Environmental Impact Assessment (EIA) : Loop 7A, (between Loop 6 at Kanakies and Loop 7 at De Kop) on the Sishen – Saldanha Railway Line

Environmental Assessment in support of an application for exemption from certain of the provisions of the EIA Regulations of the National Environmental Management Act (NEMA)

BACKGROUND INFORMATION DOCUMENT AND INVITATION TO COMMENT

Hierdie dokument is ook in Afrikaans beskikbaar.

PURPOSE OF THIS DOCUMENT

The purpose of this document is to notify interested and affected parties of the proposed project at loop 7A (between Kanakies and De Kop), to obtain their comments and provide a way for the public to take part and add value to the environmental process.

Comment is invited on:

- Any physical, natural, social, economic or environmental issues of concern,
- The public participation or environmental process that is being followed,
- Any other comments, issues or suggestions relating to this application.

Your comments and input will help to focus the Environmental Study being prepared. The environmental study will be submitted to both the National as well as Provincial Environmental Authorities together with the proper application forms for approval.

Your comment is very important. Please fill in the response form and return it to the Consultants:

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BACKGROUND

Transnet is presently investing R65bn in transport infrastructure in order to reduce the cost of doing business in South Africa and improve transport efficiencies. Part of this process includes upgrading the iron ore export capacity of the Sishen – Saldanha railway line and improving its present operational efficiency. The positions of loops 6, 7 and 8, where up and downward trains cross each other, have long been the cause of problems in the smooth flow of train traffic on the line. It is now proposed to build a new loop numbered 7A which will even out the running time of trains in this section and allow more effective scheduling of the line as a whole, at current as well as the increased tonnages planned. New loop 7A lies near a position previously identified and approved for a crossing place

WHAT IS AN ENVIRONMENTAL ASSESSMENT?

An Environmental Impact Assessment is a regulatory requirement of the National Environmental Management Act (Act 107 of 1998) (NEMA) by which the environmental impacts of various listed activities are identified, studied and evaluated for significance within the natural and social environment concerned. This is to allow the Authorities to make an informed decision whether to allow the project to proceed and what measures must be put in place to properly manage and reduce its possible environmental impact.

MOTIVATION FOR THE PROPOSED PROJECT

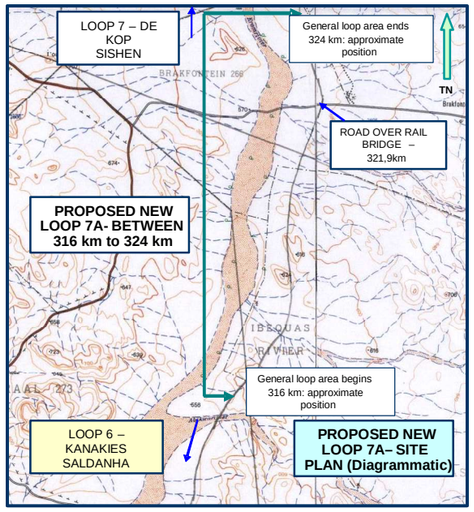
The Iron Ore Line runs for 861km between the major mines at Sishen in the Northern Cape and the Port of Saldanha on the West Coast. The line has loops or “unmanned stations” at 19 places along the line where trains from different directions cross and pass each other.

The line now carries iron ore at 32 million tonnes per annum (MTPA) while creased capacity well beyond the authorised 41MTPA is being investigated. Traffic will increase to 93MTPA

Loops are generally spaced approximately 45km apart. For various reasons, mainly related to steep gradients and land form, Loop 7 (De Kop) is only 34.7km from Loop 8 (Sous) to the north but 63km from Loop 6 (Kanakies) to the South. This difference in distance and time taken for trains to travel between these three loops disrupts the scheduling for the whole line.

It is now planned to build a new loop between 316km and 324km, returning it to a position planned and approved in 2000, which will reduce the distance to an extended loop 6 to 41km. This will even out the train traffic flow on the line and reduce turnaround time, improving train operation efficiencies significantly.

