

# Progress update on the implementation of the Broadcasting Digital Migration (BDM) programme

**15 SEPTEMBER 2016**



**the doc**

Department:  
Communications  
**REPUBLIC OF SOUTH AFRICA**

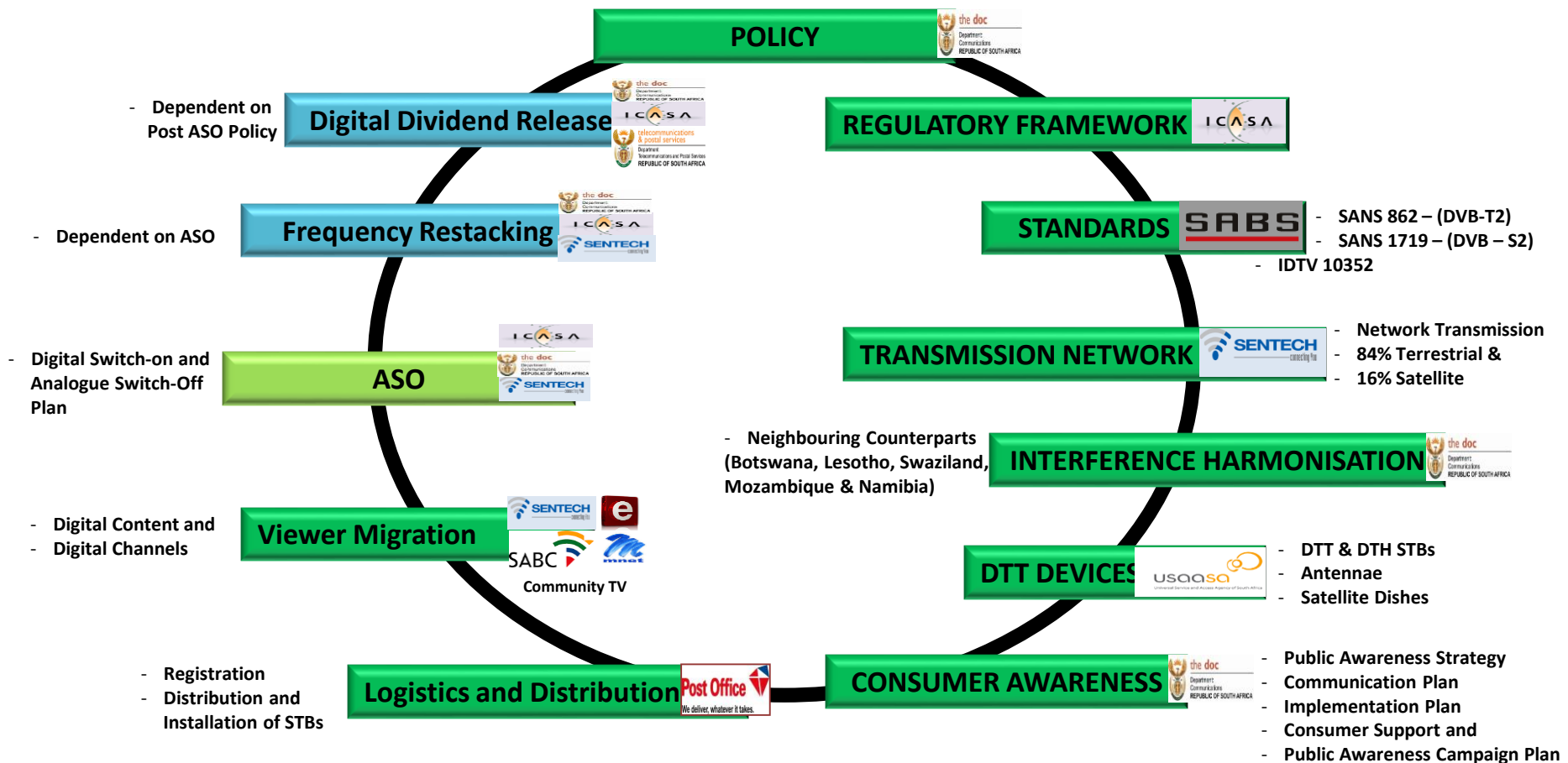


# OUTLINE

- ❑ South African Broadcasting Digital Migration Ecosystem
- ❑ Background
- ❑ Progress Update
  - ❑ Broadcasting Digital Migration Policy Framework
  - ❑ DTT Regulations
  - ❑ DTT and DTH Standards
  - ❑ Transmission Network
  - ❑ Radio Frequency Spectrum Harmonisation
  - ❑ Set-top-boxes acquisition
  - ❑ Distribution Overview
  - ❑ Public and Consumer Awareness
  - ❑ Digital Content and viewer migration
- ❑ Contribution to the nine-point plan
- ❑ Implementation Challenges
- ❑ Conclusion



