

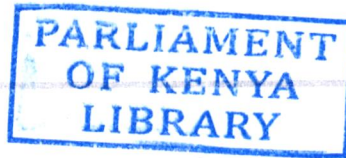


① OI committee, 250  
8/11/2018

# KENYA RURAL ROADS AUTHORITY

Tel: 020-8013846, 2710451, 2710464,  
0724735568/ 0733619197/ 0771451679  
Email: [kerra@kerra.go.ke](mailto:kerra@kerra.go.ke)/ [dgkerra@kerra.go.ke](mailto:dgkerra@kerra.go.ke)  
Website: [www.kerra.go.ke](http://www.kerra.go.ke)  
Fax: 2710442

Blue Shield Towers  
Hospital Road, Upper Hill  
P.O. Box 48151-00100  
Nairobi, KENYA



KeRRA /08/VOL.8 (524)

5<sup>th</sup> November, 2018

**The Clerk**  
National Assembly  
Parliament Buildings  
P. O. Box 41842-00100  
**NAIROBI**

② Tunao  
pls deaf  
FA  
06/11/18

*Attn: Jeremiah W. Ndombi*

## **RE: SCHEDULE OF ALLOCATIONS FOR ROADS COUNTRYWIDE**

Reference is made to the letter Ref. NA/DCS/TPWH/CORR/2018/107 dated 30<sup>th</sup> October 2018.

Attached please find:-

1. A schedule of all allocations in the current financial year per constituency country wide including disbursement already made and what is pending.
2. A schedule of all allocations in the current financial year per county countrywide including disbursements already made and what is pending.

Eng. Luka K. Kimeli  
**Ag. DIRECTOR GENERAL**

Encls.





# KENYA ROADS BOARD

3<sup>rd</sup> Floor, Kenya Re-Towers, Off Ragati Road, Upper Hill  
P. O. Box 73718 - 00200, Nairobi, Kenya.  
Tel: +254 (020) 2722865/6/8, Fax: + 254 (020) 2723161  
ISDN: + 254 (020) 4980 000, Cell: 0722 203418, 0733 334422  
Email: [info@krb.go.ke](mailto:info@krb.go.ke) Website: [www.krb.go.ke](http://www.krb.go.ke)

Financing Road Maintenance

KRB/F/86/01/A (62)

16<sup>th</sup> November 2018

**Mr. Michael Sialai, EBS**  
Clerk of the National Assembly  
Parliament Buildings  
P. O. Box 41842 - 00100  
**NAIROBI**

① Dlamini  
22/11/18

Dear **Mr Sialai,**

**RE: DEPARTMENTAL COMMITTEE ON TRANSPORT, PUBLIC WORKS  
& HOUSING REQUEST FOR A SCHEDULE OF ALLOCATIONS FOR  
ROADS COUNTRYWIDE**

Reference is made to letter Ref. No. NA/DCS/TPWH/CORR/2018/113 dated 14<sup>th</sup> November 2018.

Please find below the information requested for:

1. The gross allocations from Road Maintenance Levy to county governments for FY 2018/19 is **Kshs 8,269,000,000.**
2. The breakdown of allocations per county government is as follows:

No.	COUNTY NAME	ALLOCATION (KShs)
1	Baringo	133,931,014
2	Bomet	156,252,849
3	Bungoma	235,619,376
4	Busia	157,079,584
5	Elgeyo Marakwet	99,208,158
6	Embu	117,396,321
7	Garrisa	182,708,358
8	Homa Bay	176,094,481
9	Isiolo	103,341,832
10	Kajiado	157,906,319
11	Kakamega	271,995,701
12	Kericho	150,465,706
13	Kiambu	246,366,927

② TUNAO  
pls deaf  
MA  
22/11

**RECEIVED**  
21 NOV 2018  
CLERK'S OFFICE

No.	COUNTY NAME	ALLOCATION (KShs)
14	Kilifi	285,223,455
15	Kirinyaga	108,302,240
16	Kisii	203,376,725
17	Kisumu	181,881,624
18	Kitui	229,832,234
19	Kwale	198,416,317
20	Laikipia	109,128,974
21	Lamu	93,421,016
22	Machakos	219,084,683
23	Makueni	187,668,766
24	Mandera	267,035,293
25	Marsabit	184,361,828
26	Meru	210,817,337
27	Migori	176,921,216
28	Mombasa	216,604,479
29	Murang'a	164,520,196
30	Nairobi	415,847,530
31	Nakuru	248,847,131
32	Nandi	141,371,625
33	Narok	167,827,135
34	Nyamira	125,663,667
35	Nyandarua	129,797,341
36	Nyeri	132,277,544
37	Samburu	116,569,586
38	Siaya	158,733,052
39	Taita Taveta	106,648,770
40	Tana River	146,332,034
41	Tharaka Nithi	95,901,220
42	Trans Nzoia	147,985,503
43	Turkana	283,569,986
44	Uasin Gishu	156,252,849
45	Vihiga	117,396,321
46	Wajir	223,218,356
47	West Pokot	129,797,341
	<b>TOTAL</b>	<b>8,269,000,000</b>

3. The Board did not determine the formula used to arrive at the allocations per county - this was set by the Commission for Revenue Allocation.

4. The Board is currently in the process of releasing the first quarter allocations for FY 2018/19 to respective county governments. This is after the recent signing of the Schedule of Disbursements.

Yours Sincerely,

  
Eng. Jacob Z. Ruwa, OGW  
**EXECUTIVE DIRECTOR**

cc: Mr. James Macharia, EGH  
Cabinet Secretary  
Ministry of Transport, Infrastructure, Housing &  
Urban Development  
Transcom House - Ngong Road  
NAIROBI

Mr. Julius Korir, CBS  
Principal Secretary  
State Department of Infrastructure  
Ministry of Transport, Infrastructure, Housing &  
Urban Development  
Transcom House - Ngong Road  
NAIROBI



# **Kenya Affordable Housing Programme**

## **Development Framework Guidelines**

October 2018



## Document History

Revision	Purpose Description	Date
B	Revised Issue	10.12.2018
A	First Issue	04.07.2018



## Definition and Abbreviations

Entity or Term	Abbreviation
Affordable Housing Programme	AHP
Architectural Association of Kenya	AAK
Board of Directors	BoD
Capital Markets Authority	CMA
Central Bank of Kenya	CBK
Central Organisation of Trade Unions	COTU-K
Credit Reference Bureau	CRB
Development Framework Guidelines	DFGs
Development Finance Institution	DFI
Directorate of Occupational Safety and Health Services	DOSHS
Environmental Impact Assessment	EIA
Earned Value Analysis	EVA
Federation of Kenya Employers	FKE
Financial Institutions	FIs
Government of Kenya	GoK
House Ownership Savings Plan	HOSP
Identification	ID
Information Communication Technology	ICT
Integrated Population Registration System	IPRS
Integrated Project Delivery Unit	IPDU
Joint Venture	JV
Joint Venture Agreement	JVA
Kenya Bureau of Standards	KEBS
Kenya Mortgage Refinance Company	KMRC
Kenya Private Sector Alliance	KEPSA
Kenya Property Developers Association	KPDA
Kenya Revenue Authority	KRA
Know Your Customer	KYC
Managing Agent	MA
Management Company	MC
National Construction Authority	NCA
National Housing Corporation	NHC
National Land Commission	NLC
No Objection Certificate	NOC



<b>Entity or Term</b>	<b>Abbreviation</b>
Occupational Health and Safety Assessment Series	OHSAS
Personal Identification Number	PIN
Programme Management Consultant	PMC
Primary Mortgage Lenders	PML
State Department of Housing, Urban Development	SDHUD
Savings and Credit Cooperative Organization	SACCO
Special Purpose Vehicle	SPV
Unstructured Supplementary Service Data	USSD
Tenant Purchase Scheme	TPS
Work Breakdown Structure	WBS





# Contents

Section	Page
<b>1. Introduction</b>	<b>5</b>
1.1 Purpose of the Development Framework Guidelines	5
1.2 Vision	5
<b>2. Fundamental Principles</b>	<b>6</b>
2.1 Preferred Project Structure	6
2.2 Development Strategy	7
2.3 Development Considerations	8
2.4 Integrated Project Delivery Unit (IPDU)	9
<b>3. Project Delivery Process</b>	<b>10</b>
3.1 Governance Gateway Process	10
3.2 Approach	10
<b>4. Project Development</b>	<b>12</b>
4.1 Pipeline Development and Prioritisation Criteria	12
4.2 Project Initiation	15
4.3 Design Development	21
<b>5. Procurement</b>	<b>23</b>
5.1 Background and Justification	23
5.2 Overview of the Specially Permitted Procurement Process	23
<b>6. Implementation</b>	<b>26</b>
6.1 Construction	26
6.2 Handover and Close-out	27
<b>7. Funding Model</b>	<b>29</b>
7.1 Overview	29
7.2 Proposed Cooperation Model and the Role of NHC	30
7.3 The Housing Fund	30
7.4 Kenya Mortgage Refinance Company	34
7.5 Role of Insurance	35
<b>8. Housing Portal</b>	<b>36</b>
8.1 Primary Functions	36
8.2 System Functionality	36
<b>9. Updates and Revisions</b>	<b>39</b>



## List of Figures

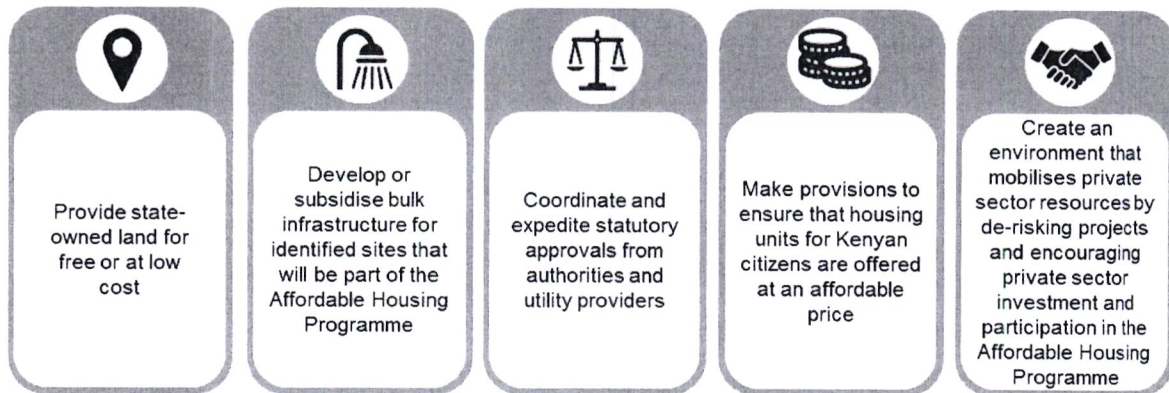
Figure 1.1 – Housing Programme Priority Themes	5
Figure 2.1 – Contractual Arrangements and Process of Engagement	6
Figure 3.1 – Key Component of the Gateway Process	10
Figure 3.2 – Gateway Delivery Process	11
Figure 4.1 – Process of Engagement with Publicly Owned Land	12
Figure 4.2 – Process of Engagement with Privately Owned Land	13
Figure 4.3 – Multi Criteria Analysis	15
Figure 4.4 – Key Steps in Public Participation	20
Figure 7.1 – Summary of Affordable Housing Demand and Supply Side Interventions	29
Figure 7.2 – JV Formation & Operation	30
Figure 7.3 – Housing Fund Capitalization	32
Figure 7.4 – KMRC Refinance Company Model	34
Figure 8.1 – Applicant Profile Assessment	38



# 1. Introduction

The Government of Kenya (GoK) has committed to deliver a series of ambitious social programmes to promote long-term economic development for Kenyan citizens through its Big Four agenda: (1) affordable housing; (2) universal health coverage; (3) enhancing manufacturing; and (4) food security and nutrition.

As part of this vision, the State Department for Housing and Urban Development (SDHUD) has been mandated to deliver the Affordable Housing Programme (AHP) and will manage the delivery throughout the project lifecycle. The GoK will act as the key facilitator and will perform the following:



## 1.1 Purpose of the Development Framework Guidelines

The purpose of these Development Framework Guidelines (DFGs) is to provide qualitative guidance on the key components of the Affordable Housing Programme. These guidelines provide instruction on how the vision and policies of the GoK, through the SDHUD, will be implemented and how progress will be monitored and reviewed. The aim of the guidelines is to set out the following:

The rationale, priority needs, and trade-offs to achieve consistency between the assessment, policy formulation, and delivery of affordable housing.

