



**environmental affairs**

Department:  
Environmental Affairs  
REPUBLIC OF SOUTH AFRICA



**energy**

Department:  
Energy  
REPUBLIC OF SOUTH AFRICA



**public enterprises**

Department:  
Public Enterprises  
REPUBLIC OF SOUTH AFRICA



# Development of a Strategic Environmental Assessment for the Identification of Energy Corridors, as well as Assessment and Management of a Gas Pipeline Network for South Africa

## Project Steering Committee and Expert Reference Group Meeting 4

**27 November 2019**

**09H45 – 14H30**

**SANBI**

Biodiversity for Life

South African National Biodiversity Institute



**CSIR**

*our future through science*

# Meeting Agenda

TIME	ACTIVITY/PRESENTATION	PRESENTER
09:45 – 10:00	<ul style="list-style-type: none"> <li>Tea and Registration</li> </ul>	All
10:00 – 10:10	<ul style="list-style-type: none"> <li>Welcome and Introductions</li> </ul>	DEFF
10:10 – 10:30	<ul style="list-style-type: none"> <li>Progress on the SEA Process</li> </ul>	CSIR and SANBI
10:30 – 11:00	<ul style="list-style-type: none"> <li>Current Gazetted Process for EGI Development in the Corridors and Gazetted Generic EMPr</li> </ul>	CSIR
11:00 - 12:00	<ul style="list-style-type: none"> <li>Proposed Draft Decision-Making Tool for EGI Development in the Corridors</li> <li>Discussion</li> </ul>	CSIR All
12:00 – 12:15	<ul style="list-style-type: none"> <li>Break</li> </ul>	All
12:15 – 13:15	<ul style="list-style-type: none"> <li>Proposed Draft Decision-Making Tool for Gas Pipeline Development in the Corridors</li> <li>Discussion</li> </ul>	CSIR All
13:15 – 14:00	<ul style="list-style-type: none"> <li>Proposed Draft Generic EMPr for Gas Pipeline Development in the Corridors</li> <li>Discussion</li> </ul>	CSIR All
14:00 – 14:30	<ul style="list-style-type: none"> <li>Discussion, Way Forward and Closing</li> </ul>	All
14.30 – 15.00	<ul style="list-style-type: none"> <li>Lunch</li> </ul>	All

**Session 1A:  
Progress on the SEA Process - CSIR**

**Gas Transmission Pipeline Network  
& EGI Expansion**

# SEA Process

Key Stakeholders Consultation  
ERG, PSC, Sector Specific Meetings

Public Outreach 1

Public Outreach 2

## PHASE 2: Assessment

PHASE 1:  
Inception

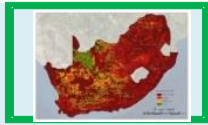
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Initial Corridors  
(Starting Point)  
June 2017

Preliminary  
Corridors

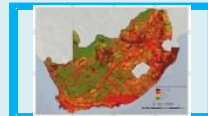


**Task II**  
(Negative Mapping)  
Sept 2017-Jan 2018

W2W  
Environmental  
Constraints Map



W2W  
Engineering  
Constraints Map



**Task III**  
(Corridor Refinement)  
Nov 2017 – Feb 2018

Draft  
Corridors



Draft Corridor  
Environmental  
Constraints Map



**Task IV**  
(Environmental Assessment)  
December 2017 – August 2019

Specialist  
Studies

Review and  
Final corridor  
alignments

**PHASE 3**  
Decision-support  
outputs and  
Gazetting

Late 2019 – Early 2020

SEA Outputs

Final Corridors

Final Corridor  
Environmental  
Constraints Map

Standards, EMPr  
and Protocols

# Phase 1: Inception

## Project Initiation Phase:

- April 2017 – June 2017
- Convened ERG and PSC
- Dedicated Project Website:  
<https://gasnetwork.csir.co.za/>
- Dedicated Project Email Address:  
[gasnetwork@csir.co.za](mailto:gasnetwork@csir.co.za)

Strategic Environmental Assessment for the Development of a Gas Pipeline Network for South Africa



Home SEA Process Project Summary FAQs Resources Stakeholder registration Contact us



You are here: Home

### The Need for an SEA Objectives

Welcome to the official website for the Strategic Environmental Assessment (SEA) for the development of a Gas pipeline network for South Africa.

The website provides the general public with the opportunity to register as stakeholders; conveys the latest information and outputs of the assessment process for review and comments; and describes the opportunities for how stakeholders can engage further in the assessment over the 18 month SEA process.

### The Need for an SEA

In 2012, Cabinet adopted the National Development Plan (NDP), which provided South Africa's plan to accelerate infrastructure development in order to address service delivery backlogs and facilitate economic growth and job creation. Operation Phakisa is a fast results delivery programme that was launched in July 2014 to help implement the NDP. This is a unique initiative of the South African government to address key issues such as poverty,

SEARCH

SEARCH

USEFUL INTERNET LINKS

- DEA
- SANBI
- SIP 10: Electricity transmission and distribution for all
- DEA Environment GIS (EGIS)
- Operation Phakisa

RECENT POSTS

- 20 April 2017 Project Launch

# SEA Process: Phase 2

Key Stakeholders Consultation  
ERG, PSC, Sector Specific Meetings

Public Outreach 1

Public Outreach 2

## PHASE 2: Assessment

PHASE 1:  
Inception

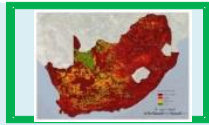
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# **Vision of SEA:** Develop a Strategic gas pipeline network and expansion of the gazetted EGI corridors in an environmentally responsible and efficient manner that responds effectively to the country's economic & social development needs.

## **Effective**

- Identify 100 km wide strategic energy corridors at a national scale based on future energy supply, demand requirements, environmental sensitivities and social & economic development priorities at a national, regional and localised level. Routes have not being assessed as part of this SEA.

## **Efficient**

- Ensure streamlining of the Environmental Assessment Process by pre-assessing environmental sensitivities within the corridors to avoid fatal flaws and focus on site specific assessments required.
  - Streamlining → Basic Assessment (BA) Process + Assessment Protocols (Specialist Inputs)
  - Exemption → Standards
- Enable developers greater flexibility regarding route options within assessed corridors (i.e. avoid land negotiation concerns).
- Promote collaborative governance between authorising authorities.