# SA DIGITAL MIGRATION ECOSYSTEM



# BACKGROUND

- ❑ Broadcasting Digital Migration (BDM) is a flagship project of the Department of Communications (DoC).
- ❑ The Presidential Proclamation of 02 December 2014 provided clarity on the responsible Department to implement BDM programme.
- ❑ Project handed over on 31 January 2016.
- ❑ In March 2015, Cabinet approved the final amendments to the BDM that unlocked the project to enable implementation.
  - ❑ STBs to include control system;
  - ❑ Government will provide free set-top-boxes and accessories to five million poor television owning households; and
  - ❑ The Minister of Communications to announce the digital switch-on and analogue switch-off dates after consultation with Cabinet.



# PROGRESS UPDATE



# BDM POLICY FRAMEWORK

- ❑ Broadcasting Digital Migration (BDM) Policy in SA was developed and approved by Cabinet in August 2008.
- ❑ BDM Policy has been amended twice (i.e. 2012 and 2015).
- ❑ Final Policy amendments approved by Cabinet on 04 March 2015 and Gazetted on 18 March 2015.
- ❑ Dual-Illumination Performance Period declared to commence 01 February 2016.



# DTT REGULATIONS (ICASA)

- ❑ DTT regulations completed and published; and
- ❑ Regulations for Digital Channel Licensing finalised.



# DTT AND DTH STANDARDS (SOUTH AFRICAN BUREAU OF STANDARDS)

- ❑ DTT SANS 862 (DVB-T2) completed and published;
- ❑ DTH SANS 1719 completed and published in April 2015; and
- ❑ IDTV SANS 10352 completed in September 2015.
  - ❑ IDTVs are the future as per the Cabinet's approved STB Manufacturing Sector Development Strategy





# TRANSMISSION NETWORK (SENTECH)

- ❑ Terrestrial and satellite network completed.
  - ❑ Covers 84 % and 16% of the population respectively; and
  - ❑ Network optimised and ready across the country.
- ❑ All 183 analogue transmitters across the country configured with DTT network and currently in full operation.



# DIGITAL SWITCH-ON AND ANALOGUE SWITCH-OFF PLAN [1]

- ☐ Phase 1: Northern Cape (including the SKA area) and Free State
- ☐ Phase 2: Mpumalanga and a portion of the KwaZulu Natal
- ☐ Phase 3: Limpopo Province
- ☐ Phase 4: North West Province
- ☐ Phase 5: Eastern Cape Province
- ☐ Phase 6: KwaZulu Natal Province
- ☐ Phase 7: Western Cape Province
- ☐ Phase 8: Gauteng Province



# DIGITAL SWITCH-ON AND ANALOGUE SWITCH-OFF PLAN [2]

- ❑ Phase 1: Addresses the requirements of the Astronomy Geographic Advantage Act of 2007 relating to the Square Kilometer Array international project.
- ❑ Phases 2 - 6: Address the cross border interference mitigation
- ❑ Phases 7-8: Address the inland where there is no anticipated cross border interference



# RADIO FREQUENCY SPECTRUM HARMONISATION

- ❑ Frequency interference analysis conducted for all neighbouring countries.
- ❑ Interference scenarios were considered in the analysis without limit on distance between sites in either countries:
  - ❑ RSA analogue television to neighbouring country's DTT (and vice-versa)
  - ❑ RSA DTT television to neighbouring country's DTT (and vice-versa)
- ❑ Botswana, Lesotho, Swaziland, Mozambique and Namibia were visited. Cooperation agreements signed between Ministers; and
- ❑ Memorandum of Understanding / Agreements in the development process.
- ❑ No interferences have been reported so far.