The affordable housing delivery mechanisms and the means to ensure their financial viability, including the different sources of subsidy.

Consistent information for key stakeholders on the process of the development and delivery of affordable housing.

These guidelines have been produced with various industry stakeholders in mind including planning and housing experts, engineers, architects, surveyors, developers and financiers, legal consultants, and other technical consultants with a special interest in affordable housing.

## 1.2 Vision

The SDHUD will ensure that best practices and governance principles are implemented. The vision is that the Affordable Housing Programme priority themes are encapsulated and that local content is leveraged and developed to enable GoK deliver on its commitments to the Kenyan people.

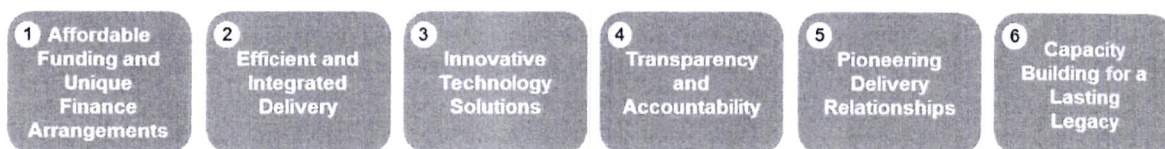


Figure 1.1 – Housing Programme Priority Themes



## 2. Fundamental Principles

As part of the development of affordable housing, and the goal to provide 500,000 homes over a four-year period, SDHUD has established some basic tenets which are set out below regarding the development and the delivery of the Affordable Housing Programme.

### 2.1 Preferred Project Structure

#### 2.1.1 Contractual Arrangements

This section outlines the contractual arrangements and process of engagement with the developer, private investor or contractor. Figure 2.1 illustrates the process which is explained in more details in the sub-sections below.

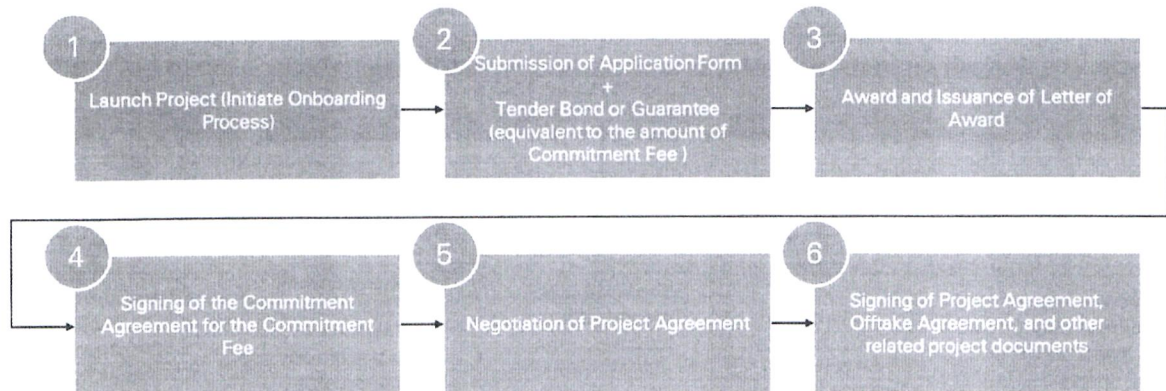


Figure 2.1 – Contractual Arrangements and Process of Engagement

#### Commitment Agreement

This governs the use of the commitment fee which the successful developer, private investor or contractor shall provide, pending negotiations and signing of the Project Agreement.

The basic provision of this Agreement is that it requires a commitment fee of up to 10% of the project cost of a particular development to be deposited by the developer into a designated escrow account as advised by SDHUD. SDHUD or NHC will not: use the commitment fee until the Housing Fund is operationalized and is in a financial position to underwrite the commitment fee; place any fiscal obligations on GoK in respect of any commitment fee.

#### Development Framework Agreement

This agreement provides a guideline of the fundamental heads of terms to be addressed and provided in the Project Agreement as project details emerge. It works as an “interim Agreement” for urgent works to commence pending final negotiations and execution of the Project Agreement.

In detail, the Framework Agreement encapsulates the terms that the parties entering into the Project Agreement will negotiate and structure according to the needs of the development project, the transaction model, as well as the operating principles that will govern the parties’ relationships.

#### Project Agreement

This agreement governs the relationship between the GoK and the developer, private investor, or contractor, and sets out in detail the terms and conditions for the development and delivery of each Project.

#### Offtake Agreement

This agreement is issued by the GoK in favour of the developer, private investor, or contractor as an undertaking for the purchase on behalf of the GoK of the completed housing units within a specified period from the date of construction completion, this time period being determined on a project-by-project basis.



The principle behind this agreement is to provide the developer, private investor, or contractor a certainty as to the quantities and prices paid in a particular development to the effect that the offtaker agrees to uptake of the housing units.

### **Letter of Support**

This is a letter that may be issued by GoK through the National Treasury, in favour of the developer, private investor, or contractor and its financiers to demonstrate that GoK is supportive of the Project and to provide that the GoK will ensure that the HF is not wound up so long as it has continuing outstanding obligations. The Letter of Support will only be issued in appropriate circumstances.

### **The National Occupational Safety and Health Policy**

This Policy will be applied to enhance the implementation of occupational safety and health programmes.

### **The National Environment Policy**

This Policy will help promote and guide the maintenance of a healthy ecosystem even as the programme undertakes its main activities.

### **Public Participation Laws and Regulations**

In line with Article 10(2) of the Constitution of Kenya 2010, the national values and principles of governance include democracy and participation of the people. As such, the incorporation of views and provision of information to the public will be provided for in the Affordable Housing Programme.

#### **2.1.2 Cooperation Model**

In the event a Joint Venture (JV) structure is the approved form of engagement, the GoK, through NHC or SDHUD as the contracting authority, shall enter into a Project Agreement with the developer, private investor or contractor to undertake and execute the delivery of a project, subject to the terms on potential profit sharing, as may be determined and agreed by NHC and SDHUD.

A Special Purpose Vehicle (SPV) shall be established jointly by the successful developer, and the GoK, in compliance with the terms and conditions in the Project Agreement.

#### **2.1.3 Land Swap**

Land swaps allows for the possibility of land to be traded or exchanged by land owners for the benefit of advancing housing projects in certain areas following due deliberations. Under the Affordable Housing Programme, land swaps shall take the form of one-time, negotiated transactions that will allow for:

- (a) GoK or County Government to swap an owned site with a private land owner for land they own in a desired location for AHP. The site from the land owner will be assessed at fair market value and GoK or County Government will provide a portion of land of equal fair market value in the alternative location.;
- (b) GoK or County Government to swap an owned site for a number of housing units in a privately-owned development. Under this scenario, the GoK or County Government will exchange a piece of land for the number of housing units whose total value, calculated as the number of units multiplied by the prevailing purchase price under the AHP, is equal to the fair market value of the land intended for the swap; or
- (c) GoK or County Government to swap land with another state-owned entity for land they own and that is in a desired location for AHP; or
- (d) Existing land owner does not want to sell the site but is open to a land swap for the negotiate fair market value of the existing site.

## **2.2 Development Strategy**

### **2.2.1 Development Split**

An essential principle in the development of housing units on government-owned property is that a portion of the land or a portion of the respective development will be solely dedicated for the construction of affordable



housing units, while a smaller portion will be allocated to the developer, private investor, or contractor for the purpose of approved development, from which the latter can achieve a reasonable commercial return. The preliminary target split under the AHP is a 70% - 30%, in favour of affordable housing, subject to review by SDHUD on a project-by-project basis.

### **2.2.2 Development Returns**

Based on the development model for a particular project, the Developer will achieve a maximum project rate of return (return hurdle), agreed on a project-by-project basis. Where the land contribution has been made by the GoK, the development returns above the hurdle will be allocated based on a pre-agreed split. It will be a requirement that the Developer, investor, contractor provide a financial model for assessment by the SDHUD.

## **2.3 Development Considerations**

### **2.3.1 Development Timeline**

Each developer, private investor, or contractor shall be required to deliver the defined number of affordable housing units within a specific period of time that will be practically identified and agreed upon, subject to assessment on a project-by-project basis.

### **2.3.2 Off-site infrastructure**

Infrastructure provision and / or upgrades external to the sites will be provided by GoK in support of the development.

### **2.3.3 Facilitations for Approvals by GoK**

Based on the selected route of procurement, and where applicable, the GoK will facilitate a schedule of approvals and No Objection Certificates (NOCs) that it will obtain on behalf of the developer, private investor or contractor, subject to submission by the developer, private investor or contractor of all relevant documents and information required and payment of the relevant fees.

### **2.3.4 Project Parties**

- NHC or SDHUD (including IPDU) as the case may be;
- Developer;
- Financier; and
- Land Owner.

The roles of each one of the above Parties will be provided in the relevant project documents including the Development Framework and Project Agreements.

Due diligence will be conducted on any developer, private investor or contractor that will be engaged in the AHP to ensure they have the technical, legal and importantly the financial capacity to undertake the Project.

### **2.3.5 Commitment Fee**

Each developer, private investor or contractor shall be required to make a commitment of up to 10% of the Project Cost, in the form described in 2.1.1 above.

### **2.3.6 Economies of Scale in the Supply Chain**

The magnitude of the projects to be procured under the Affordable Housing Programme is expected to contribute towards significant savings in the supply chain. It will be possible to avoid some of the problems associated with the housing construction industry which is highly fragmented and therefore unable to take advantage of economies of scale. The Affordable Housing Programme will be more cohesive and allow efficient construction procurement processes to be implemented.

By standardising the various design elements of the housing units, the housing construction companies will be able to cut costs and increase productivity. Further savings will be possible through approaching industry players to explore efficiencies in construction. Developers, private investors and contractors will be encouraged to seek further savings through efficiencies in the purchase of bulk materials from key suppliers.



### **2.3.7 Local content and enterprise development**

The development of local enterprise remains a key related objective of the Affordable Housing Programme. Recognising that there will be opportunities in the supply chain to provide inputs whose specifications will have been standardized for the housing projects, the Affordable Housing Programme will implement strategies that will encourage ringfencing supply of certain goods and services to allow for formalization of the informal sector as well as participation of special groups in the Affordable Housing supply chain. In addition, the use of locally produced and sourced materials and services will be encouraged for all projects.

### **2.3.8 Public Participation**

This is ongoing through various avenues such as Kenya Private Sector Alliance (KEPSA), Kenya Property Developers Association (KPDA), Architectural Association of Kenya (AAK), Federation of Kenya Employers (FKE), Central Organisation of Trade Unions (COTU-K), and other key civil society organisations to ensure the views of the public are taken into consideration in the affordable housing program. This is further discussed in Section 4.2.2 below.

### **2.3.9 Facilities Management**

This responsibility will be borne by the entity undertaking the project, depending on the selected development model, will establish the management company that will later be handed over to the management company or Housing Fund (in the case of a Tenant Purchase Scheme - TPS) in a particular project. Further details are included in Section 6.2.2.

## **2.4 Integrated Project Delivery Unit (IPDU)**

The State Department, recognising the need to develop a co-ordination and alignment mechanism that will ensure the various programs and initiatives under the Affordable Housing Programme are implemented in an efficient and cost effective manner and contribute to the stated objectives of the national agenda, has established an Integrated Program Delivery Unit (IPDU) comprising a multidisciplinary team to coordinate, monitor and support implementation of its urban development and housing programs.

The IPDU as envisioned will be the center of all the planning, designing (technical and financing) and implementation for various programs, projects, and initiatives of the State Department ensuring that the investments in urban planning, urban infrastructure and affordable housing result in the desired outcomes. The IPDU will also be the Government implementation entity under SDHUD for all urban developments, infrastructure, transportation and public works initiatives.

Through the creation of Programme Management Offices aligned to sector requirements, the IPDU will implement international best practices and governance principles, including these DFGs, to deliver a pioneering portfolio of globally recognized social initiatives to assist the Government achieve its commitments under the Four Pillars to the Kenyan people and drive long term economic development.