PROPOSED POSITION OF NEW LOOP 7A - BETWEEN 316 KM AND 324 KM



CONSTRUCTION PROCESS FOR NEW LOOP 7A

LOCATION AND STRUCTURE OF THE LOOP

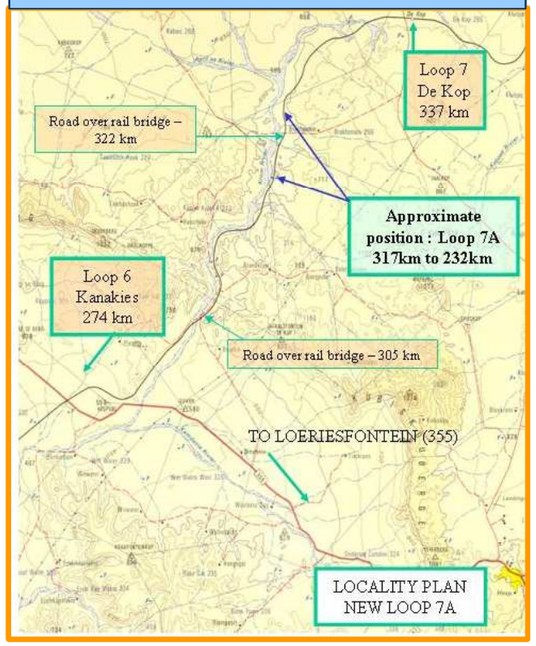
- The crossing loop will consist of a single section of line ± 5,7km long, built parallel to the existing track at 6m centres.
- The new loop will be built very near to the original position identified for Loop 7 in 2000 (319km), but will be 2km longer.
- The new track will be entirely inside the existing rail reserve and no extra land will be required.
- The route alignment will follow the same height and curves of the existing line, which means that the cuttings and embankments will be widened, at the same track level.
- Culverts and drainage structures will be extended in the same positions, whilst maintaining existing surface water patterns.
- Electrical equipment will be similar to existing equipment and will consist of mast poles at 60 to 70 metre spacing, supporting the overhead traction wires feeding power to the locomotives.
- A new electrical feeder line will be necessary, either as a new pole type route or as extra wires on the overhead equipment.
- Colour light signals and equipment kiosks will be placed at each end of the loop, to control trains entering and leaving.

THE CONSTRUCTION PROCESS

Construction of the approximately 5,7km long loop between 316km and 324km, along the existing route and in the rail reserve, will typically involve the following basic steps:

- Site establishment of temporary office, workshops, stores, toilets, mess and ablution facilities.
- Land clearance for site facilities, in the rail reserve and which will be chosen on disturbed ground or where any unnecessary damage is limited.
- Clear land and remove topsoil inside the rail reserve where banks and cuttings are to be widened.
- Extending culverts, which can be metal or concrete pipe or box type structures.
- Excavate cuttings and place and compact soil material where banks are to be widened.
- Build up banks in layers and compact the final load -bearing gravel to the standard needed, with or without stabilizing.
- Build a new maintenance road, next to the track, in rail reserve.
- Obtain soil / gravel material from borrow pits, if needed.
- Disposal of excess material, if it cannot be used for fill.
- Lay skeleton track (sleepers and rail) before adding ballast stone to hold and cushion the track.
- Erect the overhead traction equipment (OHTE) on steel masts mounted on concrete foundations next to the track.
- Erect signals and place equipment in secure “relay” rooms.
- Reinstate drainage where it has been disturbed and lay new?
- Rehabilitate the site, using topsoil where available and natural revegetation processes

GENERAL LOCATION : NEW LOOP 7A – 316km – 324km



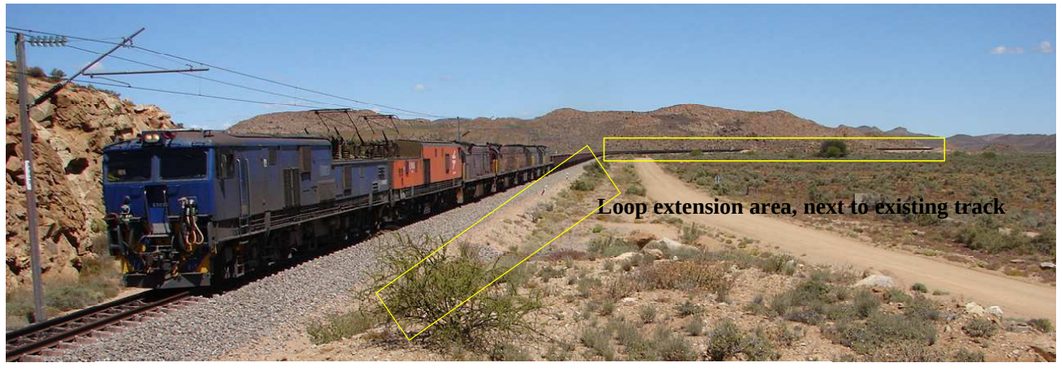
Loop 7A lies in the southern part of the Northern Cape, known as Bushmanland, close to the Knersvlakte, renowned for its harsh yet unique and beautiful landscape.

The loop lies some 40 km west of Loeriesfontein, near the farms T’ouskoppe, Koppies Kraal 273 and Ibequas Rivier 274.

