3	4					
EC	6,579	9,766	5,556	221	2,464			2,685	24,581	59,400	49,659	83.6
FS	6,522	8,253	4,313	590	1,110			1,700	20,781	26,400	41,616	157.6
GP	18,436	17,025	19,437	3,487	5,726			9,213	64,111	96,800	109,538	113.2
KZN	6,490	18,145	4,844	1,463	2,338			3,801	33,281	76,200	54,187	71.1
LP	829	179	1,612	1,337	236			1,573	4,191	31,200	24,902	79.8
MP	4,022	4,106	2,710	895	926			1,821	12,651	26,480	30,048	113.5
NC	2,987	2,004	1,043	359	636			995	7,021	9,320	18,848	202.2
NW	4,017	8,886	4,874	1,250	1,380			2,630	20,401	28,840	34,307	119.0
WC		10,277	9,153	1,233	1,603			2,836	22,261	45,360	44,230	97.5
TOT	49,882	78,641	53,542	10,835	16,419	0	0	27,254	209,311	400,000	407,335	101.8

4.2 Transverse Analysis of Outcome 8 Delivery Statistics

¹⁰ 'Sites Serviced' means two or more of basic elements (tenure, water, sanitation):

- Delivery of registered tenure (unless only tenure); and
- Delivery of full services (once off, services to subsidy standard)
- Delivery of full services (incremental, subsidy standard)
- Delivery of partial permanent services only (subsidy or non subsidy standard)
- Delivery of partial services (temporary / Emergency) (subsidy or non subsidy standard)
- Delivery with transfer of tenure, or on rural sites with existing tenure security.

'Housing Units' produced means structures delivered to current subsidy standards:

- Delivery of subsidised serviced sites with subsidised top structure (subsidy standard per province spec)
- Top structures on new or previously serviced subsidised sites
- Top structures on upgraded serviced sites
- Top structures on unserviced sites
- Top structures in traditional tenure areas

A transverse analysis was undertaken to verify the delivery claims. This analysis is possible due to recent NDHS revisions to the Outcome 8 reporting format. The Outcome 8 statistics were re-compiled from the provincial reports, and then subjected to an elemental analysis based on the specific separate components of service delivery (that is, whether each 'site' or 'house' claimed delivered tenure, water, sanitation, and/or top structures).

Table 10 below shows the reported delivery disaggregated per human settlements programme, per nature of product delivered as recorded in the reporting formats. Applying the current NDHS methodology in the second table (Outcome 8 Current Methodology) which calculates all sites added to 60% of housing units claimed), disaggregated on a delivery programme basis yields results close to the NDHS current estimates.

Table 10: Alternative analysis of reported data using transverse analysis

Outcome 8: Reported Figures (per Delivery Outcome)

Human Settlements Delivery Programme	Security of Tenure	Sanitation (Villages)	Sanitation & Top Structure	Services: Water & Sanitation	Top Structure	Top Structure with Water & Sanitation	Control Total
UISP				89108	154806	7737	251651
IRDP			3930	63939	19942	4621	92432
Rural		14708	3344		35619		53671
Emergency				602	911	125	1638
EPHP			17438	2663			20101
Tenure (Other)	47807						47807
USDG				69547			69547
TOTAL: ALL	47807	14708	24712	225859	211278	12483	536847

Outcome 8: Current Methodology

Control Total	Sites	Houses (*60%)	Total Outcome 8 DHS Estimate
251651	96845	97526	194371
92432	72490	17096	89586
53671	18052	23378	41430
1638	727	622	1349
20101	20101	10463	30564
47807	0	0	0
69547	69547		69547
536847	277762	149084	426846

4.3 Elemental Analysis of Outcome 8 Delivery Statistics

The next analysis unpacked each service delivery element separately from each definitional area from the Outcome 8 reports. This creates a new statistical frame based on elemental analysis, rather than the definitionally problematic 'sites' vs 'houses' analysis used in the official statistics. Each allocation cell is considered separately with respect to its applicability, methodology in relation to delivery and certainty in relation to what is delivered through each programme in each province.

These regrouped element figures are then re-totalled into 'elemental delivery estimates' from all HS Programmes and Funds included in the Outcome 8 reporting. The results of this analysis are shown in **Table 11** below.