### 3. Project Delivery Process

#### 3.1 Governance Gateway Process

The Governance Gateway Process is a method to examine, review and approve the progression of projects at pre-defined critical stages in their lifecycle, to provide assurance that the projects are initiated, governed, and completed in alignment with the Programme’s objectives.

The Gateway process includes the following key features:

**Robust Process:** a well-defined and standardised process with defined objectives, tasks, products, roles and responsibilities, accountability, etc.

**Adaptability:** the process is adaptable to the different programmes, acts across the range of programmes / sectors and project sizes and can be governed at the different levels that may be required.

Figure 3.1 below illustrates the key components of the Gateway Process.

<p><b>Key Stages</b></p> <p>Identification of key stages across the project lifecycle – from project initiation and development, to project delivery and implementation</p>	<p><b>Defined Roles and Responsibilities</b></p> <p>Responsibility of the gateway review lies with the gateway owners, in consultation with relevant project team members where needed – products required will be specified</p>
<p><b>Gateway Reviews</b></p> <p>Obtaining approvals for each stage to ensure that requirements have been completed and authorisation to proceed and fund the next stage is granted</p>	<p><b>Independent Review and Approving Body</b></p> <p>Accountability lies with the Project Steering Committee that approves progression decisions.</p>
<p><b>Gateway Routes</b></p> <p>Application of a pre-defined criteria to projects to determine the level of assurance required from the gateway process</p>	<p><b>Gateway Health Checks</b></p> <p>Providing a 'point in time' insight into areas of concern which may impact completion of the next stage or project outcomes (as and when needed)</p>
	<p><b>Key Deliverables</b></p> <p>Identification of deliverables that need to be produced to plan, manage and progress a project. These are identified and evidenced as part of the gateway review process</p>

Figure 3.1 – Key Component of the Gateway Process

#### 3.2 Approach

The gateway process will provide increased certainty in terms of costs, schedule, design, procurement, and risks through pre-determined review gateways throughout the project lifecycle.

It will provide SDHUD with an appropriate level of due diligence that the right project works have been undertaken at the expected level of quality before major investment decisions are made.

Project teams will also gain value from thorough readiness checks at key points in the projects’ lifecycle and added credibility from validation of their efforts. This will allow:

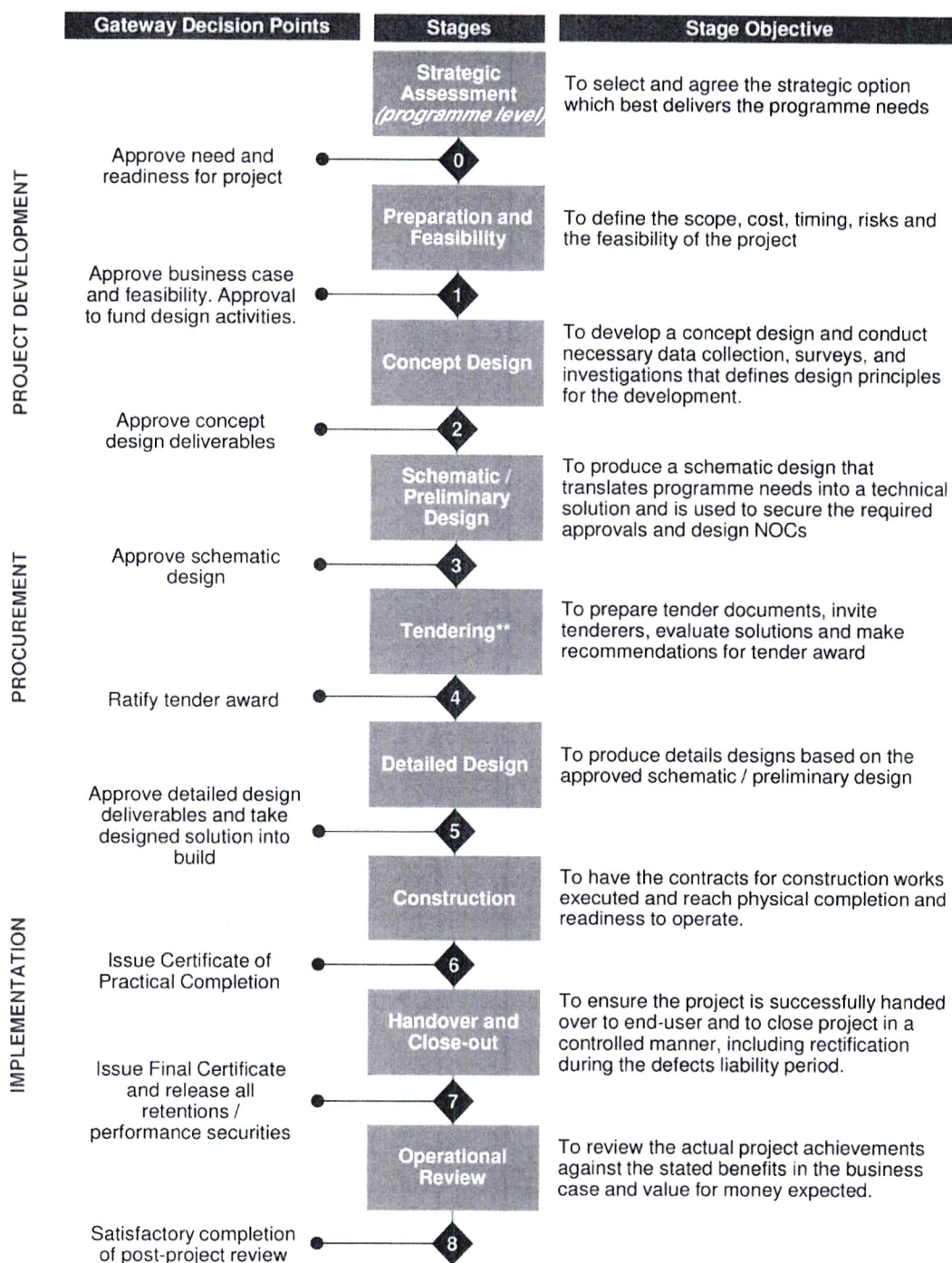
Funding and approvals to be obtained without incurring delays

Expectations of stakeholders to be met





Figure 3.2 below summarises the Gateway Delivery Process through the different stages of the project. Each phase of the project lifecycle will be discussed in further detail in the succeeding sections.



\* Gateway Ownership, Approvals, Roles & Responsibilities, and Deliverables to be defined and mapped across each stage

\*\* Position of Tendering stage is dependent on the procurement route taken

Figure 3.2 – Gateway Delivery Process



## 4. Project Development

This section outlines the project development process starting with the assessment of the pipeline and the available options, selection of the strategic option that meets the programme needs and subsequently defining the scope, timeline, risks and the feasibility and developing a schematic / preliminary design that translates programme needs into a technical solution prior to proceeding to tender.

### 4.1 Pipeline Development and Prioritisation Criteria

The process by which land plots are identified and prioritised within the context of the overall Affordable Housing Programme is described below.

The prioritisation criteria will inform the master development schedule which will identify the provisional commencement date for the development for each plot of land. Upon approval of a land plot to be developed, it will be subject to the project initiation process before it is approved as a live project and developed under the gateway process.

The programme development strategy encompasses the following attributes:

- Landowner engagement process (private owners, Counties or other public entity)
- Site Identification and compliance checks
- Site Prioritisation Assessment
- Packaging Strategy

#### 4.1.1 Land Owner Engagement Process

##### Publicly Owned Land

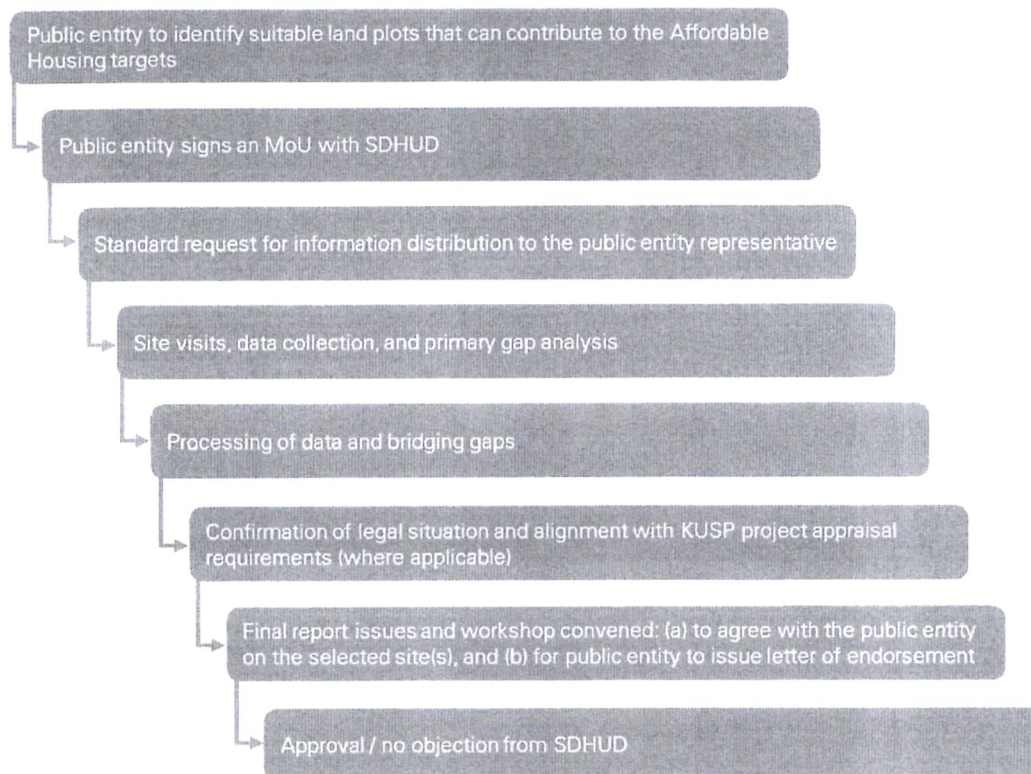


Figure 4.1 – Process of Engagement with Publicly Owned Land



### Privately Owned Land

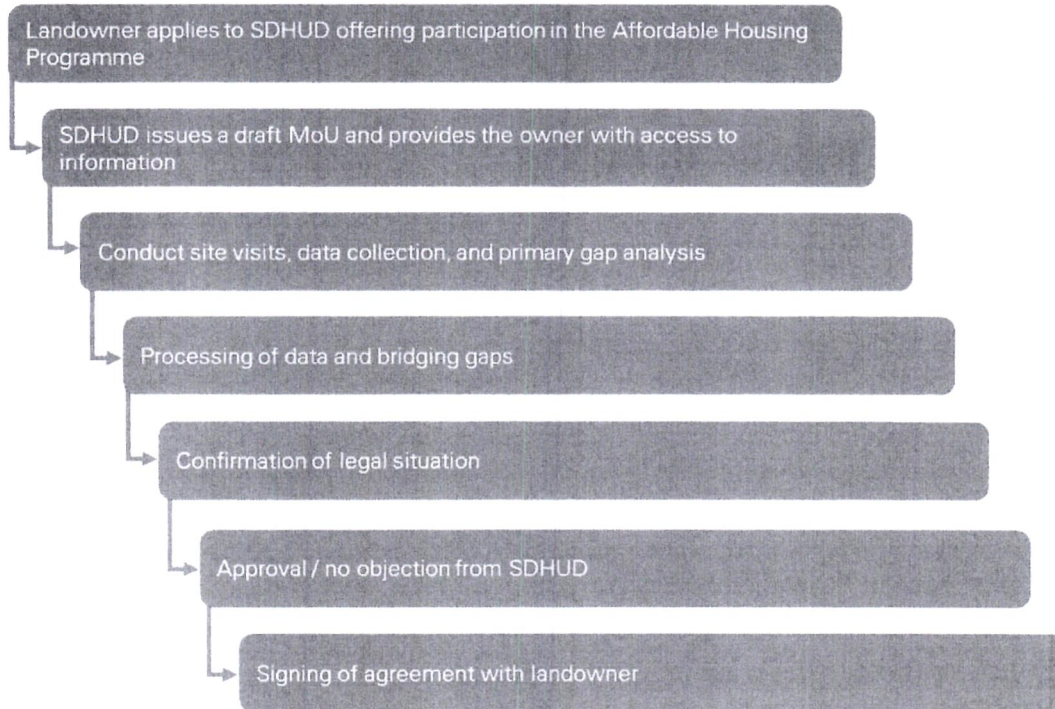


Figure 4.2 – Process of Engagement with Privately Owned Land

#### 4.1.2 Site Identification and Compliance Checks

Before a plot of land is subjected to prioritisation assessment, it will be subjected to the compliance checks that will determine the suitability of the land to contribute to the strategic objectives of the SDHUD and identify any issues that could impede on the successful development and handover of fully completed housing units. Among the critical areas of assessment are summarised below.

