

**TELKOM SA (TSA)**

**MTN ACE SUBMARINE CABLE DSR REVIEW BY TELKOM SA GLOBAL CAPACITY  
BUSINESS (SUBMARINE CABLE DIVISION)**

## PREFACE

With the high need for capacity telecommunication connectivity, Africa needed to investigate alternatives to satellite communications. The optic fibre cable connectivity was explored as the best alternative and west coast cable systems (such as SAT-3 and WACS) were commissioned to provide high speed data and services such as internet from South Africa to all parts of the world.

With SAT-3 fast reaching its sell by date, and WACS as the only alternative for South Africa's West Coast connectivity to the rest of the world, proposed cable systems such as ACE are welcomed. This initiative by MTN will bring relief to South Africa as an alternative to WACS cable system (Backup)

As part of draft scoping report (DSR), the proposed ACE cable system should adhere to environmental authorization (EA) from the Department of Environmental Affairs (DEA) in terms of the 2014 Environmental Impact Assessment Regulations published under the National Environmental Management Act, 1998 (Act 107 of 1998) (NEMA).

Telkom SA as one of the operators of other cable systems running on the same west coast route (SAT-3/WASC/SAFE and WACS), has an interest in this proposed ACE cable system. This is to ensure that ACE cable system adheres to the recommendations by International cable protection committee (ICPC) with regards to issues such as cable crossings and cable routes which impacts on construction, operations and maintenance of others.

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## ABBREVIATION AND ACRONYMS

SAT 3/WASC	South Atlantic 3/West African Submarine Cable
SAFE	South Africa Far East cable
EASSy	Eastern African Submarine Cable System
WACS	West African Cable System
EIG	East Indian Gateway
Sea-Me-We 3	South-East Asia – Middle East – Western Europe 3
COL3	Columbus 3
BMH	Beach Manhole
CLS	Cable Landing Station
ICPC	International Cable Protection Committee
NEPAD	New Partnership for Africa`s Development
DEA	Department of Environmental Affairs
TSA	Telkom SA

## INTRODUCTION

As part of emerging markets, South Africa and the rest of Africa need to accelerate their development in terms of economic growth and sustainability. It is in this context that the information technology infrastructure should be improved so that Africa can compete with the rest of the world in the area of digital information. Access to cost effective data, voice, internet and video services is one of the drivers of development through rapid economic growth. Telecommunications through submarine optical cables have been identified as the efficient and cost effective medium to link the continent of Africa with the rest of the world (carrying of high speed data, internet, voice & video) and thus enhancing Africa's competitiveness.

As an integrated Services provider, Telkom SA (TSA) is also involved in the operations of telecommunications submarine cables (namely: SAT-3/WASC/SAFE, WACS, EASSy, EIG, SMW-3 and Columbus -3). The aim is to contribute to the overall South African economic growth and thus create opportunities for the rest of the continent. This goal propels Telkom SA to support similar initiatives by other operators aimed at achieving the same. That is why Telkom is in support of the initiative by MTN (though in direct competition with them) to build an ACE cable system that will further create additional bandwidth for SA to connect with the continent and the rest of the world.

## SCOPING METHODOLOGY

DSR states that “At the onset of the project planning phase, MTN and their appointed service providers undertook a number of investigations to identify suitable cable landing points which could link to the MTN Cable Landing Station (CLS) located in Duynfontein on the West Coast of South Africa. Initially, two alternative landing locations were investigated, namely Yzerfontein and Melkbosstrand. These landing locations were selected following consideration of not only environmental issues, but also those associated with marine engineering (e.g. security of the route against external risks) and commercial aspects (e.g. proximity to national networks and their international access points)”.

ICPC (ICPC recommendation No.2) & guideline states that it is required that installation and repair operations do not constitute a threat to existing cables.

TSA recognizes and commend MTN`s optimal decision in choosing the cable landing station (CLS) to be in Duynfontein as opposed to Yzerfontein & Melkbosstrand, this has minimized risks mainly concerning the construction, operation and maintenance purposes, as currently WACS and SAT3/WASC/SAFE lands at the respective locations, and it`s evident that they adhered to the ICPC recommendations and guidelines.

## LEGAL ASPECTS

TSA is generally happy with MTN's comprehensive Draft Scope Report on issues of legality. The report has covered important areas of legislative, legal and international treaties and protocols. The chapter 3 of the report gives a comprehensive recognition of all legal aspects necessary for the proposed ACE cable system project.