# ACQUISITION OF SET-TOP-BOXES (STBs) AND RELATED ACCESSORIES [USAASA]

- ❑ Panel of 27 manufacturers appointed to supply DTT STBs, Direct to Home (DTH) STBs, antennae and satellite dishes.
- ❑ Purchase orders placed with manufacturers in August 2015.
  - ❑ Two manufacturers to produce 1 million DTT STBs and one to produce 500 000 DTH STBs; and
  - ❑ Two manufacturers to produce one million antennas and one to manufacture 500 000 satellite dishes.
- ❑ Manufacturers passed conformance regime testing in October and November 2015.
- ❑ Production of STBs and accessories commenced in November 2015; and
- ❑ DTT & DTH STBs made available in December 2015.



# STBs, ANTENNAS AND SATELLITE DISHES

## DISTRIBUTION OVERVIEW

Company	Equipment type	Purchase Order Units	Units Manufactured	Delivered to SAPO	Difference remaining	PO Value (Rand)	Amount paid delivered units	Amount Due
CZ Electronics	DTT STB	500 000	445 520	445 520	54 480	344 630 000	306 491 028	0
Leratadima	DTT STB	500 000	178 000	174 993	322 000	344 970 000	120 615 675	0
BUA Africa	DTH STB	500 000	23 300	23 300	476 700	307 145 000	14 316 642	0
QEC Pty LTD	DTT Antennas	500 000	126 536	124 555	375 445	88 850 000	22 133 423	0
Temic Manufacturing	DTT Antennas	500 000	65 575	64 585	435 415	67 545 000	8 724 787	0
Ellies Industries	DTH Satellite dishes	405 073	201 620	201 620	203 453	178 924 795	89 057 570	0
Number of installations allocated by SAPO								15 802
Number of installations completed								13 339



# DTT DEVICES



**DTT STB  
& Antenna  
packaging**



**DTH  
Satellite  
Dish  
packaging**



# DISTRIBUTION OVERVIEW (1)

- ❑ Registration commenced in the SKA and other provinces as follows:
  - ❑ Northern Cape (SKA area live pilot site) - 01 October 2015
  - ❑ Free State – 01 December 2015
  - ❑ Mpumalanga and Limpopo – 01 February 2016
- ❑ STB Distribution and Installation commenced in the Northern Cape (SKA area live pilot site) in December 2015
- ❑ Registration, STB distribution and installation streamlined with Digital Switch On (DSO) & Analogue Switch Off (ASO) Plan.





## DISTRIBUTION OVERVIEW (2)

- ❑ 32,876 registrations have been recorded of which 30,056 constitutes 91% qualifying applications.
- ❑ 15,138 households registered in the SKA area
- ❑ 15,802 STB kits has been issued in the Northern Cape Province (14 091 STB kits in SKA area)
- ❑ 15,802 allocations have been assigned to installers
- ❑ A total of 13,339 installations have been completed and digital services activated
- ❑ Total amount of Installation vouchers redeemed amounts to R6.8m to date



## DISTRIBUTION OVERVIEW (3)

- Summary of total Set-Top box equipment exchanged to date:

Reason for exchanges	Incorrect STB Type	Faulty STB	No Smart Card	Incomplete Equipment	Faulty Antenna	Faulty Dish	Faulty STB & Antenna	Faulty STB & Dish
Total STB's exchanged: 392	287	80	3	13	3	4	0	2
	73%	20%	1%	3%	1%	1%	0%	1%
Total STB's issued: 15 802	1.8%	0.5%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%



# DISTRIBUTION OVERVIEW (4)

## Summary of 1.5m STB kits

Supplier	Type of STB equipment	Quantity	Tender cost (VAT included)	Total
CZ Electronics	DTT STB's	500 000	R 687.94	R 344 630 000.00
Leratadima	DTT STB's	500 000	R 689.26	R 343 970 000.00
BUA Africa	DTH STB's	500 000	R 614.29	R 307 145 000.00
Temic Manufacturing	DTT Antennas	500 000	R 135.09	R 67 545 000.00
QEC	DTT Antennas	500 000	R 177.70	R 88 850 000.00
Ellies Industries	DTH Satellite dish set	405 073	R 441.71	R 178 924 795.00
<b>Total</b>		<b>2 905 073</b>		<b>R 1 331 064 795.00</b>

