



**Proposed construction of the
Zandkopsdrift 132kV Powerline**
DEA Ref No. 14/12/16/3/3/1/903


Presented by: **Tashriq Naicker** 13 November 2013

RULES OF THE MEETING



- ❖ Sign the attendance register to ensure that we can contact you in future.
- ❖ Kindly switch off cell phones.
- ❖ Wait until the end of the presentation to ask questions.
- ❖ Put your hand up if you have something to say.
- ❖ Announce your name when you speak.
- ❖ Keep discussions relevant to the topic.

AGENDA




- ❖ Welcome
- ❖ House rules
- ❖ Purpose of this meeting
- ❖ Introduction to Project Team
- ❖ Findings of the Basic Assessment Process
- ❖ The Water Use Licence Application Process
- ❖ Discussion


ACRONYMS/ABBREVIATIONS



- BAR - Basic Assessment Report
- DEA - Department of Environmental Affairs
- DWA- Department of Water Affairs
- EAP - Environmental Assessment Practitioner
- IAPs - Interested and Affected Parties
- PPP - Public Participation Process
- WULA - Water Use Licence Application


PURPOSE OF THIS MEETING 

- ❖ Actively introduce the public to the project and the EIA project team.
- ❖ Provide further details on the Environmental Assessment process that has been followed.
- ❖ Provide the public with an opportunity to actively participate in the Environmental Assessment Process that is being conducted.

ENVIRONMENTAL PROJECT TEAM 

SPECIALISTS


- ❖ **Aquatic Assessment:** Mr Dean Ollis from Freshwater Consulting cc
- ❖ **Heritage Impact Assessment:** Mr Jayson Orton from ACO Associates
- ❖ **Avifauna Impact Assessment:** Mr Andrew Jenkins from Avisense Consulting
- ❖ **Ecological Impact Assessment:** Mr David Hoare from David Hoare Consulting

ENVIRONMENTAL PROJECT TEAM 

GIBB

- ❖ GIBB is a leading Engineering & Environmental Management consultancy.
- ❖ GIBB has been appointed as the Environmental Assessment Practitioner (EAP) to undertake the required Basic Assessment Process.

Position	Name & Surname
Project Leader	Sukie Paras
Project Manager & Senior Environmental Scientist	Tashriq Naicker
Public Participation Practitioner	Kabelo Mphake
Environmental Assistant	Alecia Barnard

PROPOSED PROJECT 

- ❖ Eskom proposes to construct a 132kV overhead powerline from the proposed Hoekklip substation (Western Cape Province) to the Zandkopsdrift mine (Northern Cape Province).

PROJECT DETAILS

A 300m corridor has been applied for along the proposed routes to determine the environmental impacts and significance of these impacts associated with the proposed development.

The proposed project involves the construction of:

- ❖ An approximate 81.5 km long 132kV overhead distribution powerline from the Hoekklip substation to the Zandkopsdrift substation via the Landplaas switching station;
- ❖ Hoekklip substation;
- ❖ Landplaas switching station; and
- ❖ Zandkopsdrift substation.

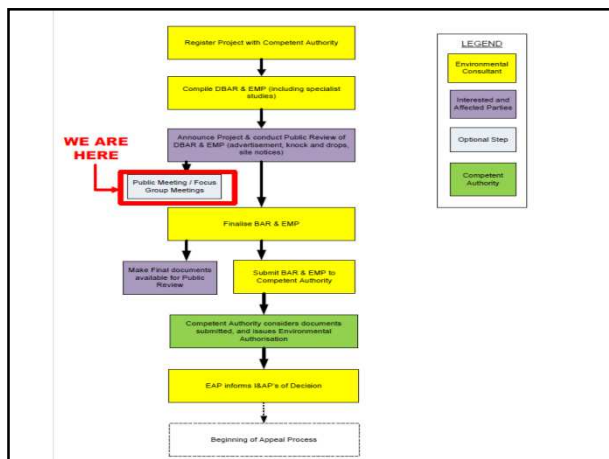
NEED FOR A BASIC ASSESSMENT

The proposed development involves activities which are listed in the EIA Regulations of 2010 as requiring a Basic Assessment Process (GNR 544 & 546).