## **Responsible**

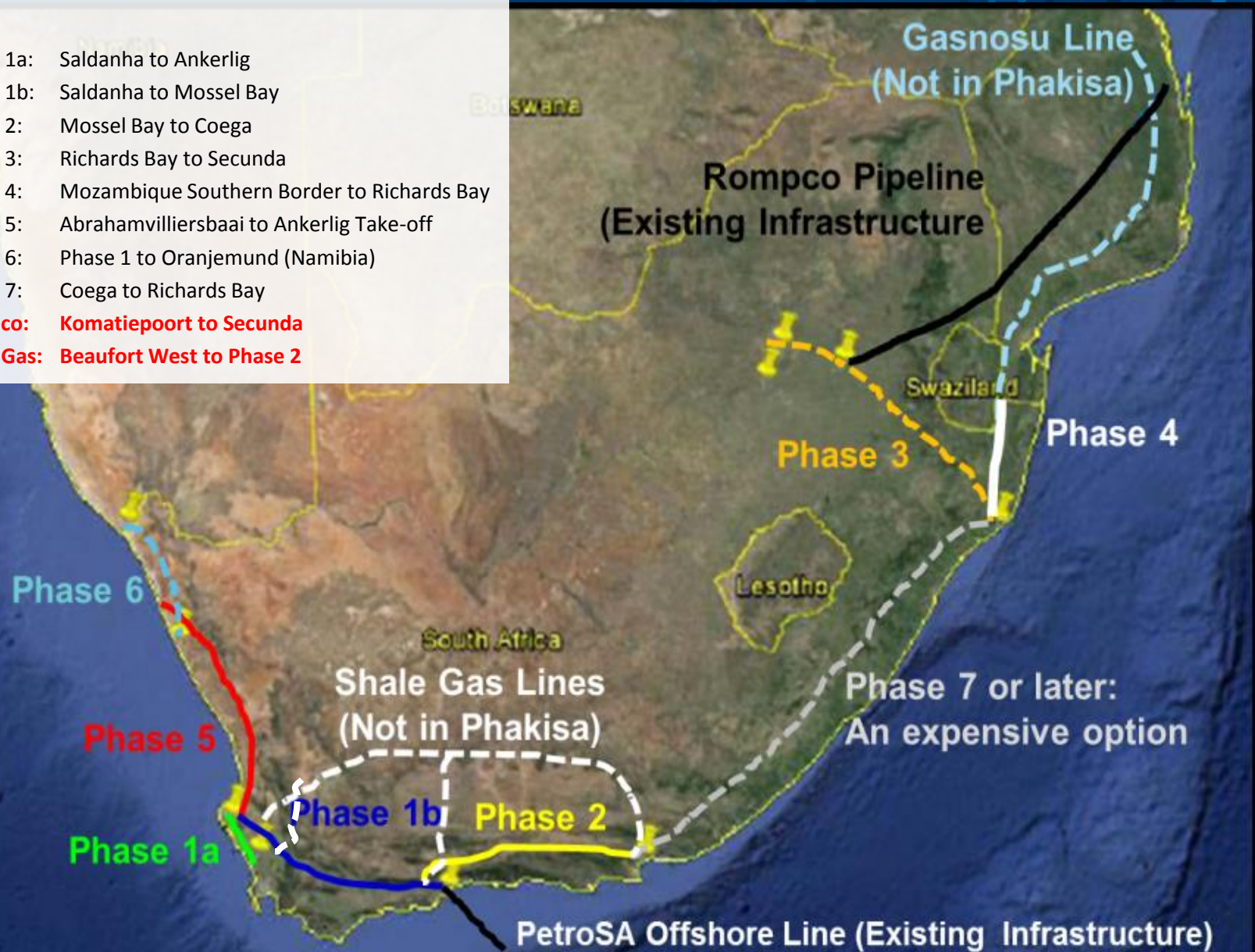
- Develop generic EMP, Assessment Protocol and Standards or Minimum Information Requirements.



# Phakisa A1 Phased Gas Pipeline Network

## Phasing

- Phase 1a: Saldanha to Ankerlig
- Phase 1b: Saldanha to Mossel Bay
- Phase 2: Mossel Bay to Coega
- Phase 3: Richards Bay to Secunda
- Phase 4: Mozambique Southern Border to Richards Bay
- Phase 5: Abrahamvilliersbaai to Ankerlig Take-off
- Phase 6: Phase 1 to Oranjemund (Namibia)
- Phase 7: Coega to Richards Bay
- Rompco: Komatiepoort to Secunda**
- Shale Gas: Beaufort West to Phase 2**

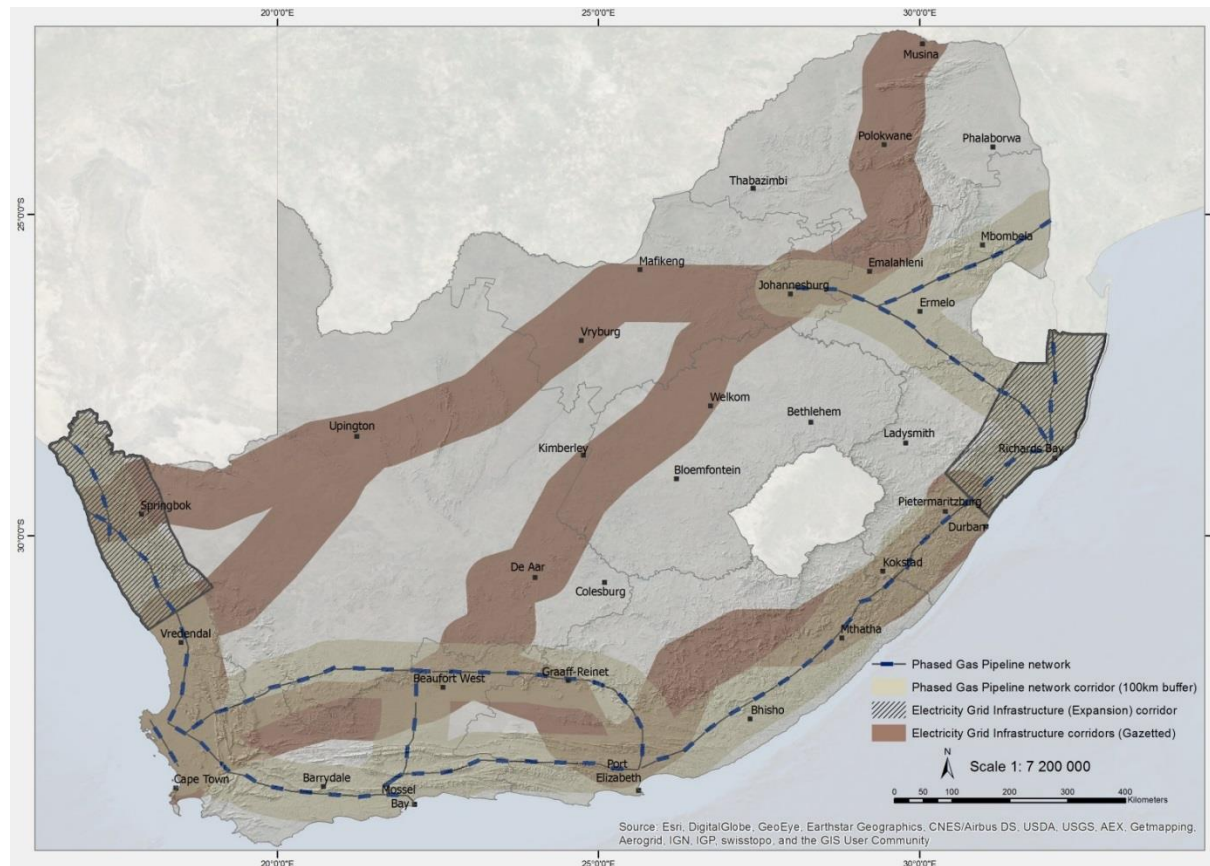




# Phase 2: Assessment – Task I

## Draft Initial Corridors:

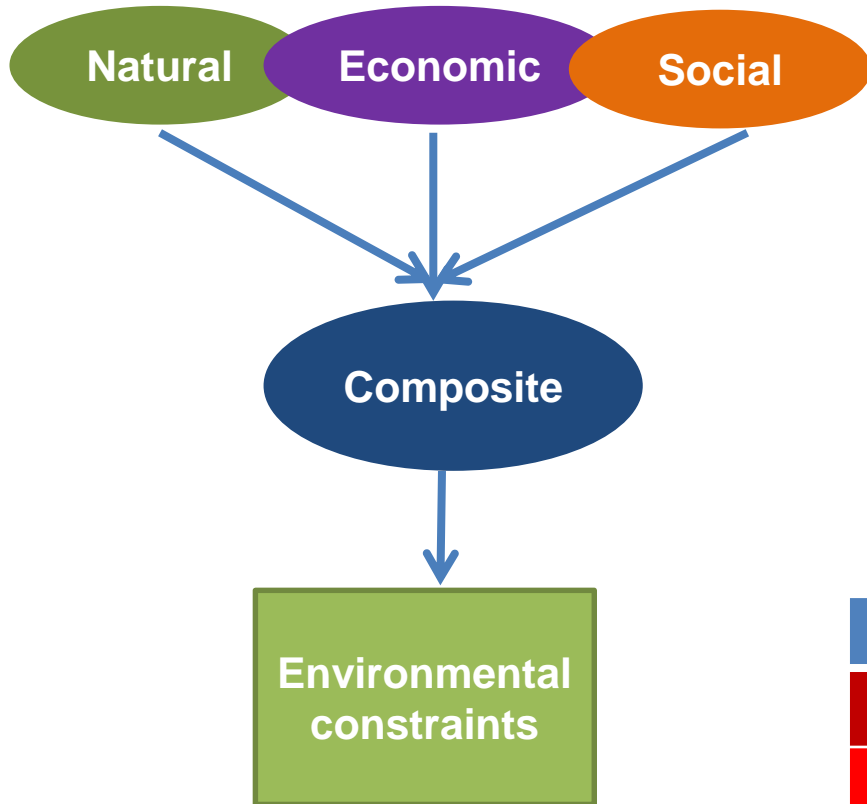
- 100 km wide
- Based on phased gas pipeline network identified in 2014 Operation Phakisa