1. USAASA's committed bulk warehousing requirements for the delivery of **1.5m STB kits** by the appointed Suppliers.

2. USAASA contracted with SAPO to arrange for the Bulk Warehousing of the 1st consignment of **1.5m STB kits**.

## STB Stock value delivered to SAPO and issued up to 31 Aug 2016

STB Stock value delivered to SAPO and issued by SAPO to date

STB Supplier	Type of STB equipment delivered to SAPO to date	Quantity delivered to assigned SAPO warehouses to date	Unit price (VAT inclusive)	Total value of STB stock delivered to date to SAPO (VAT inclusive)	Quantity of STB stock issued by SAPO to date	Total value of STB stock issued by SAPO to date	
						Rand Value	% stock issued vs. received
CZ Electronics	DTT STB's	445 520	R 687.94	R 306 491 028.80	5 914	R 4 068 477.16	1%
Leratadima	DTT STB's	174 993	R 689.26	R 120 615 675.18	131	R 90 293.06	0%
BUA Africa	DTH STB's	23 306	R 614.29	R 14 316 642.74	9 757	R 5 993 627.53	42%
Temic Manufacturing	DTT Antennas	64 585	R 135.09	R 8 724 787.65	5 861	R 791 762.49	9%
QEC	DTT Antennas	124 555	R 177.70	R 22 133 423.50	184	R 32 696.80	0%
Ellies Industries	DTH Antennas	201 620	R 441.71	R 89 057 570.20	9 757	R 4 309 764.47	5%
<b>Total</b>		<b>1 034 579</b>		<b>R 561 339 128.07</b>	<b>31 604</b>	<b>R 15 286 621.51</b>	<b>3%</b>



# DISTRIBUTION OVERVIEW (5)

- ❑ The impact of the minimum planned rollout period between 3 to 5 Years are reflected per Province in the schedule below:

Province	Total number if STB's to be distributed over 3(three) years	Total number if STB's to be distributed per year	Total number if STB's to be distributed on average per quarter	Total number if STB's to be distributed on average per month	Total number if STB's to be distributed on average per day
Northern Cape	113 063	37 688	9 422	3 141	126
North West	355 165	118 388	29 597	9 866	395
Mpumalanga	398 231	132 744	33 186	11 062	442
Western Cape	474 378	158 126	39 532	13 177	527
Eastern Cape	529 522	176 507	44 127	14 709	588
Eastern Cape	560 504	186 835	46 709	15 570	623
Limpopo	585 840	195 280	48 820	16 273	651
KwaZulu -Natal	895 738	298 579	74 645	24 882	995
Gauteng	1 287 529	429 176	107 294	35 765	1 431
<b>Distribution impact over 3 years</b>	<b>5 199 970</b>	<b>1 733 323</b>	<b>433 331</b>	<b>144 444</b>	<b>5 778</b>
<b>Distribution impact over 4 years</b>	<b>5 200 000</b>	<b>1 300 000</b>	<b>325 000</b>	<b>108 333</b>	<b>4 333</b>
<b>Distribution impact over 5 years</b>	<b>5 200 000</b>	<b>1 040 000</b>	<b>260 000</b>	<b>86 667</b>	<b>3 467</b>

NB: The target and focus will be the distribution over **4 Years**



# DISTRIBUTION OVERVIEW (6)

- ❑ The Distribution rollout plan will be re-aligned as follows going forward:
- ❑ **2016/17 Financial Year:**
  - ❑ The completion of the STB registration, STB issue and Installation payout process in the SKA area as 1st priority.
  - ❑ The completion of the STB registration in the remaining portion of the Northern Cape Province with the focus on the borderline areas.
  - ❑ The fast tracking of the STB Issuing phase and STB Installation payout process in the remaining portion of the Northern Cape Province.
  - ❑ The fast tracking of the registration process in the Free State Province with the focus on the Lesotho borderline areas as 1st priority.
  - ❑ The activation of the STB issuing phase in the Free State Province with the focus on the Lesotho borderline areas as 1st priority.
  - ❑ To extend the STB registration phase to the remaining 5 Provinces with the main focus on the borderline areas per Province.
  - ❑ The activation of SAPO's Retail Postal Network (828 outlets) for the STB registration process.