Government Notice	Listed Activities
R.544	10(i), 11(xi), 22(ii) & 23(ii)
R.546	4(d)(ii), 12 & 16(iv)(d)(ii)(ff)

MAP OF THE ZANDKOPSDRIF 132KV POWERLINE ROUTE ALIGNMENTS

[Locality Map.pdf](#)



NEED FOR A WATER USE LICENCE

The proposed route traverses through several drainage lines and as such involves activities which are listed in the National Water Act (Act No. 36 of 1998) as requiring a Water Use Licence.

Section 21	Activity
c	Impeding or diverting the flow of water in a watercourse
i	Altering the bed, banks, course or characteristics of a watercourse

AQUATIC IMPACT ASSESSMENT

- ❖ A number of freshwater ecosystems identified along the route/s, mostly in the form of highly temporary drainage lines.
- ❖ One (1) major river system – Sout River & two (2) of its tributaries namely the Groot–Goerap & Klein–Goerap Rivers are traversed.
- ❖ All the drainage lines are non-perennial.
- ❖ Proposed route (2)– traverses ~50 drainage lines as compared to the alternative which crosses ~70.
- ❖ Three (3) wetlands identified - very low rainfall in the arid region.

Present Ecological importance of drainage lines:

- ❖ 25% in poor condition
- ❖ 30% in fair condition
- ❖ 45% in a good condition


From an Aquatic point of view Alternative 2 is preferred.

SPECIALIST STUDIES

- ❖ Aquatic Impact Assessment
- ❖ Heritage Impact Assessment
- ❖ Avifauna Impact Assessment
- ❖ Ecological Impact Assessment

HERITAGE IMPACT ASSESSMENT

- ❖ Archaeological resources are widespread, but that there are only a few of high heritage significance – medium to low.
- ❖ Palaeontological resources are very rare in the affected areas as necessary excavations are small and quite shallow
- ❖ The granite outcrop is the only feature of high heritage significance.



From a heritage point of view either route is acceptable.

Hardeveld granite outcrop in the northern part of the study area.

AVIFAUNA IMPACT ASSESSMENT

- ❖ Powerlines themselves pose a collision risk for overflying birds, and a risk of electrocution for certain species.
- ❖ Fifty-six (56) species were seen during the June site visit - Ludwig's Bustard, Blue Crane bird species & Secretary bird.
- ❖ High densities of a diversity of endemic Lark species.
- ❖ There are several species that are likely to build nests in existing and new pylons.

From an Avifaunal point of view, alternative 2 is preferred as it is further away from the known Martial Eagle's nest, and is marginally shorter, which implies a lower potential for bird collisions and electrocutions.

**ALTERNATIVES
Alternative 1**

- ❖ Alternative 1 is approximately 82km long and initially follows in a north – easterly direction away from the R363 (from the Hoekklip substation) where after it crosses over the R363 in a north – westerly direction into the proposed Landplaas switching station which is located to the east of and approximately parallel with the road between Waterklip and Biesiesfontein.
- ❖ The line then continues in a northerly direction towards the Zandkopsdrift substation (located in the Northern Cape).

ECOLOGICAL IMPACT ASSESSMENT

- ❖ The study area indicates that most of the study area consists of natural vegetation – "Shrubland and Low Fynbos".
- ❖ There are no vegetation types occurring in the study area that are listed in the National List of Ecosystems that are Threatened and need of protection (GN1002 of 2011).

The following animal species of conservation concern could potentially occur on site:

- ❖ Grant's Golden Mole (VU);
- ❖ White-tailed Rat (EN); and
- ❖ Namaqua Plated Lizard (NT).

From an Ecological point of view either route may be constructed.

**ALTERNATIVES
Alternative 2 (Preferred Alternative)**

- ❖ Alternative 2 (preferred) is approximately 81.5km long.
- ❖ Follows a similar route alignment as with Alternative 1, with the exception of a few deviations - at the proposed Hoekklip substation and two deviations which occur South of the Zandkopsdrift mine.
- ❖ Alternative 2 lies predominantly to the east of Alternative 1.

[Locality Map.pdf](#)

ALTERNATIVES COMPARISON**Comparison between Impacts for Alternative 1 & 2**

- ❖ The preferred option is the least expensive to construct and has the least amount impacts on the surrounding environment.
- ❖ The preferred option is slightly shorter in distance and has an approximate 20 drainage crossings less.
- ❖ The preferred option has fewer impacts on avifauna, vegetation and on wetland resources that may occur.