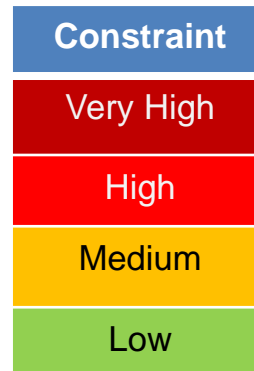
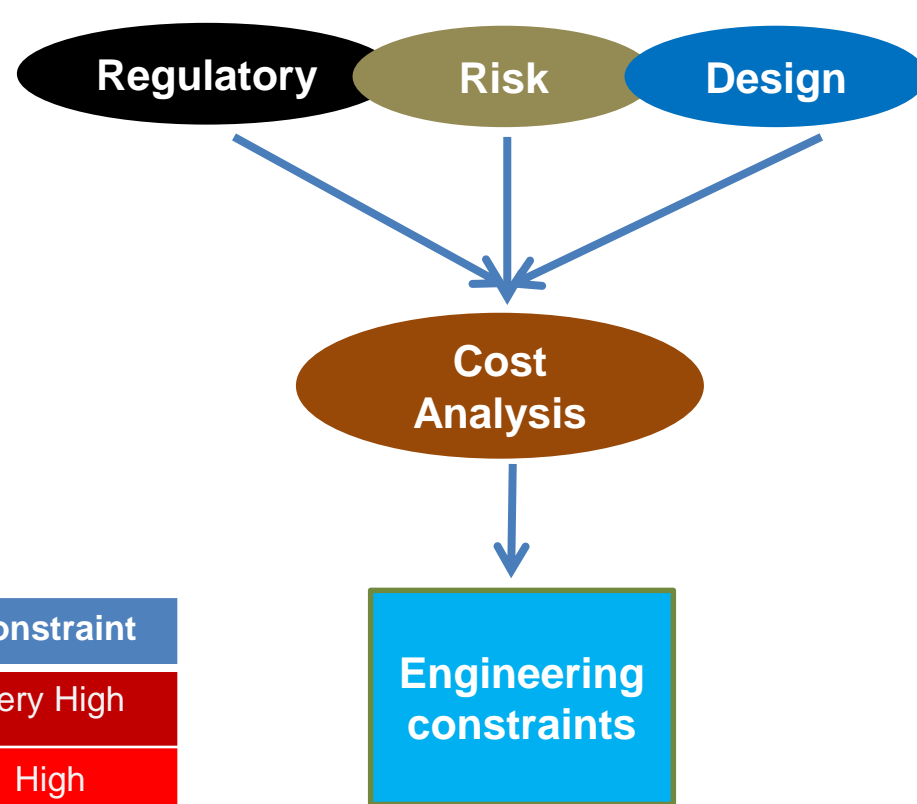
# Phase 2: Assessment – Task II

## Negative Mapping

Impact of EGI/Gas Pipelines on Environment



Impact of Environment on EGI/Gas Pipeline



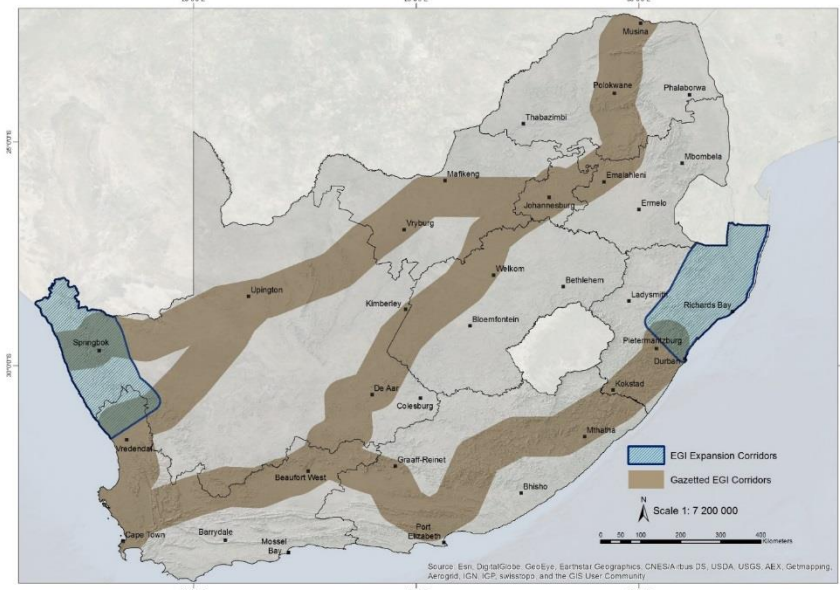
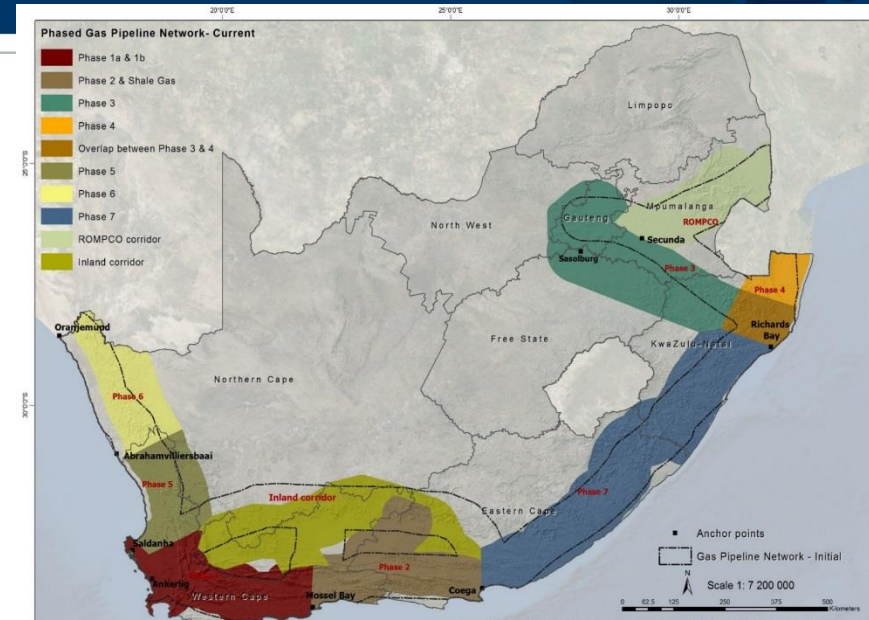
# Phase 2: Assessment – Task III

## Corridor Refinement – Draft Pinch Point Analysis:

- Completed February 2018
- Consideration of Wall to Wall Negative Mapping → Environmental + Engineering Constraints → Shift corridors where possible to contain as many low sensitivity areas as possible.
- Identification of Draft Refined Corridors → 125 km wide → Assessed by Specialists

## Shifts for PGPN:

- *Phases 5 + 6 (Diamond Mining + Protected Areas)*
- *Inland Corridor + Phase 2 (Align with 2016 EGI and Shale Gas SEAs)*
- *Phases 3 + 8 (Greater area of assessment)*