##### Land Ownership Documents:

Title Deed / Certificate of Lease

Official Certificate of Search

Cadastral surveys.

Survey maps of sites showing all encumbrances, easements and restrictive covenants that may exist on the title.

Rates & Rent clearance certificate

Check for encumbrances; Squatters, Ndung'u Report, NLC gazetted properties, etc.

##### Site information summary

Physical site inspection is a critical part of the due diligence of each site. The SDHUD team identified for site selection will visit identified sites at the outset and carry out a visual inspection of the site. This will assist in quickly determining if the sites are suitable based on the criteria set by the team.

Priority will be to establish if the sites identified can be developed by review of:

- Usable vs Non-Usable areas
- Slopes analysis,
- Soil / geotechnical assessment,
- Sensitive ecological and archaeological sites,



- Identifying if the site is within a flood-plain / flood-risk / flood prone area
- Compatibility with adjacent land uses
- Waterbodies/ Riparian Reserves

If the site is a Brownfield (with existing development), it will be necessary to determine current users and if there is a need for a resettlement plan. Identifying and mapping the users will be a critical technical criterion.

### **Site Survey Information**

#### Topographical Surveys

- Site specific topographical surveys showing contours and existing buildings and infrastructure
- Review of Kenya topo-cadastral maps can be a useful place to start

#### Geotechnical Data:

- Survey of Kenya geotechnical / soil maps
- Detailed geotechnical investigations to be commissioned during the early works stage

#### Hydrogeological and Hydrological Data / Maps:

- Survey of Kenya / Ministry of Water/ AWSB hydrogeological / hydrological maps to be provided if available
- Establish ground water, flood risk areas, etc. If information is not available this will be a subject of due-diligence analysis on the site
- Detailed investigations to be commissioned during the early works stage

### **Infrastructure Maps (site specific and regional)**

Water: Existing and future planned trunk and distribution water maps.

Waste water: Existing and future planned sewerage and storm water trunk and reticulation maps.

Power: Main and distribution power networks maps: - existing and future planned showing all networks.

Network capacities: Design committed and available capacities.

Roads networks: Current and future infrastructure programs.

Solid Waste Management Systems: Current and planned programs.

ICT infrastructure network maps.

### **Town / Physical planning data**

Local physical development and permitted land use plans;

Existing and future planned integrated urban development plans and integrated county development plans.

Planning restrictions due to proximity to sites of specific interest (airports, security / sensitive sites, waste management sites, nature reserves.

#### **4.1.3 Site Prioritisation Assessment**

The site prioritisation assessment will provide a database of land plots with a priority score that will guide the sequence of implementation by the SDHUD. The prioritised project ranking will inform the master development schedule which will be used to identify the forecast project commencement date. The database will be managed by the SDHUD and updated based on the inclusion of additional plots.

The prioritisation assessment will rank the potential projects across the overall Affordable Housing Programme which enables the SDHUD to plan the development of sites in accordance with the Programme's strategic objectives.



The prioritisation database will be a live document that will funnel the opportunities based on overall expected strategic benefits against the potential risks associated with the sites. The Multi Criteria Analysis (MCA) may consist of the following criteria as illustrated in Figure 4.3 below. Such criteria will be weighted to reflect the comparative importance:

Criteria	Score (1-10)	Weight	Weighted Score
<b>Plot Size:</b> Identifies the size of the plot on the available area to be developed			
<b>Plot Potential:</b> Assessment on the potential of the plot to provide affordable, gap and commercial units in addition to the social housing units			
<b>Potential Unit Yield:</b> Assessment on the potential number of units that the plot could yield			
<b>Economic Contribution:</b> Qualitative ranking on the wider economic impact based on the successful development of the site			
<b>Financial Land Value:</b> Approximate value of the land			
<b>Strategic Importance / Alignment:</b> Qualitative assessment of the strategic importance of the site against SDHUD strategic objectives			
<b>Approximate Cost Range:</b> Capital cost required to develop the site. This will be combined with the duration and risk potential assessment to provide an overall complexity assessment			
<b>Approximate Duration:</b> Approximate duration to develop and execute the project			
<b>Risk Assessment:</b> Qualitative assessment of the risks to the project			
<b>Delivery confidence assessment:</b> Successful delivery of the project to programme, cost and quality			

Figure 4.3 – Multi Criteria Analysis

#### 4.1.4 Packaging Strategy

A provisional packaging strategy will be conducted based on the conclusion of the following:

- Site identification and compliance checks
- Site prioritisation assessment

The provisional packaging strategy will identify plots of land that could be packaged together within a county to attract suitably competent developers, private investors or contractors and allow for economies of scale to increase efficiency, reduce the overall capital costs of the projects.

## 4.2 Project Initiation

The project prioritisation database will identify a potential project or group of projects (package) that can go through the project initiation process. On deciding whether a project is ready to be initiated and developed into a business case, the following areas will be assessed:

- Current number of projects under development;
- Supply chain capacity;
- Risk level of the current Programme;
- Project development cost; and



Fiscal space to meet undertakings under the Commitment Agreement and Offtake agreement.

If a project is deemed to be the 'right' project and it is the 'right' time to develop, then the activities under the Gateway Process shall commence and the project will become live under the SDHUD Programme.




Affordable Housing projects will be restricted to projects which are in the pipeline (captured on the database).

The following sub-sections include other key elements that will need to be considered during the project initiation phase.





#### 4.2.1 Risk Identification and Allocation

The following are the key risks that have been identified preliminarily. These may increase and be broken down into further detail during the project initiation stage. The allocation and possible mitigation strategies are suggestions and preferences but can be subject to discussions and negotiations, depending on the varying circumstances affecting each project.

The key risks identified are given in Table 4.1 below.

Risk Name	Description	Preferred Allocation	Possible Mitigation Strategies
 Site Risk	Site conditions which may make the construction, operations and maintenance of the project more expensive than anticipated.	Private sector for identified risks	Provide private sector with sufficient time to conduct site due diligence
 Design, Construction and Commissioning Risk	Risk that the project does not meet the design and construction standards set out in the Project Agreement and in the Development Framework Guidelines.	Design Risk – Shared between GoK and Private Sector Construction risk and commissioning risk – Private sector	Undertake activities (e.g. demand survey, analysis of data from Housing Portal) to ascertain and validate designs Require provision of a construction performance security to ensure enforcement of standards Require approval of designs and/or any deviations
 Financial Risk	The risk that the operations and/or construction of the project will not be funded sufficiently.	Private sector	Offtake agreement to be executed with developer Letter of Support to be issued to increase bankability Financial close as a condition precedent to construction commencement Require the holding of the bid bond until financing is in place Private party to provide construction security Daily liquidated damages for delay



Risk Name	Description	Preferred Allocation	Possible Mitigation Strategies
 Operations and Maintenance Risk	The risk that the project will not be operated and maintained in accordance with the standards set out in the Project Agreement and in the Development Framework Guidelines.	Private sector, depending on the project structure GoK at the point of transfer of Units	<ul style="list-style-type: none"> <li>Have clear performance standards and specifications</li> <li>Require the provision of a performance bond</li> <li>Penalties to be imposed in case of failure</li> <li>Have a contract clause imposing performance deductions</li> <li>Outsourcing of facilities management services by Housing Fund upon asset transfer from developer</li> <li>Integrate fees for facilities management in unit purchase agreements</li> </ul>
 Demand Risk	The risk that the actual demand for the service provided by the project is lower than the projected demand.	GoK	<ul style="list-style-type: none"> <li>Undertake demand studies</li> <li>The housing portal shall provide the fund with an early indication of desired locations and units to be able to generate a demand analysis that will guide specific project decisions</li> <li>Ensure that the Offtake Agreement clearly specifies the period and coverage</li> </ul>
 Regulatory Risk	Risk that the GoK will enforce new regulations or fail to enforce regulations that will prevent private sector from fulfilling its obligations.	GoK	<ul style="list-style-type: none"> <li>GoK to define the jurisdiction of each the county and the national government</li> <li>GoK to closely monitor and limit changes</li> <li>Require the private sector to implement the changes in such a way as to minimize the financial effect</li> <li>May opt to avail of a political risk insurance product</li> </ul>
 Force Majeure Risk	Risk that unforeseeable event occurs and hampers the ability of the private sector proponent to construct and/or operate and maintain the project.	Shared between GoK and private sector	<ul style="list-style-type: none"> <li>Require purchase and maintenance of insurance for insurable risks for the duration of the project</li> <li>Project Agreement to clearly define force majeure events and provide roles and responsibilities in such an event.</li> </ul>








Risk Name	Description	Preferred Allocation	Possible Mitigation Strategies
 Right of Way / Land Acquisition Risk	The risk that the right of way / land necessary to undertake the project as contemplated under the Project Agreement is not available.	GoK	<p>Thorough due diligence on land title and resettlement</p> <p>GoK to complete acquisition of the land prior to tender</p> <p>Contract provision to demonstrate firm commitment to deliver the site free of settlers and incumbrances.</p>
 Inflation Risk and foreign exchange risk	The risk that the financials of the project will be affected by inflation.	Shared between GoK and private sector	<p>Private sector to bear this risk except beyond a level where indexation may be considered by reference to indices.</p> <p>Forex hedge to be procured.</p> <p>Provide for payment mechanism that takes into consideration the rise in inflation</p>
 Insolvency Risk	The risk that the debt drawn down for the project cannot be paid. This is also known as bankruptcy risk.	Private sector	<p>Allow step-in rights for the lender</p> <p>Require prior GoK approval for changes in control</p> <p>Conduct of proper assessment of eligibility of the private partner</p>
 Subcontractor Risk	The risk of poorly performing subcontractors.	Private sector	<p>GoK to carry out due diligence on principal subcontractors and require approval prior to replacement</p> <p>Contract provision that the private partner will be liable for performance liabilities for all work of the subcontractor.</p>
 Interface Risk	The risk that other related infrastructure will not interconnect well or will not interface well with the facility.	Shared between GoK and private sector (GoK to ensure 3rd party actions, private partner to ensure its design meets interconnection requirements)	<p>GoK to facilitate interconnectivity arrangements for transport, utilities and other facilities</p> <p>Private partner to comply with the technical specifications for the interconnectivity requirements.</p>

Table 4.1 – Risk Identification and Allocation





## 4.2.2 Public Participation

'Public participation is any process that directly engages the general public in decision-making processes and gives full consideration to their inputs.' In Kenya, public participation is a democratic right enshrined in The Constitution of Kenya 2010. Public participation is a vital part of public governance and enforcing devolution. As a mechanism of empowering citizens, ameliorating civic engagement, increasing accountability, improving the delivery of services and promoting sustainable development. Subsequently, designing a meaningful public participation programme will play an essential role in the success of Affordable Housing Programme.

### Public Participation and Housing Delivery in Kenya

This section includes a brief overview of the history of the delivery of affordable housing in Kenya and the complexities of providing housing to the urban poor and low-income groups. While the challenges have been extensively discussed in other literature, some of the issues that have affected the success of housing projects for lower income segments include: poor communication and information sharing about projects; counter-productive or contentious resettlement policies; limited and ineffective participation programs that can lead to exclusionary design, land evictions, physical and socio-economic displacement, conflict and the rejection of public projects. Rarely are the people who will be most directly affected by these interventions involved throughout the planning, design and implementation of projects. It is therefore important that the Affordable Housing Programme adopt effective measures for public participation.

### Key Considerations

Public participation is a process that covers the lifespan of a project, it is an iterative process between a sponsor agency and key stakeholders with the aim of producing better outcomes and better governance and building citizens' capacity to advocate for their own needs, resolve and manage challenging social issues whilst allowing sponsor agencies to make better and more easily implementable decisions that reflect public interests and values, and which are better understood by the public. Designing a successful participation programme is essential for the ownership and acceptance of projects and building trust between GoK (and other state actors) and county's residents/citizens. Meaningful public participation is not just about asking communities what they want or getting their buy-in to an already determined outcome, it involves seeking public inputs at specific points in the decision-making process and on specific issues where their inputs have the real potential to help shape the decision or action that needs to be taken.