# DISTRIBUTION OVERVIEW (7)

## ☐ **2017/18 Financial Year:**

- ☐ The activation of the STB equipment issuing phase to all 5 remaining Provinces in line with the registration uptake and focus on the borderline areas as 1st priority.

## ☐ **2018/19 Financial Year:**

- ☐ The maximum processing of the registration and STB issuing in all 9 Provinces
- ☐ The completion of the balance of the STB distribution process in all 9 Provinces
- ☐ The above Distribution approach and results will be subject to the following:
  - ☐ That adequate funding is made available.
  - ☐ That the desired registration uptake materialize per Province
  - ☐ That sufficient STB stock is available
  - ☐ That the STB rollout do not exceed 5.2m needy households.



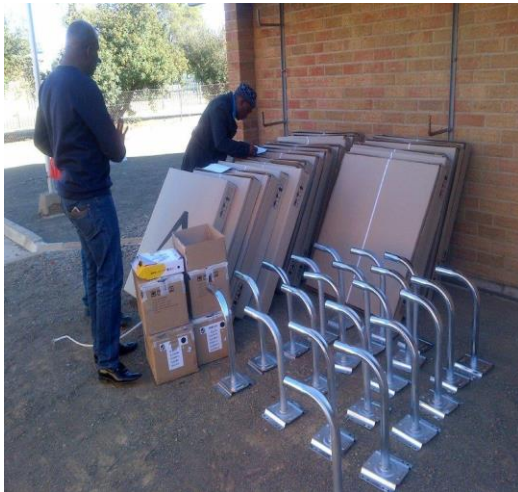


# DISTRIBUTION OVERVIEW (8)

## Delivery of STB equipment at SAPO Branches



## Bulk issuing of STB equipment to assigned Installers at SAPO Branches



# PUBLIC AND CONSUMER AWARENESS

- ❑ Strategy completed and approved in July 2015.
- ❑ Campaign launched in July 2015.
- ❑ Communication plan completed.
  - Key messages developed;
  - Pamphlets and leaflets developed (in eleven official languages);
  - TV and radio adverts developed; and
  - Minister's Digital Migration Izimbizo Campaigns
- ❑ Go Digital branding designed and procured.
- ❑ STB registration drive in progress
  - Door-to-door Campaigns





# DIGITAL CONTENT AND VIEWER MIGRATION

- ❑ Free-to-air (FTA) Broadcasters made their digital content available on digital platform in December 2015:
  - ❑ Feeding existing channels (Four SABC channels, six eTV channels and 18 SABC radio stations);
  - ❑ Incentive channels to be made available by the implementation of the digital migration programme.
- ❑ Dual-Illumination Performance Period Commenced on 01 February 2016 meaning that:
  - Network is deployed across the country;
  - Network optimisation and monitoring system is being implemented to be ready by 2016 year end; and
  - Broadcasters have begun to apply for and launch new channels with ICASA.



# CONTRIBUTION TO 9-POINT PLAN

- ❑ Seven young people completed installer training in the Northern Cape province.
- ❑ Memorandum of understanding for installer training between Department of Public Works and DoC signed.
- ❑ To train at least 10 installers per Local Municipality (at least 2,780 to be trained nationally).
- ❑ The programme will help to upskill young people on installations and post rollout support.



# FUNDING CHALLENGES [1]

## ❑ Lack of funding for dual-illumination

CLASSIFICATION	FY2016/17	MTEF
Incremental costs	(R159 312)	(R541 177)
Funding requirement	R159 312)	(R541 177)
VAT on receipt	(R22 304)	(R75 765)
Funding requirement	R181 616)	(R616 942
Funding Allocation	R100 000	-
Funding surplus/deficit	(R81 616)	(R616 942)