Therefore Alternative 2 is the preferred route

PUBLIC PARTICIPATION**Public Participation undertaken thus far:**

- ❖ Advert placed on 18 October 2013:
 - ❑ *Ons Kontrei*
- ❖ Site notices were placed at conspicuous places on 21 October 2013.
- ❖ Distribution of announcement letters to Interested and Affected Parties (I&AP's) was undertaken on 08 November 2013.
- ❖ Draft Basic Assessment Report (BAR) made available for public comment from **12 November 2013 to 10 January 2014** at:
 - ❑ *Lutzville Public Library;*
 - ❑ *Landplaas Community Hall;*
 - ❑ *Zandkopsdrift mine; and*
 - ❑ *GIBB website: (<http://projects.gibb.co.za/Projects/Zandkopsdrift-132KV-Powerline-BA>)*
- ❖ Public meeting (13 November 2013).

PUBLIC PARTICIPATION

- ❖ PP aims to inform a wide range of Interested & Affected Parties (I&APs) about the proposed project & the environmental process to be followed.
- ❖ It is a tool to allow the public to exchange information & to express their views and concerns on the proposed development.
- ❖ All contributions from I&APs must be fully documented, evaluated & responded to in the BAR.
- ❖ PP assists in identifying potential issues that will help focus & enhance decision-making.
- ❖ All registered I&APs will be continuously updated on events & activities throughout the BA process.

PUBLIC PARTICIPATION**How to participate:**

- ❖ The Draft BAR is available for review from **12 November 2013 to 10 January 2014**.
- ❖ Provide us with your comments by 10 January 2014.

Next Step:

- ❖ Minutes of this Public Meeting will be incorporated into the Comment and Response Report.
- ❖ Final BAR will be made available for public review and concurrently submitted to the Department of Environmental Affairs.
- ❖ Registered I&APs will be notified of the outcome of the application.

WAY FORWARD



- ❖ After the public review period has ended, all comments received will be collated and responded to in a Comments and Response Report.
- ❖ The minutes will be distributed to all attendees and registered I&APs.
- ❖ The BAR will be amended as necessary and submitted to DEA with all comments received.
- ❖ The Final BAR as submitted will be made available to registered I&APs during January 2014.



DISCUSSION

The Public Participation Office
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Email: publicparticipation@gibb.co.za
Website: www.gibb.co.za

Voorgestelde konstruksie van die Zandkopsdrift 132kV Kraglyn

DEA Verw. Nr. 14/12/16/3/3/1/903



Voorgelê deur: **Alecia Barnard**

13 November 2013

REËLS VAN DIE VERGADERING



- ❖ Teken van die bywoningsregister om te verseker dat ons u kan kontak in die toekoms.
- ❖ Vriendelik afskakel selfone.
- ❖ Wag tot die einde van die aanbieding om vrae te vra.
- ❖ Steek u hand op as u iets wil sê.
- ❖ Kondig jou naam aan as u praat.
- ❖ Hou besprekings met betrekking tot die onderwerp.

AGENDA



- ❖ Verwelkoming
- ❖ Huis reëls
- ❖ Doel van die vergadering
- ❖ Bekendstelling van die Projek Span
- ❖ Bevindinge van die Basiese Evalueeringsproses
- ❖ Die Water gebruik Lisensie Aansoek Proses
- ❖ Bespreking

AKRONIEME / AFKORTINGS



- BAR - Basiese Evalueeringsverslag
- DEA - Departement van Omgewingsake
- DWA - Departement van Waterwese
- EAP - Omgewingsinvloedpraktisyn
- I&APs - Belangstellende en Geaffekteerde Partye
- PPP - Proses van Openbare Deelname
- WULA - Water Gebruik lisensie Aansoek

DOEL VAN DIE VERGADERING

- ❖ Stel die publiek bekend aan die projek en die projek span.
- ❖ Verskaf verdere inligting in verband met die Omgewingsimpakproses wat tot dusver gevolg is.
- ❖ Bied die publiek 'n geleentheid om aktief deel te neem aan die Omgewingsimpakproses wat tans plaasvind.