In order to deliver 500,000 homes (as part of the Affordable Housing Programme), public participation will need to be incorporated throughout the lifespan of the project including; planning and design, resettlement and construction, relocation and post construction monitoring and evaluation of housing projects. The form of participation that will be adopted at each stage of the process needs to be clearly outlined to meet participation objectives and manage the expectations of the public by defining their role in the project in a way that is practical and real. The appropriate level of participation must provide an actual opportunity for public input to influence decisions and include mechanisms that demonstrate how their inputs are being reflected in the various housing projects. Inclusive representation across race, tribe, gender and marginalised and vulnerable groups is also essential for a successful participation programme. Other factors that contribute to the success of a participation programme include a commitment to the process, as well as the allocation of sufficient financial and human resources for all aspects of the process, training and capacity building of all those involved in the process and political will and a climate of integrity. Below is an overview of the key steps required to develop a successful participation programme:



- 1 Organize Participation**
  - Develop program, identify and commit needed skills and resources e.g. Conflict management, communication and media, practical facilitation, or research
- 2 Identify and build relationships with stakeholders**
  - Conduct a situation assessment, stakeholder/actor mapping, initiate and build relationships with relevant stakeholders.
- 3 Choose an appropriate level of public participation for each phase of the project**
  - Set clear participation goals and objectives, understand what is required to meet the needs of key stakeholders and gain inputs that will effectively impact and influence decisions.
  - Define the form of participation that is required e.g. Information sharing, consultation, involvement, collaboration or empowerment.
- 4 Integrate Public Participation in the decision-making process**
- 5 Select Public Participation tools that match the objectives of the participation process**
  - Develop tools that will help to inform, involve and gain inputs, build consensus and incorporate public inputs into decisions and relay how inputs have been used e.g. Surveys, workshops, focus group discussions, social media, public forums, radio and tv, etc.

Figure 4.4 – Key Steps in Public Participation

#### 4.2.3 Communication Protocols

Communication will play an essential role in harnessing the goodwill of all stakeholders and participants in the delivery of the Affordable Housing Programme. The successful implementation of Communications Protocols will assist in minimising any mixed messages regarding the programme.

The Affordable Housing Programme will impact a number of Government ministries, departments and agencies. The intention of the protocol is to guide the communications process and the interactions between Government departments, stakeholders and participants.

##### General Communication Principles

The following general principles of communication are applicable to the Affordable Housing Programme:

Citizens are constantly informed about GoK work and are empowered to take an active part in it.

All communication regarding the Affordable Housing Programme will originate in the Office of the Principal Secretary for SDHUD.

All relevant channels of communication will be used, particularly those that reach the poor and those in rural areas (e.g. Radio/Kenya Broadcasting Corporation News/Twitter/Facebook, etc.).

Integrated planning and communication will be utilised at the interdepartmental and inter-governmental levels.

Communications will be guided by a strategy and plan.

##### Initial Protocol Development Process

The Affordable Housing Programme will interact with all Government and County Government Stakeholders, as well as internal departments and personnel, to develop an integrated Communication Protocol. The protocol will ensure that a consistent message is delivered to all levels and to all concerned parties and stakeholders.

As custodians of this Programme, communications protocol will be guided by the Ministry of Transport, Infrastructure, Housing and Urban Development.



#### **4.2.4 Economic Development**

This section discusses the economic linkages in the Affordable Housing Programme – how economic considerations are an integral part of project development and how the programme can enhance the local economy.

##### **Household Information**

Information will be gathered on household characteristics e.g. income, disposable income, tenure etc. This is to ascertain the income brackets of the population (target) and determine affordability issues. This will feed into the economic model for the Affordable Housing Programme, which will contribute in the decision-making process of the various developments under the programme.

##### **Local Economic Development**

The size of the developments under the Affordable Housing Programme are significant, therefore, it is anticipated that during the implementation of the programme, there will be a rise in the consumption of the various building materials as well as the local manufacturing. This will also have a very positive impact on the local household income, as a result of the opportunities for new jobs creation and new emerging developments such as shopping centres, schools, hospitals, etc.

The Affordable Housing Programme will therefore emphasize strategies that allow for local content development i.e. the preference for locally produced and sourced materials as well as services.

### **4.3 Design Development**

Based on the procurement method, a number of design development options could be implemented. In general, it is intended that the majority of the Affordable Housing projects will be designed by resources appointed by the Integrated Project Delivery Unit (IPDU) within the Affordable Housing Programme. The IPDU will ideally develop projects up to schematic / preliminary stage, including securing the required statutory approvals and design NOCs, which will form the basis of the tender. This will provide the developer, private investor or contractor with adequate design details and specifications that enables them to price within the limits set by IPDU and develop a business case. The process however has been designed with a level of flexibility so as the IPDU will be able to consider proposals for design amendments as long as such design changes do not adversely deviate from the design guidelines and standards.

In some cases, and based on the procurement route, the design development will be carried out by the developer, private investor or contractor based on the design guidelines and standards. In such cases and post award, the design development from concept through to detailed design will be undertaken by the design and engineering firm appointed by the developer, private investor or contractor.

In all cases, design review and approval process will be in accordance with the Gateway process as demonstrated in Section 3 above.

#### **4.3.1 Design Approvals**

In accordance with the Gateway Process, design submissions will be reviewed by the IPDU on each stage of the design. Approval by IPDU will be required prior to proceeding to the following design stage.

#### **4.3.2 Design Management**

Design management will be conducted by IPDU who will monitor the progress of the design deliverable as the alignment with the agreed design schedule.

#### **4.3.3 Statutory Authorities Approvals**

Table 4.2 lists the permits and NOCs that would generally be required for a development. However, in order to fast-track the review and permitting process, the SDHUD will seek to secure delegated authorities from all respective stakeholders and service providers, so as it would effectively be a 'One-Stop-Shop' for the required permits and design NOCs under the Affordable Housing Programme.

Accordingly, and where applicable, the developer, private investor or contractor will be submitting all required drawings, documents, and reports to the SDHUD team for review, approval and onward submission to the respective approving authority for their issuance of the required permits and NOCs.



APPROVAL/ PERMIT REQUIRED	APPLICATION MADE TO [ISSUER]
Change of land use	County Government and National Land Commission
Architectural drawings Approvals	County Government
Structural Drawings Approvals	County Government
EIA License	NEMA
NCA Registration	National Construction Authority (NCA)
Workplace Registration	Directorate of Occupational Safety and Health Services (DOSHS)
Signboard Permit	County Government
Excavation Permit	
Hoarding Permit	
Certificate of registration under Occupational Safety & Health Act 2007 (OSHA)	Directorate of Occupational Safety & Health Services (DOSHS)
Water Connection	County Water and Sewerage Company
Sewer Connection	
Power Connection	Kenya Power Company
Telephone & Internet Connection	Telkom Kenya Limited / Safaricom Limited / Airtel Kenya or other service provider.
Borehole drilling permit	Water Resource Authority (WRA)
Borehole abstraction Permit	Water Resource Authority (WRA)
Occupational Certificate	County Government
Certificate of compliance of installed equipment i.e. lifts, boilers etc.	Directorate of Occupational Safety and Health Services (DOSHS)
Public Health Permit	Directorate of Occupational Safety and Health Services (DOSHS)
KEBS Certification	Kenya Bureau of Standards (KEBS)

Table 4.2 – Required Permits & NOCs



## 5. Procurement

### 5.1 Background and Justification

Projects in the affordable housing sector have previously faced implementation challenges due to several limiting factors in the delivery model. Historically, where projects have been awarded, there have been procurement challenges as well as challenges where selected bidders have been unable to raise the required financing. This has led to delays in project commencement and in many cases, projects have not taken off. Other projects have stalled when conditions precedent related to land titling have not been met. Others still have faced challenges when after detailed market analysis, the projects have proven to be unattractive to developers and potential partners. However, beyond the challenge of securing the right partner for projects, it is important to note that the cost of providing affordable housing can be quite high and with competing obligations of the Government, it is important to consider off balance sheet funding options that will not rely on funding from the exchequer. In this regard, SDHUD will ensure that financing is obtained to avoid fiscal risk to the exchequer.

The immediate challenge for the AHP therefore, is to develop a financing and delivery framework that will attract private sector funding and allow for mass construction of housing units. The current solution focuses on packaging housing projects into bankable projects and sourcing for project developers and financiers who can then take the projects to completion. SDHUD, National Housing Corporation ("NHC"), Housing Fund, the Integrated Project Delivery Unit ("IPDU"), County Governments or any other National or County Government entities designated by the Cabinet Secretary to implement the AHP ("Contracting Authority") will require strategic partners, such as developer consortiums and financiers, who will deliver homes under the affordable housing program.

In light of the urgent need to achieve the Government's objective for affordable housing, it is imperative that there be a procurement process for strategic partners (including developers and financiers) that will respond to the financing and time challenges, create transparency and certainty of project materialization, and allow the AHP projects to be completed in earnest. SDHUD is cognizant of Article 227 of the Constitution that requires a procuring entity to contract for goods and services in a fair, equitable, transparent, competitive and cost-effective manner.

### 5.2 Overview of the Specially Permitted Procurement Process

The Specially Permitted Procurement Process (SPPP) allows the AHP to source for suitable partners from both a technical and financial point of view and work with them to develop housing and settlement projects across the Country. To source the strategic partners for AHP, the SDHUD will identify potential strategic partners, based on criteria published in the DFGs. These criteria include willingness and ability to adhere to the DFGs, adequate experience in the real estate development sector, technical capacity to undertake similar projects, and ability to package a fully underwritten project proposal.

SDHUD will then enter into direct negotiations on various projects based on applications of interest by these potential strategic partners. There will be a special committee that will review the applications for suitability and proceed to negotiate with the strategic partners. Where more than one application has been received for a particular project, the special committee will review and rank the applications and proceed to negotiate with strategic partners by order of ranking. Successful negotiations will result in a contract that will be signed, and projects will begin.

#### 5.2.1 Publication of Development Framework Guidelines and AHP Pipeline

SDHUD shall publish the finalized and approved Development Framework Guidelines ("DFGs") as well as the list of projects forming part of the AHP, which shall include both National and County Government projects and shall be updated from time to time ("AHP Pipeline") on a dedicated AHP portal. The AHP Pipeline will be categorized into the following categories:

- (a) Where a Contracting Authority requires affordable housing units to be developed on specific parcels of public land owned by it and on which it has completed project feasibility.



- (b) Where a Contracting Authority requires affordable housing units to be developed on specific parcels of public land owned by it and on which it has not undertaken or finalized project feasibility.
- (c) Where a Contracting Authority requires affordable housing units to be developed in specific locations where it does not own public land but where it has conducted a needs analysis and determined that there is a need for affordable housing.

In addition to the projects on the AHP pipeline as above, private parties who approach a Contracting Authority with unsolicited proposals for development of affordable human settlements and housing units on private land or on public land not forming part of the AHP Pipeline will be considered, provided they are aligned to the objectives of the AHP.

### **5.2.2 Identification of Developers: AHP Application Process**

Interested applicants will be required to submit applications including technical and financial proposals that meet the minimum criteria as set out in the AHP application form ("AHP Application Form") and in putting together their applications:

- (a) Applicants for projects falling under paragraph 5.2.1(a) will rely on the information available on the projects as availed on the AHP Portal.
- (b) Applicants for projects falling under paragraph 5.2.1(b) will be required to undertake some preliminary appraisal work on the proposed project for which they are submitting an AHP application including status of external infrastructure (e.g. roads, water, electricity), expected development timeframe and such other information as may be set out in the AHP Application Form that may be relevant to facilitate decision making.
- (c) Applicants for projects falling under paragraphs 5.2.1(c) and private parties who approach a Contracting Authority, will also be required to undertake the preliminary appraisal work required under paragraph 5.2.2(b). In addition, such applicants will also be required to provide basic information on the location, including geographical coordinates of the site, current ownership of the land and if the project applicant does not have the land rights - a brief description of how the applicant intends to acquire such rights.

The information provided by applicants in the AHP Application Form will be sufficiently detailed as to demonstrate the applicant's investment, commitment, and ability to proceed with the development of the proposed project.