# FUNDING CHALLENGES [2]

RISK / ISSUE	IMPACT / IMPLICATION	MITIGATION PLAN
STBs and related accessories	Delays in the rollout and subsequent analogue switch off	Engagements with National Treasury ongoing
Public Awareness	<ul style="list-style-type: none"> <li>- Poor registration uptake</li> <li>- Unavailability of STBs on retail market</li> </ul>	<ul style="list-style-type: none"> <li>- Engagements with National Treasury ongoing</li> <li>- Engagements with Retail industry ongoing</li> </ul>
Contact Centre	Absence of consumer support undermining the progress of the Digital Migration	Engagements with National Treasury ongoing
Dual-Illumination	Delays in the rollout and subsequent analogue switch off	Engagements with National Treasury ongoing



# FUNDING CHALLENGES [3]

RISK / ISSUE	IMPACT / IMPLICATION	MITIGATION PLAN
Inadequate STB Distribution funding	Funding shortfall for STB Distribution	Engagements with National Treasury ongoing
Additional funding for bulk warehousing of 1.5m STB kits by SAPO	USAASA will not be able to execute its committed bulk warehousing requirements for the delivery of 1.5m STB kits	Re-allocation of Distribution funding for 2016/17 financial year
Funding for SAPO DTT Marketing & Awareness Plan	No funding for implementation of SAPO DTT Marketing & Awareness Plan	Engagements with National Treasury ongoing



# LEGAL CHALLENGES

- ❑ Subsequent to the March 2015 Policy Publication, eTV launched a legal challenge in the North Gauteng High Court. In June 2015, the Court ruled in favour of the Minister of Communications upholding the provisions of the approved Policy Amendments.
- ❑ In 2016, eTV launched an appeal application in the Supreme Court of Appeals (SCA). In June 2016, the SCA ruled in favour of eTV, setting aside clause 5.1.2(B)(a) which states that “the STB control system for the free-to-air DTT STBs shall not have capabilities to encrypt broadcast signals for the subsidised STBs”
- ❑ The Department has since filed an application in the Constitutional Court.



# MITIGATION INTERVENTIONS TO DATE

Noting the funding deficiencies, the DoC has introduced some mitigation strategies towards realising successful implementation:-

- ❑ On Funding deficiency, the minister is engaging with national treasury to find a solution.
- ❑ Door-to-door registrations campaigns in partnership with Local Municipalities in order to fast track the registration process.
- ❑ Partnership forged for installation training to localise skills and post installation support. The effort will further reduce the contact centre call load.
- ❑ Engagements have commenced with retail sector to get buy-in for the introduction and distribution of retail STBs and integrated televisions in the market.



# CONCLUSION

## MIGRATION SUCCESS – 7C's

### ☐ COST

- South Africa funding 100% cost of STBs to 5 million poor households
- Affordability of STBs in the retail market

### ☐ CONFORMANCE

- Decoders tested to SA specification, reliability and work on the network

### ☐ COVERAGE

- Replicate analogue coverage / DTH gap filler

### ☐ CO-OPERATION

- Broadcasters / signal distributors / manufacturers / government & consumer groups.
- All impacted stakeholders

### ☐ CONTENT

- Migration is only consumer led & driven
- Only migrate / purchase a decoder if there is new, attractive, relevant content available on DTT TV