Table 11: Example of disaggregated approach

Outcome 8: Reported Figures (per Delivery Outcome)						
Human Settlements Delivery Programme	Security of Tenure	Sanitation (Villages)	Sanitation & Top Structure	Services: Water & Sanitation	Top Structure	Top Structure with Water & Sanitation
UISP				89108	154806	7737
IRDP			3930	63939	19942	4621
Rural		14708	3344		35619	
Emergency				602	911	125
EPHP			17438	2663		
Tenure (Other)	47807					
USDG				69547		
TOTAL: ALL	47807	14708	24712	225859	211278	12483

Outcome 8: Disaggregation of Service Elements						
Service Delivery Element	Security of Tenure	Sanitation (Villages)	Sanitation & Top Structure	Services: Water & Sanitation	Top Structure	Top Structure with Water & Sanitation
Tenure	47807	0	17438	155710	0	12358
UISP	0		0	89108		7737
IRDP	0		* Rural	63939		4621
Rural	0		* Rural	0		0
Emergency	0			* N/A		* N/A
EPHP	0		17438	2663		0
Tenure	47807		0	0		0
USDG						
Water	0	0	0	156312	0	12483
UISP				89108		7737
IRDP				63939		4621
Rural				0		0
Emergency				602		125
EPHP				2663		0
Tenure				0		0
USDG	0			69547		0
Sanitation	0	14708	24712	156312	0	12483
UISP		0	0	89108		7737
IRDP		0	3930	63939		4621
Rural		14708	3344	0		0
Emergency		0	0	602		125
EPHP		0	17438	2663		0
Tenure		0	0	0		0
USDG				69547		0
Top Structure	0	0	24712	0	211278	12483
UISP			0		154806	7737
IRDP			3930		19942	4621
Rural			3344		35619	0
Emergency			0		911	125
EPHP			17438		0	0
Tenure			0		0	0
USDG						

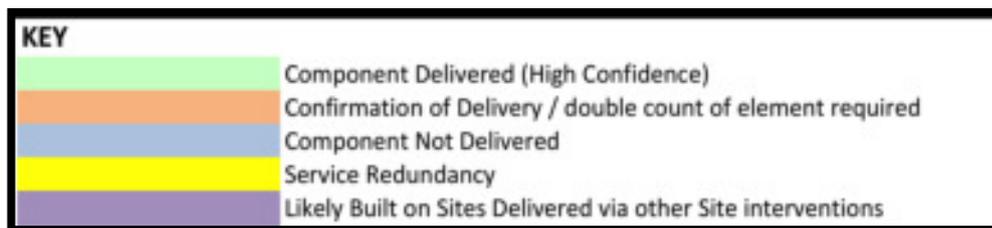
On the basis of the analysis, the element delivery totals (that is, the number of instances of a specific service interventions delivered) were re-aggregated per element, as illustrated in **Table 12**.

Table 12: Example of results of disaggregation analysis



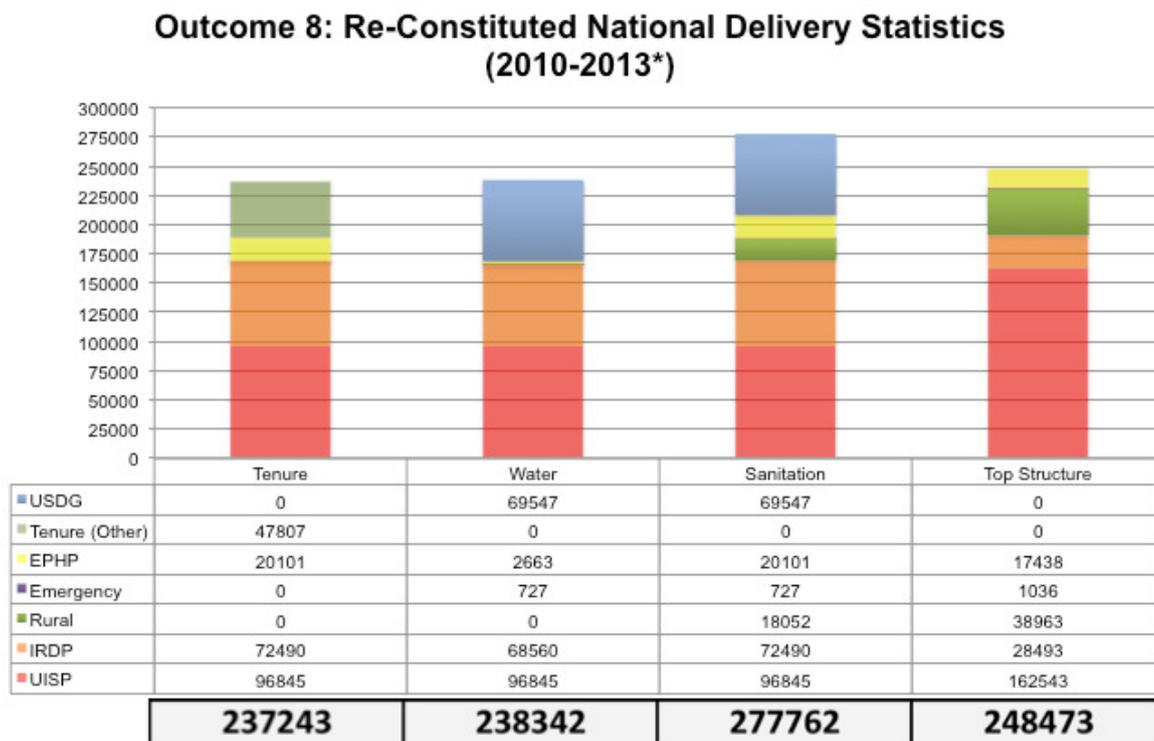
Outcome 8: Disaggregation of Service Elements