### **5.2.3 Evaluation**

SDHUD shall establish an AHP Committee who will be responsible for reviewing and evaluating the AHP Application Forms. Where only one AHP Application Form is received for a particular project, the AHP Committee will review the application and make its assessment. Where more than one application is received for a particular project, the AHP Committee will evaluate all the applications received and rank the applicants.

The AHP Committee shall be responsible for all aspects of the project selection process and presentation to the market. This will include conceptualisation and identification of potential projects, preparation of the tender documents, publication of the invitation to bid, conduct of pre-bid conference and responding to request for clarification from bidders and other stakeholders.

### **5.2.4 Direct Negotiations**

Where only one AHP Application Form is received for a particular project, and provided that the applicant meets the technical and financial criteria, such applicant will be invited for negotiations on the project agreement(s).

Where more than one application is received for a particular project, the AHP Committee will invite the highest ranked applicant for negotiations on the project agreement(s) and request the second ranked applicant to extend the validity of its application pending completion of negotiations with the highest ranked applicant. Should negotiations with the highest ranked applicant fail, the AHP Committee will invite the second ranked applicant for negotiations.



#### **5.2.5 Execution of contract**

The relevant Contracting Authority will conclude the project agreement(s) with the sole applicant (in the case where only one AHP Application Form is received) or with the highest ranked applicant (or the second ranked applicant as the case may be) where more than one AHP Application Form is received, following successful negotiations.

#### **5.2.6 Form of Application**

The form of application will be provided through the SDHUD Affordable Housing Portal.



## 6. Implementation

### 6.1 Construction

Construction of the projects under the Affordable Housing Programme will be undertaken by the developer, private investor or contractor and will be supervised by the PMC on behalf of the SDHUD who will monitor activities on site and report progress on cost, time and quality of the project, as well as escalating risks and performance issues to SDHUD.

#### 6.1.1 Project Controls

Effective project controls will increase the certainty of outcome and identify areas of underperformance early to allow for effective mitigation measures to be implemented.

The key areas of project controls cover the following:

- Planning and scheduling;
- Cost estimating;
- Cost control;
- Progress and performance measurement; and
- Document control and management.

The PMC will implement and monitor the project controls requirements of the SDHUD that each developer, private investor or contractor will agree to adhere to as part of the procurement process. The SDHUD will develop a standardised Work Breakdown Structure (WBS) that will facilitate consistent reporting and capturing of schedule activities and associated Earned Value Analysis (EVA). All schedules will be cost- and resource-loaded by the contractor and monitored by the PMC.

#### 6.1.2 Health, Safety and Environmental Policy

The Affordable Housing Programme acknowledges its potential to influence change in occupational health and safety management. Developer, private investor or contractor shall be committed to providing and maintaining a safe and healthy working environment for their staff and workers and to ensuring the safety of others affected by the operations and services.

The vision is for health and safety to be a natural and integral part of the Programme culture. We aspire to this through effective leadership and developing appropriate behaviours. This means that the developer, private investor or contractor will be expected to be proactively working with all parties including personnel and supply chain to ensure that health and safety leadership is fully integrated into the decision-making processes and supply chain.

Developer, private investor or contractor will achieve this by:

- promoting a vibrant safety culture through two-way communication and participation including the use of safety moments and safety challenges;
- implementing behavioural-based programmes;
- promoting the importance of the safety & health and physical, mental and social wellbeing of all personnel, within the workplace;
- providing adequate funding and resources that contribute towards a safe and healthy working environment, including supervision, training and the appointment of competent professionals;
- implementing business controls, health and safety legislation;
- improving and assessing health, wellbeing and safety performance by investing in training, awareness, systems, tools and an assurance programme;
- improving and monitoring performance and progress against objectives; and





having either achieved or, working towards the British Standard OHSAS 18001:2007 (Occupational Health and Safety Management Systems) and other sector-specific equivalents, as appropriate.

Developer, private investor or contractor will have to ensure that these requirements are defined within their business management system, and they will be accountable for developing and implementing an HSE policy for the specific development, which will be in line with the following National Policies and their applicable laws and Acts:

- The National Occupational Safety and Health Policy
- The National Environment Policy

## 6.2 Handover and Close-out

The SDHUD will not take ownership of the assets at any stage of the project. The Offtake Agreement will be signed to ensure the purchase of the completed housing units within a certain period after construction completion and handover of the assets to the offtaker.

### 6.2.1 Project Completion and Asset Handover

Projects will be assessed as complete once all contractual responsibilities have been demonstrated and approved by SDHUD. At this stage the project team will apply for Gateway 7 and will confirm that the project has achieved the requirement stipulated under this stage.

If it forms part of the strategy, the asset will be transferred to a facilities management company who will be responsible for building operations and maintenance for a predefined period.

### 6.2.2 Facilities Management

For the responsible maintenance of the buildings and common property facilities, this Development Framework Guidelines anticipates the formation of a Management Company (MC) to be incorporated under the Companies Act, 2015 which shall manage the property on behalf of all the home owners. The Management Company's shareholders shall comprise all those persons who are owners of units in the residential estate. The shareholders will elect a Board of Directors (BoD) who shall appoint a Managing Agent (MA), duly authorized to conduct facilities and estate management services, that will be responsible for the day-to-day operations of facilities management in the development.

#### Role and Responsibilities of the MC

The MC will be primarily responsible for ensuring that implementation of the commonly subscribed community living conditions and restrictions that dictate homeowner actions with respect to the development and neighbourliness.

With the BoD as the duly elected representatives of the shareholders (home owners), the MC will be ultimately responsible for financial, legal, physical and relational matters with related parties in the development. The Board will be required to meet routinely and have an annual meeting with all homeowners.

The BoD will set policies and regulations and they may appoint an MA to conduct day-to-day operations and enforce the set policies and regulations. The BoD will be required to monitor and assess the actions of the MA by requiring them to prepare regular reports detailing accomplished tasks and financial information.

Anticipated responsibilities for the managing agent include, but are not limited to:

- Collecting and managing service or facilities management fees from homeowners;
- Maintaining the property and ensuring that common property is functional and in good condition;
- Ensuring that the facilities are not in violation of any regulatory or local housing provisions and that the facilities are up to environmental standards;
- Alerting home owners of any existing violations and taking remedial action as required;
- Managing the finances earmarked for the running of the MC and upkeep of facilities;
- Handling questions and concerns from homeowners;



Appointing and retaining service providers such as security services, garbage collection, building repair and maintenance services, grounds management and landscaping, etc.

Obtaining and managing required insurance policies;

Retaining legal counsel, as necessary;

Preparing regular reports for both the board of directors and home owners;

Conducting satisfaction surveys ensuring that homeowners realise the importance of facilities management and taking required action; and

Regularly communicating with homeowners and keeping them up to date on community news and developments.

### **Funding of Facility Management Operations**

In keeping with leading practices, the funding approach for facilities management under this Development Framework Guidelines will aim to ensure that common property infrastructure and services are of a quality and functionality that is consistent with the level of physical, social, aesthetic and economic amenity provided by the property at the beginning of the development's occupancy.

The funding approach will seek to address the following five desirable characteristics:

Minimising total cost incurred by owners over the life of the development;

Equity in the allocation of cost across individual lot owners at a particular time juncture;

Equity in the allocation of costs to different lot owners over the life of the development;

Avoidance of unanticipated significant financial obligations for lot owners; and

Minimisation of disharmony between the owners who collectively own the common property.

The MC will establish a sinking fund that will be managed by a Fund Manager. The Fund Manager will be required to provide reports on the financial performance of the fund and the use of funds. This report will be presented to the homeowners at the annual general meeting.

The sinking fund will be capitalised in the first instance by lump sum contributions equal to the first two years of a suitable monthly service fee. This lump sum contribution will be added to the purchase price of the home. After the home purchase, the homeowners will be required to contribute a monthly service fee which the MA will be required to collect. Homeowners under the TPS could submit their payments through their monthly payment to the Housing Fund.

The MC will set a reasonable annual operating budget that will be ratified by the Board of Directors and shareholders in the annual general meeting. The budget will be submitted to the Fund Manager who will release funds as agreed to facilitate the MA's work. The MA will provide regular finance reports to both the Fund Manager and the BoD. The Fund Manager will use the financial reports from the MA to paint a true and transparent picture of the performance of the sinking fund.



## 7. Funding Model

### 7.1 Overview

The housing deficit in Kenya remains high (driven by a growing population) with the housing shortage estimated at approximately two million homes. Affordability is the key constraint to access to formal housing for the low-income segment of the population, which is compounded by the lack of access to formal sources of financing for home ownerships (mortgages primarily). As such, supply has frequently favoured the middle- to high-income segment of the population.

The GoK under Article 43 (1)(b) of the Constitution of Kenya is responsible for providing accessible and adequate housing with reasonable sanitation to all Kenyans. To this end, the GoK will partner with developers, private investors and contractors to achieve the goal of increasing the supply of affordable housing in the country and will provide an attractive and enabling investment environment through the contribution of land, infrastructure and strategic state interventions where required. GoK will further facilitate access to potential home buyers through the Housing Fund as well as the civil servants housing scheme and housing for essential services.

The programme will implement a multi-pronged approach to both the demand and the supply side of the housing sector. This will entail:

#### Developing innovative housing solutions

Diversifying available housing delivery solutions aimed at bringing development costs down. This will include among other things using alternative building technologies, building materials purchase aggregation and leveraging on economies of scale.

#### Enhancing value and efficiency

Through provision of among other things a ready market for off-take, one-stop shop for approvals, architectural/building plans, design services, land servicing/off-site infrastructure provision including water, power, sanitation and transport network.

#### Creating accessible financing solutions

Financing solutions play a catalytic role in stimulating both supply and demand of affordable housing. The greater percentage of Kenyans are unbanked. This, coupled with informal and irregular incomes, means that traditional products offered by commercial banks are frequently not a viable option. Financing solutions that are accessible to low income households are therefore of paramount importance.

A mortgage refinance or a mortgage liquidity facility will ensure availability of long-term funding to lenders as well as steady liquidity. Tapping into the capital markets will be another source of long-term patient capital. It will therefore be possible to lengthen the maturity of loans thereby improving affordability.

The financing solution created will further be credible and bankable to enable developers' access construction financing as well as allow them to recycle their capital.

#### Establishing institutional partnerships

Putting in place the right partnerships and creating a platform to facilitate interaction of the various stakeholders in delivery of housing. This will further involve demand aggregation, augmenting resources, leveraging liquidity and facilitating off-take.

Figure 7.1 – Summary of Affordable Housing Demand and Supply Side Interventions



## 7.2 Proposed Cooperation Model and the Role of NHC

The GoK will partner with the private sector through joint ventures and will be represented by NHC (as the master developer) in the project development process. Further, the GoK will provide offtake of qualified units through the Housing Fund.

The GoK will contribute land and off-site infrastructure to the Special Purpose Vehicle (SPV) that will be created under the Project Agreement. It will further facilitate access to potential home buyers such as civil servants housing scheme, housing units for essential services and the general public through the housing portal under the Housing Fund. The development partner will source for third party financing (if required), contribute equity financing and development expertise to the SPV which will also be able to leverage its resources with senior bank debt.

The projects will follow clear implementation arrangements, flow of funds and information among the various stakeholders and the development partners will jointly be responsible for the operation and governance of the joint venture as stipulated in the Project Agreement.