OMGEWING PROJEK SPAN**SPECIALISTE**

- ❖ **Water Impakstudie:** Mnr Dean Ollis van Freshwater Consulting cc
- ❖ **Erfenis Impakstudie:** Mnr Jayson Orton van ACO Associates
- ❖ **Voëls Impakstudie:** Mnr Andrew Jenkins van Avisense Consulting
- ❖ **Ekologiese Impakstudie:** Mnr David Hoare van David Hoare Consulting

OMGEWING PROJEK SPAN**GIBB**

- ❖ GIBB is 'n toonaangewende firma met betrekking tot Ingeeurs-en Omgewingsbestuur advies.
- ❖ GIBB is aangestel as die Omgewingsinvloedpraktisyn om die nodige Basiese Evaluering te onderneem.

Posisie	Naam & Van
Projek Leier	Sukie Paras
Project Bestuurder & Senior Omgewingsinvloedpraktisyn	Tashriq Naicker
Publieke Deelname Paraktisyn	Kabelo Mphake
Omgewingsassistent	Alecia Barnard

VOORGESTELDE PROJEK

- ❖ Eskom stel voor dat 'n 132kV oorhoofse kraglyn gebou word vanaf die voorgestelde Hoekklip substasie (Wes-Kaap Provinsie) tot en met die Zandkopsdrift myn (Noord-Kaap Provinsie).

PROJEK BESONDERHEDE



Daar is aansoek gedoen vir 'n 300m deurgang al langs die voorgestelde kraglyn roetes om die uitwerking op die omgewing asook die betekenis van hierdie impakte weens die voorgestelde ontwikkeling, te bepaal.

Die voorgestelde projek behels die volgende:

- ❖ 'n Oorhoofse kraglyn vanaf die Hoekklip substasie tot en met die Zandkopsdrift myn wat ongeveer 81.5 km lank is;
- ❖ Hoekklip substasie;
- ❖ Landplaas skakel stasie; en
- ❖ Zandkopsdrift substasie.

BEHOEFTE VIR 'N BASIESE OMGEWING EVALUERINGSPROSES



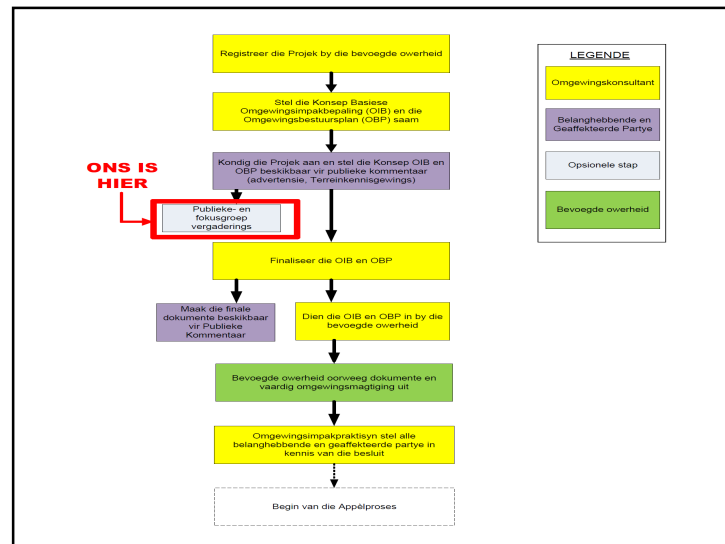
Die voorgestelde ontwikkeling behels aktiwiteite wat gelys is in die OIB-Regulasies van 2010, wat 'n Basiese Ewalueringsproses benodig (GNR 544 & 546).

Goewermentskennigewing	Gelysde Aktiwiteite
GNR.544	10(i), 11(xi), 22(ii) & 23(ii)
GNR.546	4(d)(ii), 12 & 16(iv)(d)(ii)(ff)

KAART VAN DIE ZANDKOPSDRIF 132KV KRAGLYN ROETES



[Locality Map.pdf](#)



BEHOEFTE VIR 'N WATERGEBRUIK LISENSIE



Die voorgestelde roete loop deur verskeie dreineringslyne en as sodanig behels aktiwiteite wat in die Nasionale Waterwet (Wet 36 van 1998) gelys is as 'n aktiwiteit wat 'n watergebruiklisensie benodig.