Service Delivery Element	Quantity of re	Sanitation (Villages)	Sanitation & Top Structure	Services: Water & Sanitation	Top Structure	Top Structure with Water & Sanitation	High Confidence	Low Confidence	Total Recd Deliv
Tenure	47807	0	17438	155710	0	12358	213212	20101	
UISP	0	0	0	89108	0	7237	96845		
IRDP	0	0	* Rural	63939	0	4621	68560		
Rural	0	0	* Rural	0	0	0			
Emergency	0	0	0	* N/A	0	* N/A			
EPHP	0	0	17438	2663	0	0		20101	
Tenure	47807	0	0	0	0	0	47807		
USDG									
Water	0	0	0	156312	0	12483	237615	727	
UISP				89108	0	7237	96845		
IRDP				63939	0	4621	68560		
Rural				0	0	0			
Emergency				602	0	125		727	
EPHP				2663	0	0	2663		
Tenure				0	0	0			
USDG	0			69547	0	0	69547		
Sanitation	0	14708	24712	156312	0	12483	277035	727	
UISP		0	0	89108	0	7237	96845		
IRDP		0	3930	63939	0	4621	72490		
Rural		14708	3344	0	0	0	18052		
Emergency		0	0	602	0	125		727	
EPHP		0	17438	2663	0	0	20101		
Tenure		0	0	0	0	0			
USDG				69547	0	0	69547		
Top Structure	0	0	24712	0	211278	12483	247437	1036	
UISP			0	0	154806	7237	162543		
IRDP			3930	0	19942	4621	28493		
Rural			3344	0	35619	0	38963		
Emergency			0	0	911	125		1036	
EPHP			17438	0	0	0	17438		
Tenure			0	0	0	0			
USDG									



The reconstituted elemental delivery statistics obtained using this transverse analysis methodology are shown in **Table 13** below.

Table 13: Reconstituted elemental delivery statistics



This illustrates that, when disaggregated on an elemental basis, the maximum service delivery is in relation to tenure (277,762 unique instances), then top structures (248,473 units), then water and sanitation, with 238,342 and 237,243 instances of delivery respectively. It is clear that these figures, when broken down per element, per programme, are significantly lower than the claimed 393,000 sites and housing units delivered. It must be borne in mind that as these are unique instances, when these are re-aggregated into the number of households serviced, this will imply that one household may well obtain

5 Conclusions, Recommendations and Way Forward

5.1 Conclusions Regarding Outcome 8 Delivery Statistics

Initial indications are that the current Outcome 8 performance statistics are inflated. Key reasons for this are the claiming of more elements of service than is delivered and too simplistic formulae for allocating units to delivery statistics.

An elemental analysis of Outcome 8 delivery indicates that most services have been delivered to between 233,000 unique instances (Tenure), 238,000 instances (water), 248,000 (top structures), and 278,000 (sanitation). The assessment of potential household level impact indicates that an estimated 238,000 households have accessed serviced sites plus top structures. This increases to 295,000 if households only accessing sanitation and top structures, or only top structures are added. In total, 358,000 households have been impacted by one or more element (tenure, water, sanitation or top structure).

If access to two or more elements is considered as the benchmark (i.e. delivery to 295,000 households), overall delivery is estimated to be 74% of current estimates. However, it is essential to note that these elemental breakdowns cannot be directly compared to the existing 'sites plus houses' statistics, as they are measuring different, finer grained outcomes.

In terms of the review process undertaken the following is indicated:

- The review of data sources enabled a fresh view of the data, as well as providing a format for ground-up analysis, transverse analysis, disaggregation and re-aggregation of data. However, additional analysis is required to corroborate information.
- There are multiple levels of risk and potential problems when assessing existing data. Ultimately, this exercise is re-analysing questionable data. Problems include definitional gaps, uneven application of housing and funding programmes, problems with the reporting framework, and data inaccuracies at source (within projects, metros and provinces).
- It is noted that, as specified in the Terms of Reference, the real verification of data should be undertaken at the provincial and Municipal / project level, based on project level verification and assessment of the robustness and accuracy of provincial reporting tools, methodologies and systems. However, this is outside the scope of this exercise.
- Further corroboration of this information is required using other datasets. In addition, adding other services (roads, street lighting and electricity connections) would add to the complete analysis but is hampered by access to datasets and comparability of the data.

5.2 Recommendations

The following recommendations are made based on the analysis and the findings.