# Phase 2: Assessment – Task IV

## Specialist Assessment and Final Corridors

- Draft Specialist Assessments completed July 2018
- Peer Review completed July 2018 – February 2019
- Draft Specialist Assessments finalised for Stakeholder Review – March 2019
- Draft Specialist Assessments and SEA Report Chapters released for stakeholder comment → 25 April 2019 – 24 June 2019
- **Final Specialist Assessments completed → August 2019**
- **Final Pinch Point Analysis → Identification of Final Corridors → July 2019**
- **Final SEA Report → November 2019**

### Biodiversity and Ecological Impacts (Terrestrial and Aquatic Ecosystems, Flora and Fauna)

### Socio-Economic and Planning Assessment

### Seismicity

#### Terrestrial:

- Fynbos Biome
- Savannah and Grassland Biomes
- Indian Ocean Coastal Belt Biome
- Albany Thicket Biome (*Gas Pipeline only*)
- Succulent and Nama Karoo Biomes

#### Aquatic:

- Estuaries
- Rivers and Wetlands

#### Gas Pipeline Network

- Benefits and Opportunities of Gas
- Regional and Settlement Planning
- Governance and Disaster Management

#### EGL Expansion

- Socio-Economic Impacts

- Earthquakes and Faults

Bats

Avifauna

Visual (EGL only)



# Summary of Consultation (2017-2018)

## Stage 1 Consultation (Project Initiation, Preliminary (Draft Initial) Corridors and Negative Mapping)

### Consultation with ERG and PSC

- ERG and PSC Meeting 1

### Consultation with Authorities

- Provincial Authorities Roadshow – Round 1

### Consultation with Project Partners

- Various Meetings

### Consultation with Specialists

- Specialist Workshop – Multi-Author Team Meeting 1

### Consultation with the Public

- Public Outreach Roadshow – Round 1

### Conferences and Seminars

- Biodiversity Research and Evidence Indaba, Pretoria
- International Gas Cooperation Summit, Durban
- Africa Oil Week, Cape Town
- IAIAsa Conference, Western Cape
- IAIA Conference, Durban
- 15th Annual Biodiversity Planning Forum, Cape St Francis, Eastern Cape

### Consultation with Key Stakeholders and Sectors

- DEA, DoE, DPE, iGas, Transnet, Eskom, the Department of Trade and Industry, Coega IDZ, Saldanha Bay IDZ, Richards Bay IDZ
- Western Cape Government DEADP
- Presidential Infrastructure Coordination Committee
- Falcon Oil and Gas
- South African Oil and Gas Alliance
- South African Local Government Association (SALGA) Karoo STR Initiative Workshop
- Minister and Mayoral Technical (MinMay Tech) Western Cape Forum
- TNPA Environmental Department of the Port of Durban
- KZN COGTA



# Summary of Consultation (2018)

## Stage 2 Consultation (Draft Refined Corridors, Provincial, Municipal and Industry Feedback Exercise, and Draft Specialist Assessment and SEA Chapters)

### Consultation with ERG and PSC

- ERG and PSC Meeting 2

### Consultation with Authorities

- Provincial Authorities Roadshow – Round 2

### Consultation with Project Partners

- Various Meetings

### Consultation with Specialists

- Specialist Workshop – Multi-Author Team Meeting 2
- Meeting with Bat Specialist – Bat Assessment Protocols

### Consultation with the Public

- Public Outreach Roadshow – Round 2
- Public Outreach Roadshow – Round 3 (Additional)

### Provincial, Municipal and Industry Feedback Exercises

- Provincial and Municipal Feedback Exercise
- Industry Feedback Exercise

### Consultation with Key Stakeholders and Sectors

- TNPA Environmental Department of the Port of Richards Bay
- Chamber of Mines, Energy Intensive Users Group and Business Union of South Africa
- Department of Defence and Armscor
- Department of Agriculture, Forestry and Fisheries and the Agricultural Research Council
- KZN Ingonyama Trust Board and the Traditional Affairs Branch of the KZN COGTA
- KZN COGTA Action Working Group 18 Meeting
- TNPA Environmental Department of the Port of Saldanha
- KZN Ingonyama Trust Board
- Eskom, Birdlife and Endangered Wildlife Trust

### Conferences and Seminars

- African Conference for Linear Infrastructure and Ecology, Kruger National Park
- Esri User Conference, San Diego, California
- SAOGA Networking Breakfast, Sandton
- SAOGA Networking Breakfast, Mouille Point, Cape Town
- Conference on Wind Energy and Wildlife Impacts, Stirling, Scotland

# Summary of Consultation (2019)

Stage 3 Consultation (Final Pinch Point Analysis, Final Corridors and Draft Decision-Making Tools)



## Consultation with ERG and PSC

- ERG and PSC Meeting 3
- ERG and PSC Meeting 4

## Consultation with Authorities

- South African Heritage Resources Agency and Heritage Western Cape

## Consultation with Key Stakeholders and Sectors

- Development Bank of South Africa and Department of Planning, Monitoring and Evaluation

## Consultation with Project Partners

- Various Meetings

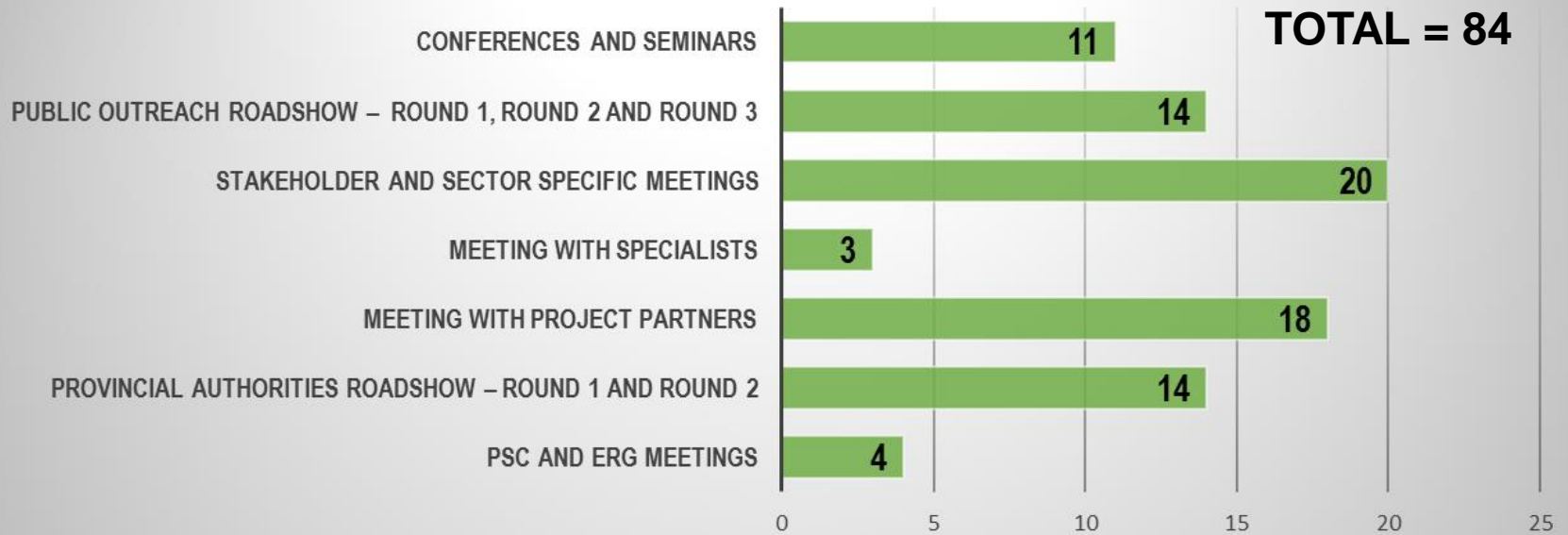
## Consultation with Specialists

- Various Discussions

## Consultation with the Public

- Via gazette process

# Summary of Consultation - MEETINGS HELD & NEWSPAPER ADVERTS



# SEA Process: Phase 3

Key Stakeholders Consultation  
ERG, PSC, Sector Specific Meetings

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Public Outreach 2

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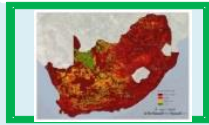
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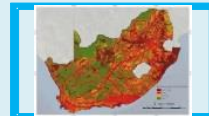