The area is at a general altitude of 580m above mean sea level and receives an average of only 274 mm rainfall per annum.

The Krom River runs parallel to the site but is not influenced by the line, while a tributary, the Abequas River passes beneath the line 1km to the south

Koppies flank the line to the west as well as the east, forming a well defined natural pass.



Northbound train passing through proposed loop 7A area

Typical crossing loop – (loop 13 :Kenhardt) left, loop construction in progress (loop 1), right

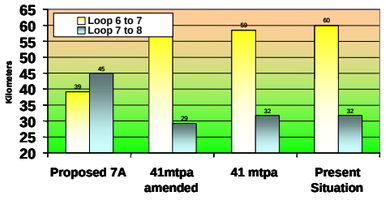
OPERATIONS

Trains with 342 wagons or even 420 as planned under the 93mtpa scenario will be able to cross at new loop 7A.

Once all upgrades are in place, the distance between loop 7A & loop 6 will reduce from 60km to 39km while the distance between loops 7A and 8 will be the standard 45km.

The illustrative running time of trains between loop 7A and loop 6 could reduce to 70 minutes and the running time between new loop 7A and 8 is a well balanced 60 minutes.

SECTION DISTANCE BETWEEN LOOPS



THE STUDY PROCESS

Environmental Assessment

The study will follow the procedure set out in Chapter 5 of NEMA, which allows an Applicant to apply for exemption from the regulations for a specific activity listed under the Act. This does not mean the study will be any less thorough or transparent than any other EIA, but is used when the environmental impact may not be severe or, most importantly, is not likely to adversely affect the rights and interests of other parties. The study will therefore be thorough and broad enough to prove this to all concerned.

In terms of the laid down process, Transnet will submit an Application to carry out a listed activity, an Application for Exemption and a detailed report or Environmental Assessment for approval by DEAT as well as the Northern Cape Department of Tourism, Environment & Conservation.

Previous approval

Transnet gained approval to construct a new loop 7 in this area in 2000 (316-319km). This position was revised due to train handling problems and loop 7 was built in its original position at 336km. The train handling problems have now been overcome by modern technology such as radio distributed power and better braking efficiency and the loop can now be placed in its optimal position for the line as a whole.

POTENTIAL ENVIRONMENTAL CONCERNS

From previous studies dealing with an increase in traffic capacity of the ore line, the following are some of the known environmental concerns likely to arise. These, together with any other issues identified, will be addressed as part of the study:

- Soil and land disturbance as a result of building a new crossing loop,
- Soil and land disturbance at borrow pits, where rock and gravel are dug out for earthworks construction,
- Noise from increased train movement, with more and possibly longer trains stopping and pulling off,
- Construction activity and disturbance from the construction site,
- The effect of construction camps in the rural area around loop 7A,
- Increased safety hazard – road and pedestrian traffic affected by construction work ,
- The spreading of dust during earthworks construction,
- Generation of ore dust from trains in transit,
- The aesthetic or visual effect of construction on the landscape and sense of place at loop 7A,
- Negative effect on adjacent landowners through trespassing, poaching, littering and social effects,
- Effect on terrestrial (land) and riverine ecology.

Listed Activities

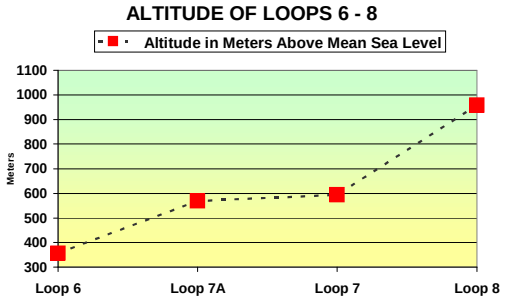
All site characteristics, the natural and social environment and ways of managing and mitigating any possible impacts will be assessed.

The study will address all the potential activities listed under NEMA falling inside the scope of the project-

- "The construction of facilities or infrastructure, including associated structures for rail transportation.
- The construction of facilities or infrastructure, including associated structures or infrastructure for any purpose in a one in ten year flood line of a river or stream, or within 32 metres from the bank of a river or stream where the flood line is unknown",

Public participation

Public participation is the cornerstone of sound environmental management. Local communities, land owners, municipal structures and farming associations will all be informed of the project, their comments and concerns noted and included in the study as a guide to the decision-making process.



Beginning of Loop 7A area – from North (Sishen) end

YOUR COMMENTS BY 22 JANUARY 2006 PLEASE

Your comments on the proposed project at loop 7A, the study methods, areas of concern and public participation process are vital to a thorough assessment. Please assist by participating and help in guiding the decision – making process.