5.2.1 NDHS Implementation of Human Settlements Functions

The following recommendations are made in respect of improving the human settlements function across municipal, provincial and national level:

- Undertaking a detailed forensic data analysis will be time consuming and costly. What is more important is to clearly define future steps to resolve data difficulties in respect of NDHS reporting in the short, medium and long term.
- Constitutional Competences should be reassessed and re-applied to the implementation and monitoring of human settlements performance. This should focus on the intended concurrent, not current, Province-driven approach.
- A firm implementation of the national policy and programme framework is required. This will require a review of, and re-application of the Housing Code.
- The number of funding instruments should be reduced (Housing Programmes and Financial Interventions). There should also be more specific application of programmes to specific circumstances / project conditions (e.g. UISP for upgrading)
- A universal database of informal settlements is required. The best chance of resolving this will be to combine the resources of key players to clearly define, then collate and map geospatially and with satellite imagery informal settlements. This should then be verified on the ground. Partners to this must include the NDHS, NUSP, HDA and StatsSA.
- Definitions relating to delivery of Outcome 8 statistics should be standardised at national, provincial and local level¹¹.
- There should be a greater insistence on conformity with national tracking and reporting systems and reporting requirements (specifically HSS and BAS). Data reporting on these systems should be a prerequisite for obtaining further HSDG and USDG funding by metros and provinces
- There should be a clear perspective on reasons why Municipalities do not favour certain programmes (e.g. added time and cost implications of UISP, understanding and history with IRDP).

5.2.2 Improving Statistical Framework & Reporting Structure

A number of key considerations exist that would improve DHS statistical framework and reporting including:

- Key information systems (specifically, BAS and HSS) should be updated to support the capturing of reporting data.

¹¹ Initiatives are currently under way to develop a universal set of definitions to be adhered to by provinces, taset, but organisational 'territories' are creating blockages to this process. Some of the processes underway include HDA correlation of StatsSA, Eskom and own datasets with GTI information; NUSP definitions and consulting contracts (Informal Settlement Upgrading courseware and WB / CSP / NUSP Financing House Consolidation work); and City Support Programme, that is requesting Geolocated informal settlement profiles (from March 2014).

- Consideration must be given to implementing a single reporting tool for all Human Settlements Outcomes (Consolidation of PN, O8 and USDG reporting formats) to limit the current reporting burden and to improve statistical accuracy and correlation of results between reporting requirements (such as NDHS and Treasury reports).
- Consideration should be given to an elemental basis of reporting on service delivery, instead of (or as well as) in respect of 'sites' and 'houses'. This would result in greater clarity regarding what is being delivered from a service element perspective through different programmes.
- Strong training and capacity support frameworks should be re-implemented from NDHS to the Provinces (and Assigned Metros) to ensure implementation of systems.
- The number of reports required should be simplified, standardised and reduced.
- Data collation and synthesis processes should be automated (preferably within HSS).
- It is recommended that provincial data and municipal-level project verification checking is undertaken in the future for proper verification.

References

National Department of Human Settlements (2010): **Outcome 8 Delivery Agreements: Sustainable Human Settlements and Improved Quality of Household Life**

National Department of Human Settlements (2010): **Outcome 9 Delivery Agreement: A Responsive, accountable, effective and efficient local government system**

National Department of Human Settlements (2009): **National Housing Code**, Upgrading Informal Settlement Programme , Chapter 5, Volume 4

National Upgrading Support Programme, website.

National Upgrading Resorce Programme (20??): **Resource Kit**, The National Upgrading Support Programme

Meltzer, I & Thellane, M (2013): **Informal Settlements – South Africa**, 28 August 2013, Presentation by Housing Development Agency and Eighty20.

Provincial Departments of Human Settlements & National Department of Human Settlements (2010 to 2013): **Outcome 8 Quarterly Statistical Reports**

Housing Development Agency (2013): **Informal Settlements Database**

National Department of Human Settlements (2010 to 2013): **Practice Note (PN) data**: reviewed & re-analysed from EPR HS, recaptured where necessary as a comparator to the O8 data

DHS Outcome 8 (O8) data: re-collated from DHS sources & analysed transversally, disaggregated elementally and re-consolidated.

National Department of Human Settlements (2014): **Housing Subsidy System (HSS) data on active projects** (with geocodes*) reviewed to assess overall and provincial differences in delivery and reporting.

National Department of Human Settlements (2010 to 2014): **Urban Settlements Development Grant (USDG) Reports and Statistics from Metropolitan Municipalities***

StatsSA (2012): **Census 2011** data assessed to consider overall national service standards and informal settlement conditions (*)

Housing Development Agency (2013): **H.D.A Informal Settlements Layer, Lapsis & GIS information** reviewed, analysed and used to undertake limited project-level verification and consistency checks.