Afdeling 21	Aktiwiteit
c	Belemmering of wegkeer van die vloei van water in 'n waterloop
i	Wysiging van die (bed), oewer, vloei rigting of karakter van die waterloop

WATER IMPAKSTUDIE



- ❖ Daar was heelwat varswater-ekosisteme geïdentifiseer langs die kraglyn roete/s, meestal in die vorm van hoogs tydelike dreineringslyne.
- ❖ Een (1) groot rivier stelsel - Soutrivier en twee (2) van sy sytakke naamlik die Groot-en Klein-Goerap Riviere word gekruis.
- ❖ Al die dreineringslyne is nie-standhoudend.
- ❖ Voorgestelde roete (2) - deurkruis ~ 50 dreineringslyne in vergelyking met die alternatiewe roete wat ~ 70 dreineringslyne deurkruis.
- ❖ Drie (3) vleilande is geïdentifiseer - 'n baie lae reënval in die dorre streek.

Huidige ekologiese belangrikheid van dreineringslyne:

- ❖ 25% in 'n swak toestand
- ❖ 30% in redelike toestand
- ❖ 45% in 'n goeie toestand

Uit 'n water spesialis se oogpunt word Alternatief 2 aanbeveel.

SPEKIALISTE STUDIES



- ❖ Water Impakstudie
- ❖ Erfenis Impakstudie
- ❖ Vöels Impakstudie
- ❖ Ekologiese Impakstudie

ERFENIS IMPAKSTUDIE



- ❖ Argeologiese hulpbronne is wydverspreid, maar slegs 'n paar van hierdie hulpbronne is van 'n hoë erfenis betekenis - medium tot laag.
- ❖ Paleontologiese hulpbronne is baie skaars in die omgewing aangesien die nodige opgrawings baie klein en vlak is.
- ❖ Die graniet dagsom is die enigste hulpbron van 'n hoë erfenis betekenis.



Uit 'n erfenis oogpunt is beide roetes aanvaarbaar.

Hardeveid graniet dagsom in die Noordelike deel van die studie area.

VÖELS IMPAKSTUDIE



- ❖ Kraglyne hou 'n botsing risiko vir die voëls in, asook 'n risiko van elektriese skok vir sekere spesies.
- ❖ Ses en Vyftig (56) voël spesies was waargeneem gedurende die Junie besoek - Ludwig's Bustard, Blue Crane voëlsesies & Sekretaris voël.
- ❖ Hoë digtheid van 'n verskeidenheid van endemiese Lark spesies was ook waargeneem.
- ❖ Daar is verskeie spesies wat geneig is om neste te bou in bestaande en nuwe kragpale.

Uit die oogpunt van 'n voëllewe spesialis, is die alternatief 2 roete verkies aangesien dit verder weg van die bekende Martial Arend se nes is, en die afstand is ook effens korter. Dit impliseer dat daar 'n laer potensiaal is vir voël botsings en elektriese skok.

ALTERNATIEWE Alternatief 1



- ❖ Alternatief 1 volg 'n noordelike rigting vanaf die voorgestelde Landplaas skakel stasie, wat aan die oostekant en ongeveer parallel met die pad tussen Waterklip en Biesiesfontein, geleë is.
- ❖ Alternatief 1 is ongeveer 82 km in lengte .

EKOLOGIESE IMPAKSTUDIE



- ❖ Die studie area dui daarop dat die grootste deel van die area bestaan uit natuurlike plantegroei - "struikveld en Lae Fynbos".
- ❖ Daar is geen plantegroei tipes wat in die studie gebied voorkom wat gelys is in die Nasionale Lys van ekosisteme wat bedreig word (GN1002 van 2011) .

Die volgende dier spesies van bewaring kan moontlik in die studie gebied voorkom:

- ❖ Grant se Goue Mol (VU);
- ❖ Wit-sterk Rot (NL); en
- ❖ Namaqua pantserakkedis (NT).

Vanuit 'n ekologiese oogpunt is beide roetes aanvaarbaar.

ALTERNATIEWE Alternatief 2 (Voorkeur roete)



- ❖ Alternatief 2 (voorkeur roete) volg 'n soortgelyke roete aanpassing as Alternatief 1, met die uitsondering van 'n paar afwykings. Hierdie afwykings vind eerstens plaas by die voorgestelde Hoekklip substasie, waar Alternatief 2 uitkeer in 'n noordwestelike rigting vir ongeveer 4,5 km voor dit weer aansluit by Alternatief 1.
- ❖ Die tweede afwyking vind plaas Suid vanaf die Zandkopsdrift myn, waar Alternatief 2 afwyk in 'n oostelike rigting voor die aanvang van die Zandkopsdrift myn substasie, en is 'n totale afstand van 81,5 km lank.
- ❖ Alternatief 2 lê hoofsaaklik na die Ooste van Alternatief 1.