### ☐ COMMUNICATION

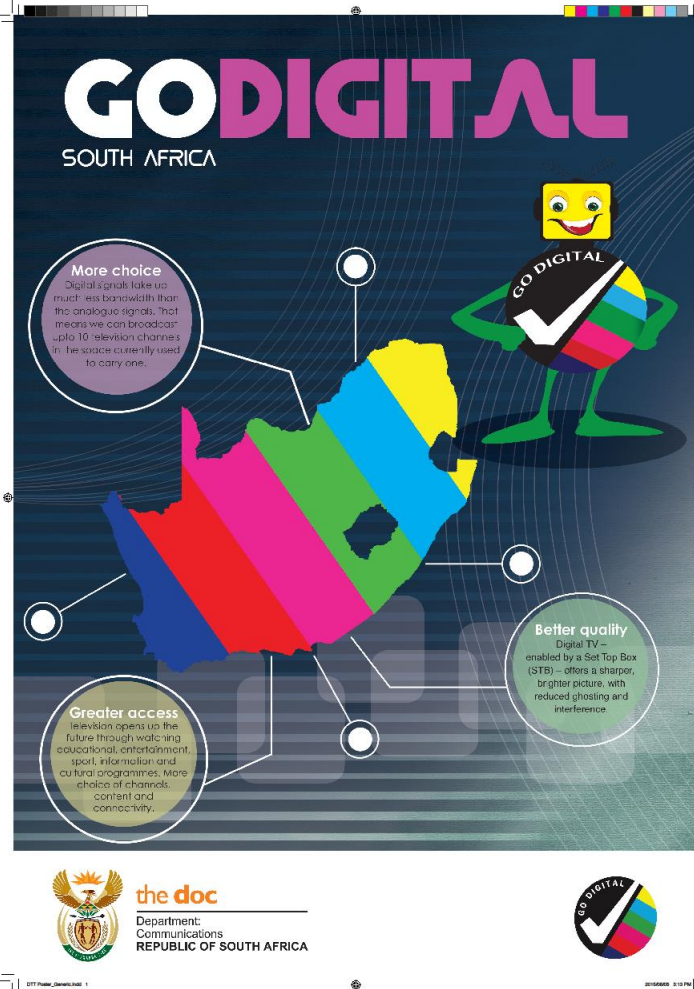
- Consumer have to understand the process;
- Know what to do and when to do;
- Consumer sets pace and success of migration
- Slow migration = low awareness / no incentives / high costs / high disruption

### ☐ CONSUMER SUPPORT

- Community support representative model
  - Functional Call centre
  - Field Support
- Community initiatives



# THANK YOU



# ADDITIONAL SLIDES



# SKA Registration & Distribution results: 01 Oct 2015 – 31 Aug 2016

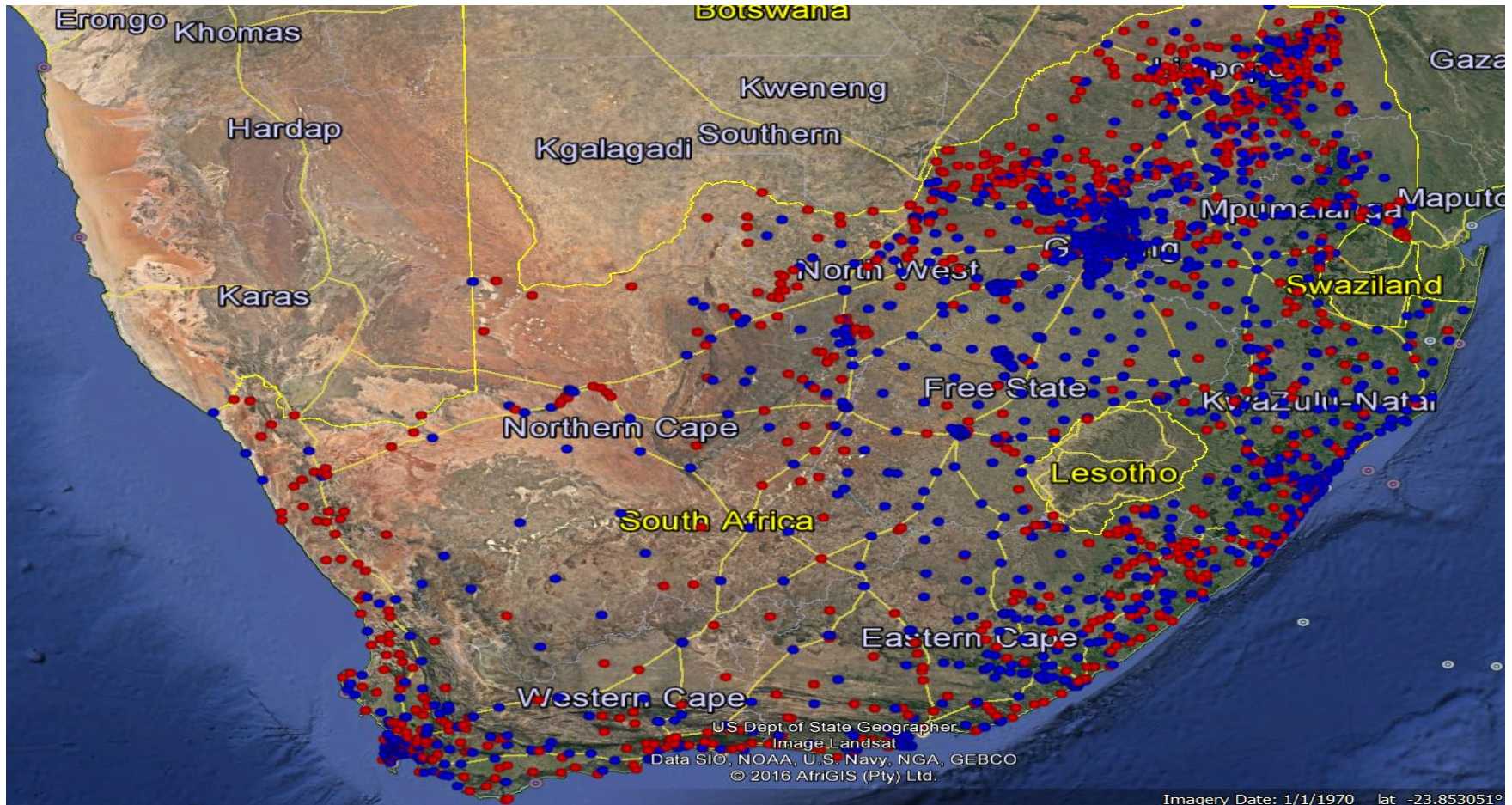
Qualified Registrations vs. STB issues & installations in SKA area (Live Pilot site in Northern Cape Province)