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# Phase 3: Decision Support Outputs

## Decision Support Outputs and Gazetting:

- Streamlining of Environmental Authorisation (EA) Process:
  - EGI → Exemption from Environmental Authorisation (via use of a Standard)
  - Gas Pipeline → Streamlined Environmental Authorisation Process (via use of a Basic Assessment)
- Assessment Protocols (*once gazetted*) will need to be followed for specialist inputs
- Generic EMPr for Gas Pipelines
- Note: The Gas & EGI SEA Specialist Team provided comments and recommendations on the Generic EGI EMPr (in 2018) that was gazetted for implementation in March 2019



# Session 1B: SEA Corridor Refinement Recap - SANBI

## Gas Transmission Pipeline Network & EGI Expansion

*Note: Refer to the separate file for SANBI's Presentation*

**Session 2:  
Current Gazetted Process for EGI  
Development in the Corridors and  
Gazetted Generic EMPr  
- CSIR**

**Gas Transmission Pipeline Network  
& EGI Expansion**

# EGI Development in Corridors – Status Quo

- **Follow 2014 NEMA EIA Regulations:**
  - GNR 327 + 326 – Listing Notices 1 + 3 – BA Process
  - GNR 325 – Listing Notice 2 – Scoping and EIA Process
- **GN 113 – 16 Feb 2018:**
  - 5 EGI Corridors gazetted → Geographical Areas [**NEMA S.24 (2) (a)**]
  - Streamlining Applications for EA for large scale electricity and distribution infrastructure, which trigger Activity 9 of Listing Notice 2 (and any other listed activities for the realisation of such infrastructure) from **Scoping and EIA** to **Basic Assessment**
    - **Activity 9 of Listing Notice 2: The development of facilities or infrastructure for the transmission and distribution of electricity with a capacity of 275 kilovolts or more, outside an urban area or industrial complex**
  - Reduced decision-making timeframe from **107 days** to **57 days**
  - Pre-negotiated route with landowners
  - **Activity 11 of Listing Notice 1** if triggered in the EGI Corridors would require a BA Process **without** the reduced decision-making timeframe.
    - Activity 11 of Listing Notice 1: The development of facilities or infrastructure for the transmission and distribution of electricity (i) outside urban areas or industrial complexes with a capacity of more than 33 but less than 275 kilovolts; or (ii) inside urban areas or industrial complexes with a capacity of 275 kilovolts or more;
- BA to be undertaken in accordance with 2014 EIA Regulations → Appendix 1

# EGI Development in Corridors – Status Quo

- Compulsory use of National Screening Tool – GN960 – 5 July 2019
- Compulsory use of Assessment Protocols (once gazetted) or compliance with Appendix 6 of the 2014 EIA Regulations for Specialist Assessments
- **GN 435 – 22 March 2019** - Two Generic EMPs gazetted for implementation:
  - Generic EMP for substation infrastructure for electricity transmission and distribution
  - Generic EMP for overhead electricity transmission and distribution infrastructure
- Compulsory use of Generic EMP for Applications for EA for substation and overhead electricity transmission and distribution infrastructure:
  - Activity 11 or 47 (expansion) of Listing Notice 1
  - Activity 9 of Listing Notice 2
- **Generic EMP consists of:**
  - Part A - Definitions, acronyms, roles & responsibilities and documentation and reporting.
  - Part B – Section 1: **Pre-approved Generic EMP Template**
  - Part B – Section 2: Preliminary Infrastructure Layout and Applicant Declaration
  - Part C – Site Specific EMP
  - Appendix 1 - Method Statements

# EGI Development in Corridors - Generic EMPr

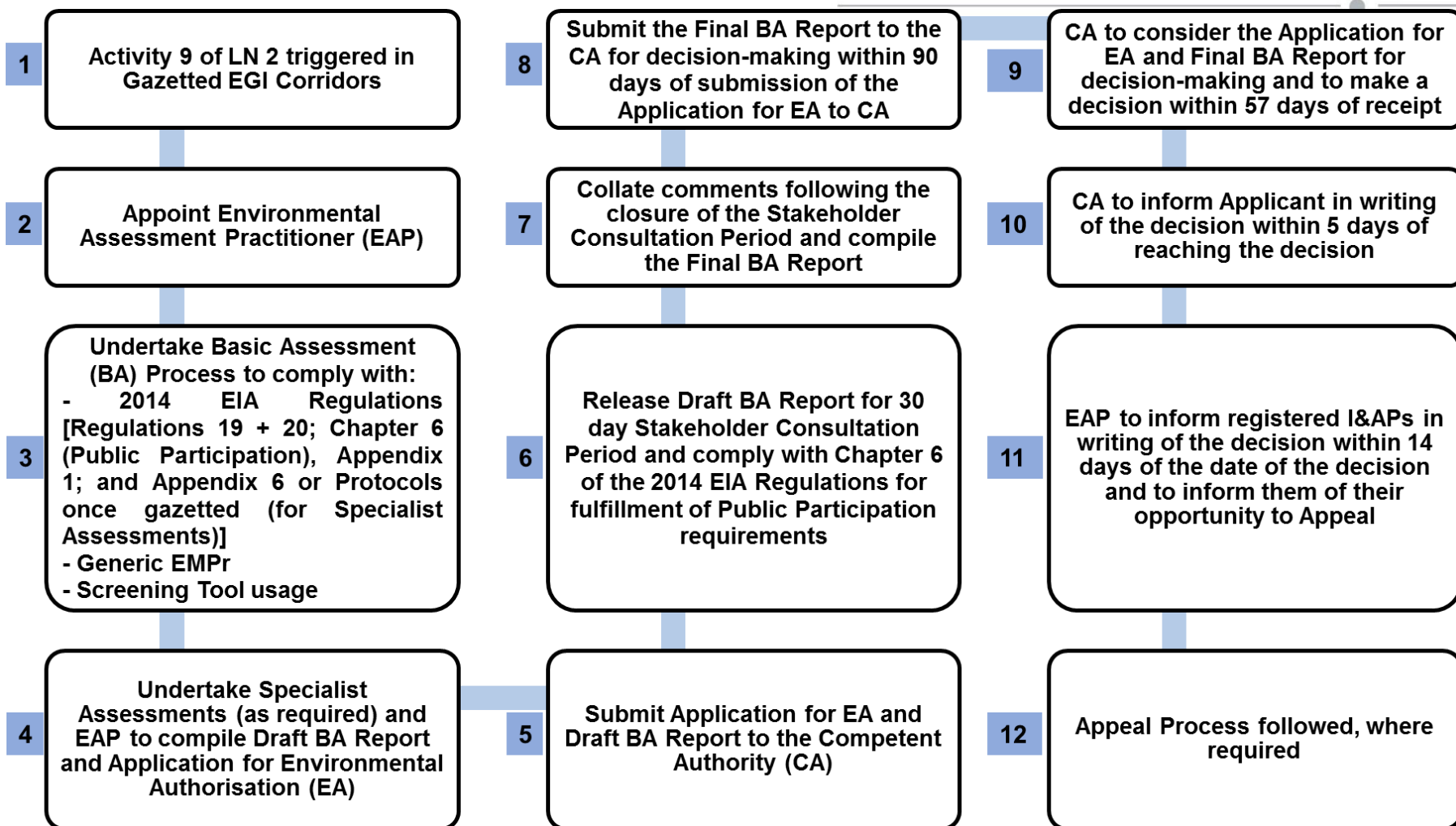
Section of Generic EMPrs	Content and Actions
<b>Part A</b>	<ul style="list-style-type: none"><li>• Definitions, acronyms, roles, responsibilities, documentation and reporting</li><li>• Not legally binding and does not need to be submitted to CA with the BA Report</li></ul>
<b>Part B – Section 1</b>	<p><b>Pre-approved Generic EMPr Template</b></p> <ul style="list-style-type: none"><li>• Generally accepted impact management outcomes and impact management actions required for the avoidance, management and mitigation of impacts and risks</li><li>• Does not need to be submitted to the CA with BA Report</li><li>• Must be completed by Contractor prior to commissioning of development</li><li>• Each page signed and dated by Applicant prior to commissioning</li><li>• Legally binding</li></ul>
<b>Part B – Section 2</b>	<p><b>Preliminary Infrastructure Layout and Applicant Declaration</b></p> <ul style="list-style-type: none"><li>• Details of Applicant, EAP and Project Details (Name, Location, Description, Technical Specification [Length and tower parameters – number, spacing, height, ground clearance])</li><li>• Development Footprint Infrastructure Map</li><li>• Signed declaration by the applicant</li><li>• Must be submitted to the CA with BA Report</li></ul>