The formation and operation of the JV will be as outlined in Figure 7.2 below:

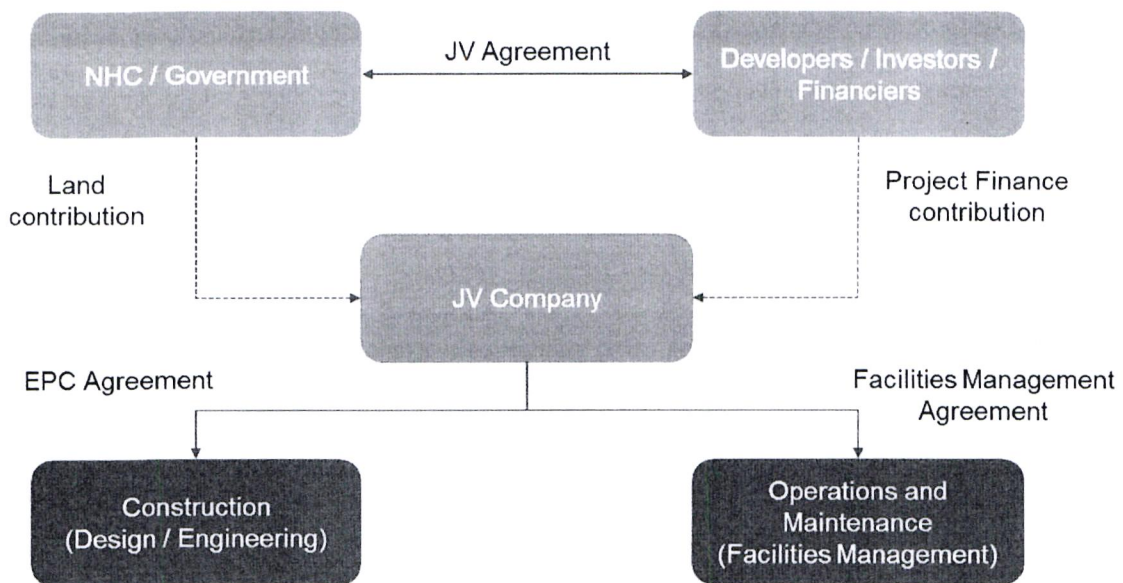


Figure 7.2 – JV Formation & Operation

## 7.3 The Housing Fund

The Housing Act Cap 117 establishes a Housing Fund under the control of NHC. The Housing Fund which will play a pivotal role as the catalyst to increased supply of affordable housing by private developers (via the Offtake Agreement), and as the bridge to the demand of affordable housing by low- and middle-income Kenyans.

The Housing Fund will provide affordable long-term financing to home owners through a nationwide Tenant Purchase Scheme. (TPS). It will also allow potential home owners to save towards the purchase of an affordable home through the affordable housing Home Ownership Savings Plan (HOSP). In addition, the Housing Fund will work with development partners and local financiers in providing long-term finance for end users. The Housing Fund will provide developers with Offtake Agreements to purchase qualifying affordable housing units. The Offtake Agreement will be effected twelve months following the completion of a development to allow for a sufficient contractor defects liability period and payments will be made in a pre-agreed staggered timeline.

All the activities of the Housing Fund will be executed in an objective and transparent process under publicly disclosed operational rules.



### 7.3.1 Fund Objectives

To fulfil its mandate of delivering affordable housing to low- and middle-income Kenyans, the Housing Fund will facilitate the development of large-scale affordable housing projects by the private sector, aggregating the demand of housing units from qualified home buyers and providing home buyers with affordable long-term financing solutions to allow them to purchase and own homes.

To achieve its objectives, the Fund will perform amongst others the following functions:

Provide offtake undertaking to developers to catalyse the development of affordable housing units in scale.

Develop a housing portal that will aggregate demand from potential home buyers for the affordable housing units that are being developed.

Implement a national affordable housing HOSP where employers, employees and self-employed individuals can make tax-advantaged savings/contributions towards the purchase of an affordable home.

Develop and administer a national TPS that will provide affordable long-term financing to homeowners.

### 7.3.2 Fund Purpose and Benefits

The current housing market in general and the affordable housing segment, in particular, suffers from inefficiencies in both the supply of housing and the demand from homeowners.

On the supply side, developers both private and public, have been unable to develop sufficient scale of housing units to meet the high market demand and make a dent in the housing deficit. Developers typically do not undertake large scale housing projects due to the significant market or sales risk, preferring to undertake smaller projects (or phases) that have a significant number of the units pre-sold or bought off-plan. For the same reason (high market risk) the developer's financiers are often hesitant to finance large scale housing projects and as a result few large-scale housing projects get developed. On the demand side, the biggest obstacle to homeowners purchasing and owning homes is access to affordable long-term financing.

The Housing Fund is the most effective way to overcome the inefficiencies that exist in the affordable housing sector in the following ways:

**Bringing together all relevant stakeholders:** The housing sector is large, complex and fragmented with numerous stakeholders including home owners (current and potential), investors, developers, financiers (SACCOs, pension funds, insurance companies, etc), regulators, the national and county governments. The Housing Fund brings all these stakeholders together and allows them to interact in a single ecosystem with clear and consistent objectives, and processes which will improve the stakeholder engagement and coordination.

**Effectively mobilising public and private capital:** The Housing Fund efficiently mobilises public and private capital to deliver affordable housing to Kenyans. Due to the scale of the current affordable housing shortage private sector involvement is critical and the GoK, through Housing Fund, will leverage its resources with those from the private sector to deliver more houses to the Kenyan population. Working with banks and the capital markets, the Housing Fund will unlock the local and international capital currently unable to participate in development or long-term end user financing. The Housing Fund is an entity with the necessary scale to access affordable financing terms from the financial markets (on more favourable terms than smaller players) which it would then pass on to home owners.

**Harnessing economies of scale:** The Housing Fund has the size and scale to guarantee the development of large-scale housing projects which benefit from economies of scale and are cheaper to develop on a cost per square metre basis. The Housing Fund will provide developers and their financiers a credible and bankable affordable housing off-taker that will allow for the development of larger and more affordable housing projects.



**Leveraging public sector scale and private sector innovation:** The Housing Fund can provide affordable housing to the market because it combines the size, scale and stability of a public entity with the flexibility, agility and innovation of a private sector player. In addition, the Housing Fund will be self-sustainable and will not seek a commercial return on capital, instead will apply any gains derived from its efficiencies and scale to provide more affordable housing to Kenyans.

**Encouraging savings and contributions for home ownership:** The Housing Fund allows potential home buyers to save towards the purchase and payment of an affordable home in a tax-advantaged way through the national affordable housing HOSP. It also allows Employers to participate in the provision of Housing as per section 31 of the Employment Act.

**Establishing a housing portal:** The Housing Fund has developed a web-based Housing Portal that allows potential homeowners and developers to interact with the Housing Fund. Through the portal, potential homeowners will be able to register and begin contributing towards the purchase of an affordable home. The potential homeowners will also be able to register their interest in homes that are being developed and allow the fund to aggregate housing.

**De-risking projects and ensuring quality housing:** The Housing Fund's size and scale as a housing off-taker allows the Fund to impose strict quality standards on the qualified large-scale developments which ensures that quality is not sacrificed in the development of affordable housing. Further, the off-taker agreement, will attract more private sector developers to affordable housing development due to the Housing Fund's ability to absorb the project market risk.

**Liability Capping:** The maximum amount of guarantees the fund can offer in any year will be proposed by the management as part of the yearly budget process and ratified by the board. In ratifying the yearly budget, the board will consider the ability of the Fund to honor its off-take agreements over the coming year based on the Fund's financial ability and performance. The Fund's management will therefore only be able to offer guarantees to the extent that has been ratified by the board. In addition, the regulations operationalizing Housing Fund will prohibit the Fund from having outstanding guarantees of more than 150% of the Funds Equity Capital at any time.

### 7.3.3 Housing Fund Funding and Capital Markets

As the bridge between the supply and demand of affordable housing, the Housing Fund must fund itself in the most efficient and cost-effective manner. Housing Fund will raise funding from the following sources:

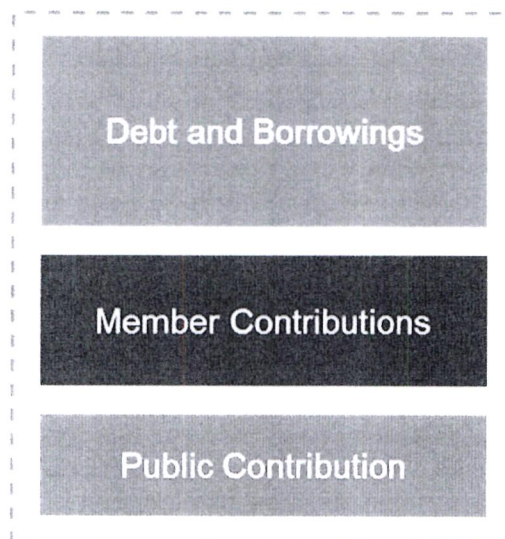


Figure 7.3 – Housing Fund Capitalization



### **Public and Member Contributions**

Statutory contributions from employees and employers to the Housing Fund as detailed in the Finance Act 2018 Section 31 A.

Voluntary contributions (benefit) from potential homeowners to the affordable housing HOSP

Rental revenue from the current available stock of housing provided by the SDHUD

Grants or donations from development partners

Returns from Housing Fund's investments and capital.

Other equity investors

### **Debt and Borrowings**

Short-term credit lines and warehouse funding lines from local banks and international funders.

Issuance of Mortgage Backed Securities (MBS) to institutional investors (off-balance sheet)

### **Bank Credit Lines**

The Housing Fund will raise short-term capital from local banks and development finance institutions (DFIs) in the form of credit lines. The credit lines will allow the Housing Fund to "warehouse" the houses that have been developed by the private developers for six (6) to nine (9) months before they are ready to be securitized and sold in the capital markets. Due to the size of the affordable housing programme, the Housing Fund will look to a syndicate of banks to provide the credit lines required. The bank credit lines will also be used to provide the funding for servicing advances for the MBS.

### **Mortgage Backed Securities**

The Housing Fund will issue mortgage backed securities in the local capital markets on a regular basis backed by the affordable housing units and the tenant purchase certificates issued to home owners. The MBS will be designed to maximize the tenor of the securities issued and lower the aggregate funding costs to the TPS home owners. The MBS will be issued in the following classes:

Short-term/money market notes (0 – 5 years): Targeted to money market funds and short-term investors and banks.

Medium-term notes (5 – 10 years): Targeted to banks, insurance companies and fund managers.

Long-term notes (10 – 20 years): Targeted to pension funds and life insurance funds.

Equity and residual investments (20 – 25 years): Retained by Housing Fund.

Issuance of Mortgage Backed Securities will not be a primary source of Funding for the Fund especially in the first couple of years. Member contributions will initially be sufficient to meet any offtake guarantees the Fund executes.

The MBS would not be issued on the balance sheet of the Fund but via SPVs. Therefore, the securities would not fall under CMA's corporate financing regulations which require historical financials. The MBS will be issued under the CMA's ABS guidelines which do not require the issuer to have historical financials.

### **Financial Capacity of the Fund**

The Housing Fund as described above will have a critical role as the government's financial arm in promoting and developing the domestic housing sector and its funding structure will continue to be one of its main credit strengths. This funding structure that will consist of stable mandatory contributions from employees approximately 2.5 million and growing as anchored in the Finance Act 2018. In addition to this the Housing Fund will also access as a core part of its stable funding base the Affordable Tax Relief which would grow to contribute a significant portion of the funding base. In years to come the voluntary contributions from the informal sector are also expected to contribute a significant base of funding.

The combination of the access to liquidity in the capital markets when (and if) required in addition to the stable cashflows noted above will provide a resilient and stable funding structure to provide credit comfort to the



developers and investors of certainty of payment following construction in line with the DFG's as it focuses on promoting and implementing the government's housing policy.

## 7.4 Kenya Mortgage Refinance Company

KMRC is a limited liability company regulated by Central Bank of Kenya (CBK) as a non-deposit taking financial institution. KMRC falls under the supervision of the Capital Market Authority (CMA) and will be substantially owned and managed by private sector with GoK (through National Treasury) holding approximately 20% of the equity.

KMRC was established to expand the affordable housing sector in the Kenyan economy by providing lenders with access to long-term liquidity which will in turn promote the availability and affordability of housing finance to Kenyans.

KMRC will provide liquidity and longer-term financing to Kenyan banks and other institutions with the aim of increasing the volume of residential mortgages. It will provide funding and capital market access to primary mortgage lenders (PML) at attractive rates, resulting in greater availability of fixed rate mortgages and longer-term loans.