[Locality Map.pdf](#)

ALTERNATIEWE VERGELYKING**Vergelyking tussen impakte vir Alternatief 1 & 2:**

- ❖ Die gekose opsie is die goedkoopste om te bou en het die minste hoeveelheid impakte op die omliggende omgewing.
- ❖ Die gekose opsie is effens korter in afstand en het ongeveer 20 dreinerings kruisings minder as Alternatief 1.
- ❖ Die voorkeur-opsie het 'n kleiner impak op die voëllewe, plantegroei en veiland hulpbronne wat mag voorkom.

Alternatief 2 is dus die voorkeur-roete

PUBLIEKE DEELNAME**Publieke Deelname dusver:**

- ❖ Advertensie geplaas op 18 Oktober 2013:
 - ❑ *Ons Kontrei Streekskoerant*
- ❖ Kennisgewings geplaas op opsigtelike plekke op 21 Oktober 2013.
- ❖ Die verspreiding van aankondigingsbriewe na B&Gpe het plaasgevind op 8 November 2013.
- ❖ Konsep Basiese Evalueeringsverslag is beskikbaar gestel vir publieke kommentaar vanaf **12 November 2013** tot en met **10 Januarie 2014** by:
 - ❑ *Lutzville Publieke Biblioteek;*
 - ❑ *Landplaas Gemeenskapsaal;*
 - ❑ *Zandkopsdrift myn; en*
 - ❑ *GIBB webtuiste: (<http://projects.gibb.co.za/Projects/Zandkopsdrift-132KV-Powerline-BA>)*
- ❖ Publieke Vergadering (13 November 2013).

PUBLIEKE DEELNAME

- ❖ Die doel van die Publieke Deelname is om 'n wye verskeidenheid van belanghebbende en geaffekteerde partye (B&GPe) in te lig oor die voorgestelde projek en die omgewing proses wat gevolg moet word.
- ❖ Dit is 'n instrument om aan die publiek inligting te verskaf en om hul menings en kommentaar oor die voorgestelde ontwikkeling te lig.
- ❖ Alle bydraes van B&GPe moet ten volle gedokumenteer, geëvalueer en op gereageer word in die Basiese evalueeringsproses.
- ❖ Publieke Deelname help met die identifisering van potensiële kwessies wat sal help die verbeterde besluitneming.
- ❖ Alle geregistreerde B&GPe sal voortdurend in kennis gestel word oor die gebeure en aktiwiteite wat verband hou met die Basiese Evalueeringsproses.

PUBLIEKE DEELNAME**Hoe om deel te neem:**

- ❖ Die Konsep Basiese Evalueeringsverslag is beskikbaar vir kommentaar vanaf **12 November 2013** tot en met **10 Januarie 2014**.
- ❖ Dien u geskrewe kommentaar in by ons **Kantoor vir Publieke Deelname** nie later as **10 Januarie 2014**.

Volgende Stap:

- ❖ Minute van die Openbare Vergadering sal opgeneem word in die Kommentaar-en Antwoordverslag.
- ❖ Finale Basiese Evalueeringsverslag sal beskikbaar gestel word vir publieke kommentaar en gelyktydig ingedien word by die Departement van Omgewingsake.
- ❖ Alle geregistreerde B&GPe sal in kennis gestel word van die uitslag van die aansoek.

PAD VORENTOE

- ❖ Na die afloop van die publieke oorsig tydperk, sal alle kommentaar ontvang, saamgestel word en daarop gereageer word in 'n Kommentaar-en Antwoordverslag.
- ❖ Die notule sal versprei word aan alle deelnemers en geregistreerde B&GPe.
- ❖ Die Basiese Evalueringsverslag sal gewysig word soos benodig en ingedien word by die Departement van Omgewingssake met al die kommentaar wat ontvang is.
- ❖ Die Finale Basiese Evalueringsverslag sal beskikbaar gestel word aan geregistreerde B&GPe gedurende Januarie 2014.

**BESPREKING**

Die Publieke Deelname Kantoor
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