# EGI Development in Corridors – Generic EMPr

Section of Generic EMPrs	Content and Actions
<b>Part C</b>	<p><b><u>Site Specific EMPr</u></b></p> <ul style="list-style-type: none"><li>• To be prepared by EAP if there are any site specific sensitivities or attributes that need to be addressed and are not covered in Generic Pre-Approved Template (Part B - Section 1)</li><li>• To include site specific impact management outcomes and impact management actions</li><li>• To be submitted to CA with the BA Report</li><li>• Once approved, Part C will form part of the EMPr and will be legally binding</li></ul>
<b>Appendix 1</b>	<ul style="list-style-type: none"><li>• Any method statements needed prior to commissioning of the development</li><li>• Does not need to be submitted to the CA</li></ul>

# EGI Development in Gazetted Corridors – **GENERIC** Process Overview (275 kV or more)



**Note: Route negotiations have not been displayed on the generic process diagram above, as IPPs and Eskom have independent processes regarding this.**

**Session 3:**  
**Proposed Draft Decision-Making Tool for**  
**EGL Development in the Corridors -**  
**Standards**  
**- CSIR**

**Gas Transmission Pipeline Network**  
**& EGL Expansion**

# Proposed Standard for EGI Development

- Allow exemption from Environmental Authorisation for distribution and transmission power line infrastructure within the gazetted corridors (5 gazetted corridors + 2 expanded EGI corridors) provided that there is compliance with Standards:
  - Activity 11 (>33 to 275kV outside urban areas and >275kV inside urban areas) or 47 (expansion of  $\geq 275$ kV) of Listing Notice 1
  - Activity 9 ( $\geq 275$  kV outside urban area) of Listing Notice 2
- Allowed for in Section 24(2)(d) of NEMA
- **Rationale for Standard:**
  - Issues relating to and impacts for power line development are well known.
  - Several applications for EA for power line development have been considered by the CA  
→ Good understanding of the key factors to consider during decision-making.
  - Support objectives of the NDP and SIPs
  - To be proactive rather than reactive with regards to planning for infrastructure
  - To ensure that when required, environmental approvals are not a cause for delay, whilst maintaining the highest level of environmental rigour
  - **The SEA Process has assessed the risks and impacts of EGI development and pre-assessed the sensitivities within the corridors**

# Proposed Standard for EGI Development

## Objectives of the Standard:

- Applies to the Proponent
- Proponent to achieve the Standard without involvement of Competent Authority (CA).
- CA is not required to make decisions on the Standard.
- Specify the process to plan the power line route.
- Specify the process to identify risk areas.
- Standard can still be monitored by the CA.

→ **OUTCOME: Registration of project based on the Standard**

## • **3 Main Sections:**

- **Procedural Requirements**
- **Environmental Principles**
- **Specialist Input Requirements**

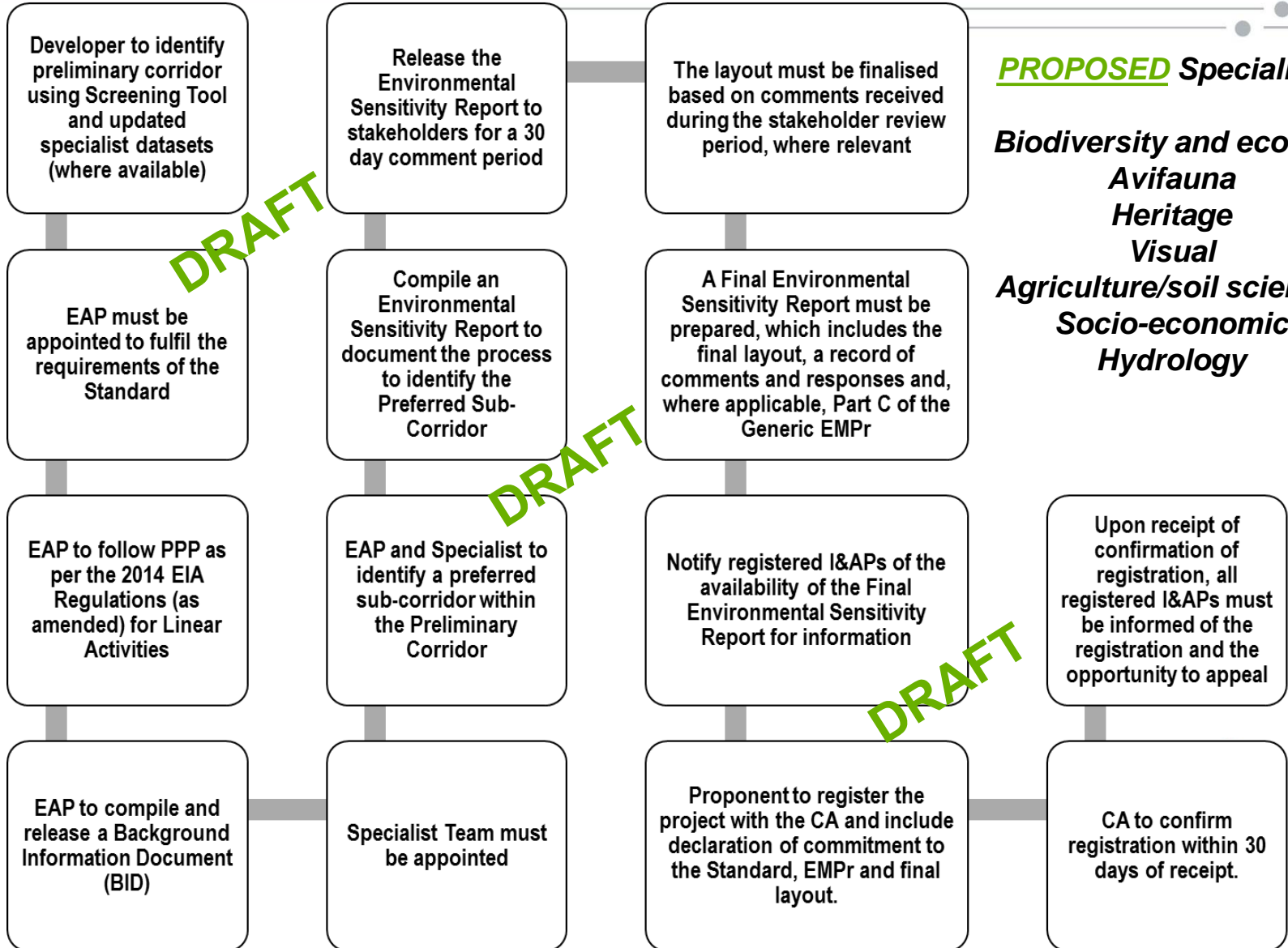
**Note that the Standard will be made available for comment during the gazetting process. A draft version was presented at the ERG and PSC Meeting 4.**