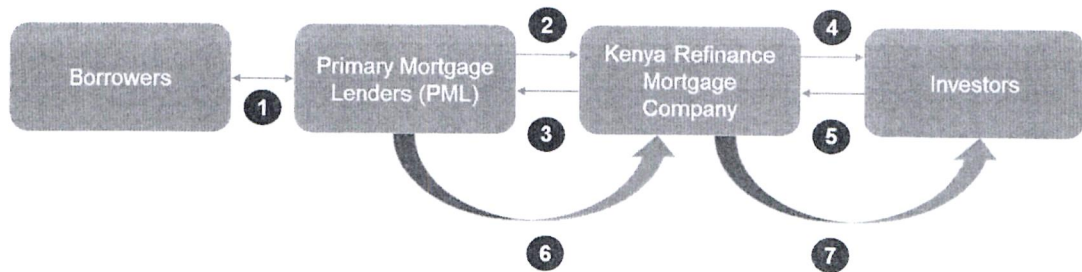
KMRC will focus on:

Refinancing the mortgages created by participating mortgage lenders;

Developing the market by standardizing mortgage practices, promoting legislative reforms and improving process;

Developing the secondary mortgage market, and

Deepening the capital markets by raising funds through the issuance of quality long-term securities.



- 1 Borrowers take out "qualifying" mortgage loans and make monthly payments
- 2 PML assigns /pledges rights to mortgage loans to KMRC
- 3 KMRC extends term loans to PML in line with KMRC stated objectives
- 4 KMRC issues term notes/bonds to investors
- 5 KMRC pledges PML loans and collateral to investors
- 6 PML repays loans with borrower's mortgage payment
- 7 KMRC repays note/bonds/credit lines

Figure 7.4 – KMRC Refinance Company Model

KMRC will offer the housing finance market in Kenya a credible and high-quality source of long-term funding at attractive rates while ensuring sound lending habits among primary mortgage lenders, such as banks and savings and credit cooperatives (SACCOs), resulting in greater availability of fixed rate mortgages and longer available loan terms. This will, in turn, help improve the affordability of mortgages, increase the number of





qualifying borrowers, and result in the expansion of the primary mortgage market and home ownership in Kenya while deepening the capital markets.

Further, by acting as a central refinancing platform, KMRC will act as a force for the standardisation in the market. It will set the criteria for the type of loans it will refinance, industry standardised documentation, risk characteristics, etc. Standardising market practices allows for greater transparency and the creation of the market information systems, which in turn leads to better risk management and consumer regulations and overall lowering of the risks associated with mortgage lending.

The mortgage liquidity facility will function as an immediate step on the path to a full secondary mortgage market and the tool for delivering policy objectives such as the promotion of affordable housing as per the GoK's Big Four agenda.

## 7.5 Role of Insurance

Mortgage guarantees and insurance play an important role in promoting and expanding the housing finance system and allow for expanded access to capital. Reducing credit risk through insurance and guarantees enables financial institutions to provide loans to lower income groups. It will therefore be crucial to introduce mortgage guarantee mechanisms to make mortgages more accessible and affordable. It will also enable banks to extend longer term loans and lower down-payment requirements and the cost of the loan.

To boost both the individual and corporate investor confidence in housing finance, the GoK will engage insurance companies in the market to develop innovative insurance products that cover investors against loss should a loss triggering event occur. These will include products that offer protections to home owners, investors, lenders and developers.

### 7.5.1 Home Buyer Insurance

This will include income-loss insurance products that would protect homeowners from losing their home if they lost their income. The cover would pay all or part of the owner's monthly mortgage payment for a limited time. The policy would cover involuntary job loss or loss of income due to business disruption or other qualifying reasons (disability, hospitalization, and loss of life). It would specifically make principal repayments and interest payments up to a set limit per month or a set maximum for up to a specified period of time.

### 7.5.2 Capital Market Investors

Mortgage wraps, which are external credit enhancement strategies provided by insurance companies, would guarantee timely payments of interest and principal in the event that the issuer of a security failed to make payment. This will play a pivotal role in encouraging increased investment in housing finance.

### 7.5.3 Fund Protection

Insurance will provide the much-needed credit enhancement and audit verification to support and enable securitization and hence growth of the secondary mortgage market and deepening of capital markets. Mortgage insurance will not only protect the fund against loss should the home-owner default but will also be a risk management tool. It will further ensure that the housing stock used in securitization remains intact as there will be protection against fire, natural catastrophes and other unforeseen loss or damage to the property.

Beyond advancing homeownership or other primary housing policy goals such as improving the quality of the housing stock, a major underlying objective of mortgage insurance will be to protect and stabilize the country's banking and housing finance sector in the event of economic catastrophe such as severe recession or depression.



## 8. Housing Portal

The National Housing Portal ("the Portal") will be utilised in the automated management of registration of potential homeowners for the Affordable Housing Programme. Registrations will be ongoing throughout the programme and it will be possible to access the portal through a variety of platforms including USSD, mobile app, mobile web and web portal.

The Portal will allow individuals to see progress towards home ownership and provide a real connection to their aspiration of home ownership.

The Portal will house: (i) the wallets of potential homeowners for payments and contributions; ii) the online National TPS allowing homeowners to be allocated homes through a lottery system; (iii) product data from financial institutions on mortgage offers or mortgage support; and (iv) data from property developers on availability of homes.

As the system registers aspiring homeowners and facilitates their contributions and payments to the Housing Fund in the fashion of a HOSP, the Portal will provide real time evidence of demand aggregation.

### 8.1 Primary Functions

The Portal's primary functions are to:

Provide details of the projects forming part of the AHP pipeline.

Register individuals looking for affordable housing – proving demand by aggregating information on their capacity to pay, income ranges, credit profiles as well as desired housing typologies.

Create an ecosystem that links industry players and stakeholders in the housing sector – including property developers, financial institutions such as banks and SACCO's, as well as the various government agencies supporting the programme

Interface with the e-citizen portal for verification of applicants';

Verify income and tax compliance of applicants via an uplink to the KRA for tax compliance and further income verification.

Create a 'credit profile' of applicants via a credit reference bureau.

House the online HOSP wallet for acceptance of payments into the Housing Fund. These are the contributions that will be made towards the down payment requirements (where applicable) and will accept payments via mobile money, bank transfers, credit and debit cards.

Identify social housing beneficiaries (those in most need) in event that there are more applicants than there are houses available.

Automatically allocate a house once an applicant has met the given set of criteria via a lottery system

To that end, the Portal will provide a fully automated online database that can be used to demonstrate effective house demand in all parts of the country.

### 8.2 System Functionality

#### 8.2.1 Client Registration

This is the stage at which individuals' meta-data will be captured. Applicants can register themselves via (1) USSD dial-in; (2) website and/or (3) web-app on mobile phone. To minimize incorrect data each individual's details will be verified through IPRS, KRA and the "e-citizen" databases.

#### Registration Options

Mobile – USSD

- Dial \*xxx# to Register Details

Mobile – WebApp



- Visit [mobile.nyumbani.go.ke](http://mobile.nyumbani.go.ke) (e.g.)

#### Web-based

- Visit [www.nyumbani.go.ke](http://www.nyumbani.go.ke) (e.g.)

Huduma Centres – with web-enabled stations that allow:

- Registration
- Update of Details
- Upload of KYC documents

All registrations will have two-step verification where the system will automatically send an 'activation/registration' code to the mobile number entered. Following that an account is created and more details are requested from the applicant for the profile assessment and creation.

At this stage next of kin and other support can also register to make contributions towards an applicant's wallet.

### 8.2.2 Applicants' Assessments – Profile Creation

This module within the Portal will be a lead on from registrations. Here, each applicant's details will be assessed to create a profile of their requirements, via a number of automated steps as follows, these assessments will not require any human interface and thus remove any potential of introducing bias:

#### Vetting

Vetting will be initiated through the automatic assessment of data provided by registrants. Final vetting will require upload of specific KYC documents upload – including but not limited to any number of the following:

- ID Card
- Birth Certificate
- KRA PIN certificate
- Spouse's ID
- Marriage Certificate

#### Scoring

Scoring will be via Credit Reference Bureau (CRB) verification – through third party interfaces including mobile network operator verification, which will provide mobile wallet transaction history to build credit profiles of those not conventionally banked. In principle the scoring will provide credit assessments that are driven by data analytics. This means that (1) the credit and risk decision-making is fully automated; (2) the system will be able to run "Thin File Assessments" for those with little to no conventional transaction histories; and (3) the level of Artificial Intelligence integrations being deployed reduce the time taken on each assessment – providing a credit profile of each applicant in much less time than is conventionally accepted

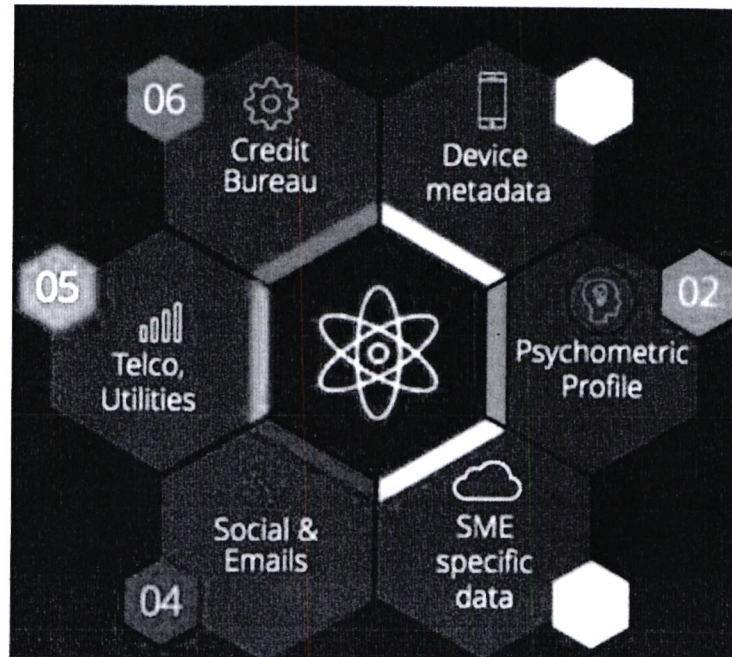


Figure 8.1 – Applicant Profile Assessment

### Property assignment rules

See section on Housing Fund Housing Allocation. Rules from the Housing Fund will make up the terms and conditions of acceptance. These will apply to:

- Valuations (pre-purchase process)
- Property transfer from developers to Housing Fund
- Insurance of the houses

### 8.2.3 Payments

Incorporated in the Portal is a secure wallet that is housed under the Housing Fund. Payments can easily be made to the wallet via a number of payment options all driven by anti-fraud and unusual activity detection systems – ensuring that the funds are appropriately accounted for, for each individual's contribution as well as the overall deposits held.

The payment module will not only facilitate deposits but will also allow for withdrawal processing – as payments towards housing allocations. Administration is run via data analytics and provides statements to individuals plus account management and activity modules. That way concerned stakeholders have a view and oversight of the funding available as well as the demand for units.

### 8.2.4 Property Developers

To ensure that the supply side is catered for – all prequalified property developers who have expressed a demonstrable interest and/or have been contracted for the supply of units will also have access to the Portal.

Our internal administrators will initiate the Developer's registration to maintain credibility of the Programme's delivery funnel. Property Developers will then be able to confirm their company details to finalize their registration online.

This module allows Property Developers to upload the ongoing and already developed properties, and these will be broken down as:

- Property details
- Listing of approved units
- Categorization of property (by location/price/units/features)



Images of units or renderings of drawings

### **8.2.5 Financial Institutions (FIs)**

Similar to Property Developers, Financial Institutions will also have administrative user access to the Portal. These will be view only options, as information on the credit-worthiness of applicants will be posted to this module.

Internal admin will create the users in the same fashion as with Property Developers and Financial Institutions will also verify and confirm their details online. The function of this module will be for Financial Institutions to bid for mortgages and mortgage support dependent on the profile of the applicant.

The mortgage offer rules will have been pre-agreed within the Housing Fund – and Financial Institutions will simply offer financing within those parameters. Applicants will then receive notifications on these offers and accept the best-fit.

#### **Administration**

The portal also connects to the Housing Fund – by feeding information to (1) the wallet of contributions made by applicants as well as (2) to be established.

### **8.2.6 System Security**

The Portal's backend will meet all of the compliancy standards for data collection as well as the baseline standards for privacy and security, as outlined in ICT Authority's guidelines.

The integrated technical safeguards that have been instituted ensure a high level of privacy and security and are applied to the following areas:

- Back end server(s), including data encryption and transmission
- Administrator controlled username and password access
- Automated audit trails
- Information Security Industry Standard encryption and SSL certifications (currently 128-bit).

## **9. Updates and Revisions**

These Development Framework Guidelines will be subject to regular review and revision as the Affordable Housing Programme progresses. Subsequent versions of the document will be published, and appropriate notices provided to stakeholders as required.