Item no	Province	SKA branch	Total projected households	Total registrations to date	Total STB's issues to date	Total number of installations allocated	Total number of installations completed	Percentage registrations completed	Percentage STB issues completed	Percentage installations completed
1	Northern Cape (SKA area)	Carnarvon	982	1 706	1 681	1 681	1 579	174%	99%	94%
2	Northern Cape (SKA area)	Brandvlei	465	786	762	762	696	169%	97%	91%
3	Northern Cape (SKA area)	Vanwyksvlei	509	434	408	408	391	85%	94%	96%
4	Northern Cape (SKA area)	Williston	573	790	771	771	723	138%	98%	94%
5	Northern Cape (SKA area)	Calvinia	1 313	1 537	1 524	1 524	1 436	117%	99%	94%
6	Northern Cape (SKA area)	Nieuwoudtville	474	412	389	389	352	87%	94%	90%
7	Northern Cape (SKA area)	Loeriesfontein	645	830	785	785	718	129%	95%	91%
8	Northern Cape (SKA area)	Pofadder	1208	1 466	1 438	1 438	1 285	121%	98%	89%
9	Northern Cape (SKA area)	Groblershoop	1 549	1 138	1 065	1 065	967	73%	94%	91%
10	Northern Cape (SKA area)	Sutherland	741	505	479	479	415	68%	95%	87%
11	Northern Cape (SKA area)	Fraserburg	861	532	366	366	309	62%	69%	84%
12	Northern Cape (SKA area)	Victoria West	1 330	1 320	1 169	1 169	939	99%	89%	80%
13	Northern Cape (SKA area)	Kenhardt	404	660	474	474	405	163%	72%	85%
Sub total (SKA Door-to-Door campaign sites)		13	11 054	12 116	11 311	11 311	10 215	110%	93%	90%
14	Northern Cape (SKA area)	Britstown	842	448	417	417	258	53%	93%	62%
15	Northern Cape (SKA area)	Marydale	1841	284	244	244	228	15%	86%	93%
16	Northern Cape (SKA area)	Keimoes	1 904	363	348	348	280	19%	96%	80%
17	Northern Cape (SKA area)	Kakamas	1367	170	143	143	89	12%	84%	62%
18	Northern Cape (SKA area)	Springbok	3 503	1 758	1 621	1 621	1 353	50%	92%	83%
Sub total (SKA non Door-to-Door campaign sites)		5	9 457	3 023	2 773	2 773	2 208	32%	92%	80%
Grand total		18	20 511	15 139	14 084	14 084	12 423	74%	93%	88%

**Note:** The planned STB Door-to-Door campaign for the 5 remaining SKA town areas (Britstown, Marydale, Keimoes, Kakamas & Springbok) is scheduled for **Sept 2016**



# SAPO PO & RPA footprint



● Post Offices (1 520)

● Agencies (828)