# Proposed Draft Standard for EGI Development

for Activity 11 or 47 of Listing Notice 1 and Activity 9 of Listing Notice 2

## PROCEDURAL REQUIREMENTS



### PROPOSED Specialists:

- Biodiversity and ecology**
- Avifauna**
- Heritage**
- Visual**
- Agriculture/soil scientist**
- Socio-economic**
- Hydrology**

# Proposed Standard for EGI Development

## Environmental Principles – to guide placement of infrastructure

Based on input from specialists and SANBI

- Avoid natural and semi-natural Critically Endangered (CR) and Endangered (EN) ecosystems (listed in terms of NEM:BA).
- No setting up of construction camps, stockpiling areas, batching plants in natural and semi-natural CR and EN ecosystems, and areas where there is confirmed threatened species presence and /or habitat.
- No removal of EN and CR species.
- Avoid direct footprint on wetlands.
- Avoid routing power lines within 500 m of the edge of waterbodies found to be suitable for Greater Flamingo, Black Stork, Blue Crane, Great White Pelican, Lesser Flamingo and African Marsh-harrier.
- No pylon placement in the estuarine functional zone or within its associated inflowing coastal wetlands and rivers.

# Proposed Standard for EGI Development

## Proposed Specialist Input Requirements

- Specifications per environmental theme → to establish the environmental baseline, determine risk and guide the power line routing for the following **proposed** specialist inputs:

**Terrestrial Ecology**

**Aquatic Ecology**

**Avifauna**

**Agriculture**

**Visual**

**Heritage**

**Socio-Economics**

- The Standard includes recommendations for the power line routing in terms of Civil Aviation, Defence, and Bats

**Session 4:**  
**Proposed Draft Decision-Making Tool for  
Gas Pipelines in the Corridors –  
Streamlined EA Process - CSIR**

**Gas Transmission Pipeline Network  
& EGI Expansion**

# Gas Pipelines in South Africa – Environmental Legislative Status Quo

- Follow 2014 NEMA EIA Regulations:
  - GNR 327 + 326 – Listing Notices 1 + 3 – BA Process
  - GNR 325 – Listing Notice 2 – Scoping and EIA Process
- **Main trigger → Listing Notice 2 – Activity 7:**
  - The development and related operation of facilities or infrastructure for the bulk transportation of dangerous goods:
    - **(i) in gas form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 700 tons per day;**
    - (ii) in liquid form, outside an industrial complex, using pipelines, exceeding 1 000 metres in length, with a throughput capacity of more than 50 cubic metres per day;  
or
    - (iii) in solid form, outside an industrial complex, using funiculars or conveyors with a throughput capacity of more than 50 tons per day.

**Full Scoping and EIA Process is currently needed**

# Gas Pipelines in Corridors – Planned Approach

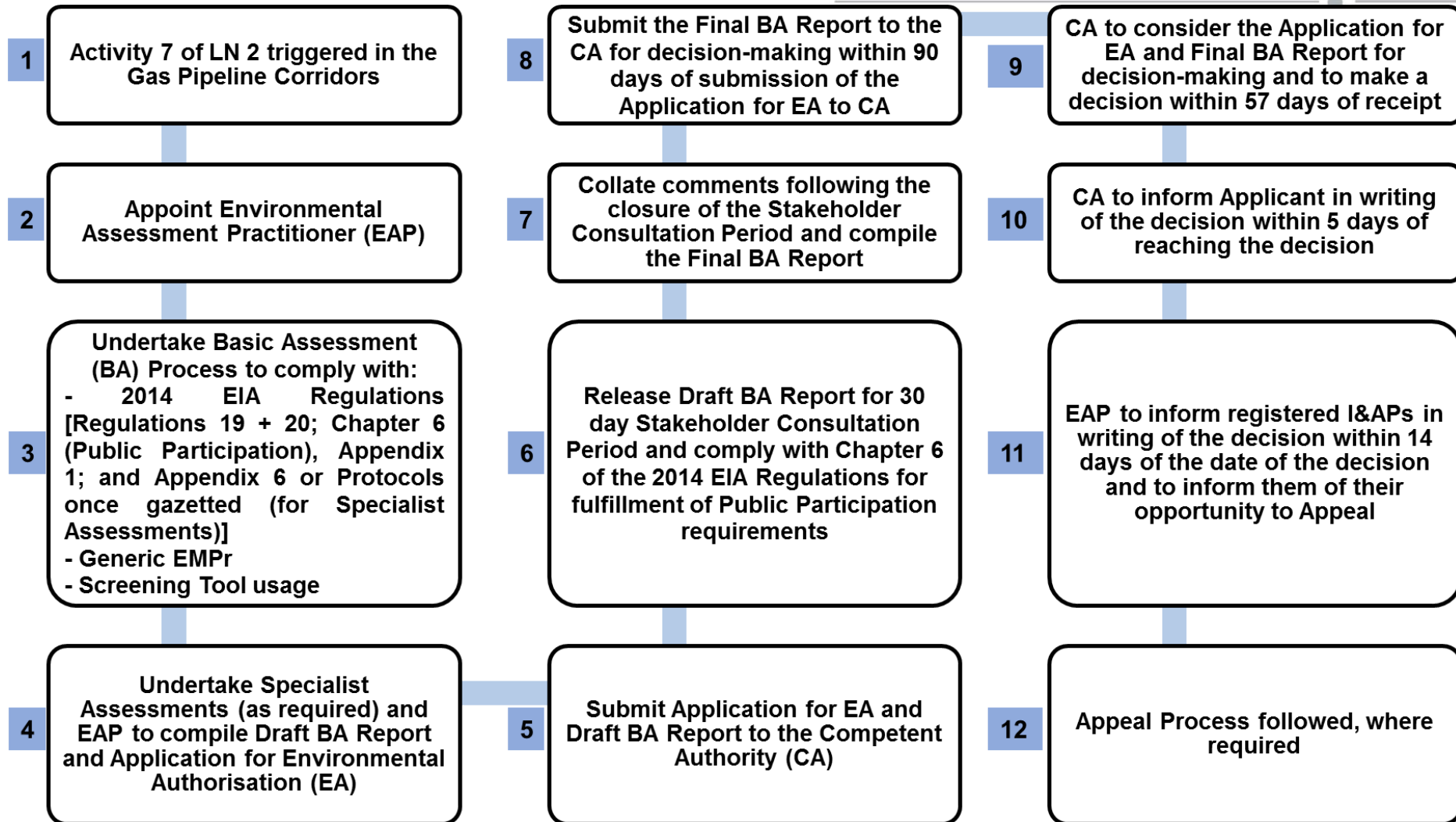
- **Rationale to streamline gas pipeline development within the corridors:**
  - Support objectives of Operation Phakisa
  - Accelerate the gas to power programme
  - Be proactive rather than reactive with regards to planning for infrastructure
  - Ensure that when required, environmental authorisations are not a cause for delay, whilst maintaining the highest level of environmental rigour
  - **The SEA Process has assessed the risks and impacts of gas pipeline development and pre-assessed the sensitivities within the corridors**
- **Minimum Information Requirements**
  - *19 (3) of EIA Regulations: A basic assessment report must contain the information set out in Appendix 1 to these Regulations or comply with a **protocol or minimum information requirements** relevant to the application as identified and gazetted by the Minister in a government notice.*
- **However there is no need to amend the EIA or BA Process for Gas Pipeline Development. The requirements contained in the EIA Regulations are sufficient for such development.**



# Gas Pipelines in Corridors – Planned Approach

- Gazette the 9 Gas Pipeline Corridors → Geographical Areas [**NEMA S.24 (2) (a)**]
- Streamline Applications for EA for gas pipelines, which trigger Activity 7 of Listing Notice 2 (and any other listed activities for the realisation of such infrastructure) from **Scoping and EIA** to **Basic Assessment**
- Reduce the decision-making timeframe from **107 days** to **57 days**
- Allow for pre-negotiations with landowners
- BA to be undertaken in accordance with 2014 EIA Regulations → Appendix 1
- Compulsory use of National Screening Tool – GN960 – 5 July 2019
- National Screening Tool will specify the Specialist Assessments that will be required
- Compulsory use of Assessment Protocols (once gazetted) or compliance with Appendix 6 of the 2014 EIA Regulations for Specialist Assessments.
  - Relevant Assessment Protocols gazetted for comment to date:
    - Agriculture, Terrestrial Biodiversity, and Aquatic Biodiversity Protocol
  - Draft Heritage Protocol has been developed and going through team review process. SAHRA will review as well.
- Compulsory use of Generic EMPr for Gas Pipelines once developed

# Gas Pipelines in Corridors – Planned Approach





**Session 5:  
Proposed Draft Generic EMPr - CSIR**

**Gas Transmission Pipeline Network  
& EGI Expansion**

# Proposed Draft Gas Pipeline Generic EMPr

- Draft Generic EMPr for Gas Pipelines has been compiled
- Once gazetted, it will be mandatory for Applications EA for gas pipeline infrastructure within the corridors:
  - Activity 7 of Listing Notice 2
- The Draft Generic EMPr consists of:
  - Part A - Definitions, acronyms, roles, responsibilities, documentation and reporting.
  - Part B - **Pre-approved Generic EMPr Template**
  - Part C – Site Specific, Project, Applicant and EAP Information and Applicant Declaration
  - Part D – Site Specific EMPr
  - Part E - Method Statements

# Proposed Draft Gas Pipeline Generic EMPr

Section of Generic EMPr	Content and Actions
<b>Part A</b>	<ul style="list-style-type: none"><li>• Definitions, acronyms, roles, responsibilities, documentation and reporting</li><li>• Not legally binding and does not need to be submitted to CA with the BA Report</li></ul>
<b>Part B</b>	<p><b>Pre-approved Generic EMPr Template</b></p> <ul style="list-style-type: none"><li>• Generally accepted impact management outcomes and impact management actions required for the avoidance, management and mitigation of impacts and risks</li><li>• Does not need to be submitted to the CA with BA Report</li><li>• Must be completed by Contractor prior to commissioning of development</li><li>• Each page signed and dated by Applicant prior to commissioning</li><li>• Legally binding</li></ul>
<b>Part C</b>	<p><b>Site Specific, Project, Applicant and EAP Information and Applicant Declaration</b></p> <ul style="list-style-type: none"><li>• Details of Applicant, EAP and Project Details (Name, Location, Description, Technical Specification [Pipeline length, diameter, pressure, material composition, depth below ground, throughput, gas specification, block valves, markers, pigging stations])</li><li>• Development Footprint Infrastructure Map</li><li>• Signed declaration by the applicant</li><li>• Must be submitted to the CA with BA Report</li></ul>

# Proposed Draft Gas Pipeline Generic EMPr

Section of Generic EMPr	Content and Actions
<b>Part D</b>	<p><b><u>Site Specific EMPr</u></b></p> <ul style="list-style-type: none"><li>• To be prepared by EAP if there are any site specific sensitivities or attributes that need to be addressed and are not covered in Generic Pre-Approved Template</li><li>• To include site specific impact management outcomes and impact management actions</li><li>• To be submitted to CA with the BA Report</li><li>• Once approved, Part D will form part of the EMPr and will be legally binding</li></ul>
<b>Part E</b>	<ul style="list-style-type: none"><li>• Any method statements needed prior to commissioning of the development</li><li>• Does not need to be submitted to the CA</li></ul>



# Proposed Draft Gas Pipeline Generic EMPr – Part B – Pre-Approved Generic Template

## Design Phase Examples Of Management Actions

- Ensure that pipelines are designed and built according to international and national standards and in accordance with the surrounding land-use.
- Ensure the DMR&E are consulted with to determine the location of mining areas
- Identify and consult with the municipalities affected by the final routing of the gas transmission pipeline. Determine what support would be required, should a disaster occur
- Avoid, as far as possible and in ascending order of importance: (a) remnants of natural vegetation in good condition, (b) Ecological Support Areas (ESAs) (especially ESA 1), (c) terrestrial Critical Biodiversity Area (CBA) 2s, and (d) CBA 1s, especially those that are Irreplaceable, or have Endangered (EN) or Critically Endangered (CR) ecosystems and threatened species populations. Where such areas are unavoidable the gas pipeline and associated infrastructure should be routed to minimise the footprint of impact.
- As far as possible, no pipeline or associated infrastructure and activities (e.g. roads; Pipeline Intelligence Gauge Stations (PIGS), trenching, pipe jacking, ROW clearance) should be developed within or below the Estuary Functional Zones.

# Proposed Draft Gas Pipeline Generic EMPr – Part B – Pre-Approved Generic Template

## Construction Phase Examples Of Management Actions

- All staff must receive environmental awareness training prior to commencement of the construction activities.
- Erect, demarcate and maintain a temporary fence or barrier around the perimeter of any No-Go and restricted area.
- Ensure water conservation is being practiced.
- Ensure that an awareness campaign is undertaken prior to the commencement of construction to inform surrounding landowners, land users and occupiers, as well as I&APs of the proposed construction, and inform them of the potential risks associated with prohibited activities within the gas pipeline servitude, such as illegal excavations.
- All storage areas must have sufficient containment to ensure that potential spills/leaks from the stored containers are contained.
- Before excavation, virgin topsoil, to a depth of 30 cm, must be stripped from the entire surface of excavation area and stockpiled for re-spreading after backfilling. Underlying subsoil that is excavated must also be stockpiled separately from the topsoil. In addition, significantly different subsoil layers must also be stored in separate stockpiles from one another.

# Proposed Draft Gas Pipeline Generic EMPr – Part B – Pre-Approved Generic Template

## Construction Phase Examples Of Management Actions

- When backfilling, the separate soil layers must be backfilled in their same, original vertical sequence i.e. deepest soil layer at the bottom, and topsoil at the top.
- Ensure that the trench is backfilled in a manner that is free draining and not susceptible to erosion.
- Ensure that the development footprint area and physical extent of construction activities are minimised as much as possible and rehabilitate cleared areas after construction is completed.
- Search, rescue and replanting of all rare, protected and endangered plant species likely to be damaged during the construction phase within the development footprint must be identified and undertaken by a relevant and suitably qualified specialist, prior to any development, breaking of ground or clearing of vegetation.
- Construction camps, toilets, temporary laydown areas and borrow pits should be located outside of the EFZ.
- Existing crossing points must be favoured over the creation of new crossings (including temporary access).
- Generic management actions for waste management, handling of dangerous goods, stormwater and waste water management, dust emissions etc. included.

# Proposed Draft Gas Pipeline Generic EMPr – Part B – Pre-Approved Generic Template

## Post-construction Phase: Rehabilitation, Operations and Maintenance Examples Of Management Actions

- Implement rehabilitation measures and interventions according to the site-specific rehabilitation plan.
- A suitably qualified rehabilitation expert must be appointed to manage the process in order to recreate the natural environment as best as possible and to ensure that ecosystem structure and function recover.
- Implement management actions according to Alien Invasive Management Plan. Carry out regular surveys to identify invading species and implement the necessary control operations where they are found.
- Access roads and tracks to pigging stations and any other locations must be regularly maintained, especially their drainage, to ensure that ongoing disturbances of the ecosystems are minimised. This is particularly important in areas with deep, sandy soils where there is a natural tendency for them to widen and the tracks to deepen over time.
- Monitor the condition of the gas pipeline infrastructure regularly to ensure that there is no exposed section, ongoing erosion occurring or leakages.
- In the event of aerial monitoring / checking of the pipeline, avoid flying below 500 m above ground to limit sensory disturbance to nesting birds, if aerial patrols are undertaken.



Thank you