## NEED AND DESIRABILITY

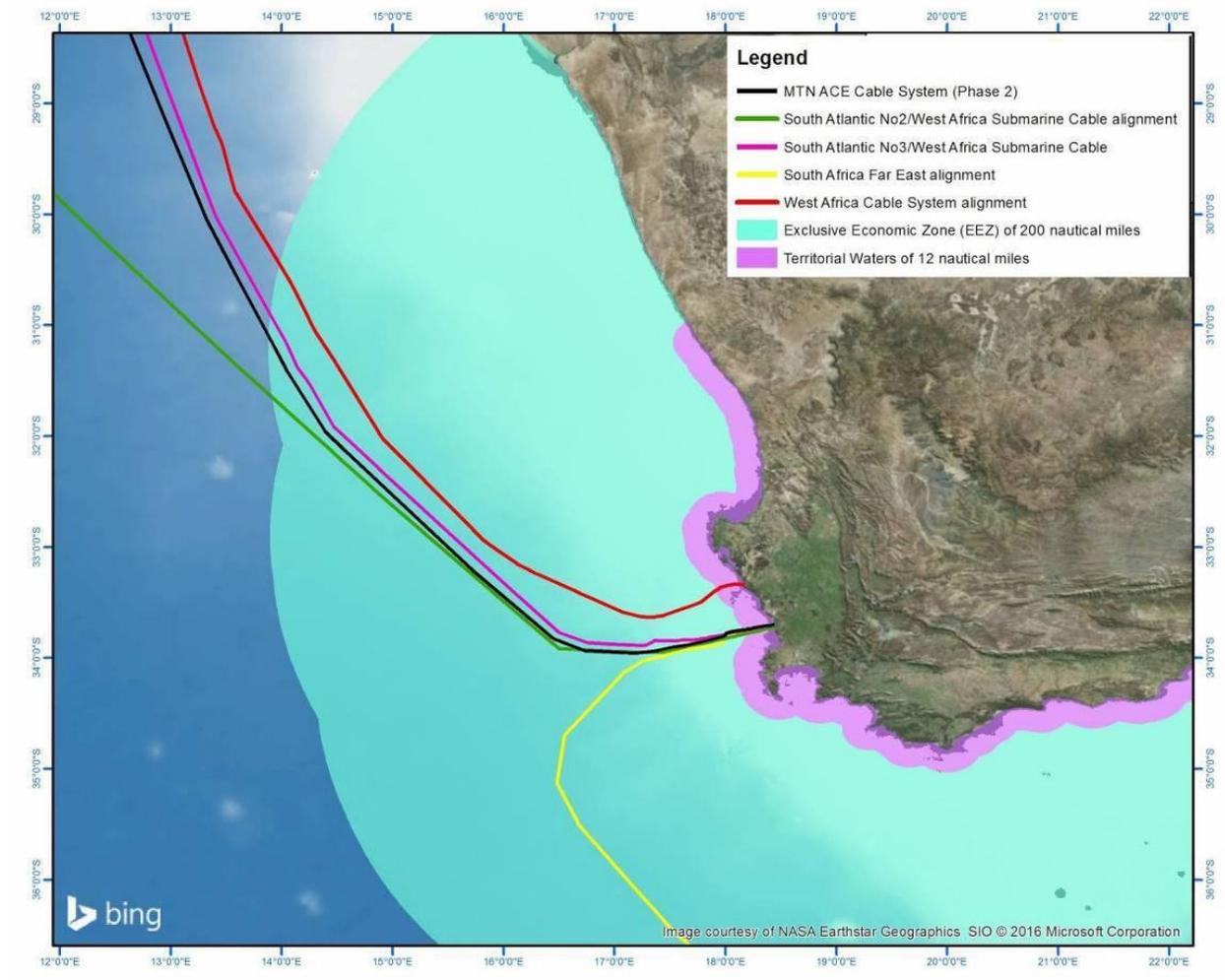
With Africa's telecommunication reliance on Satellites which are expensive, have limited bandwidth and limited performance, the need for the investment to undersea cable systems is necessary. Enhanced information Technology infrastructure supported by low cost, high quality, bigger bandwidth and better performance submarine optic cables, is a driver of Africa's economic growth and support of its NEPAD goals.

As a leading integrated service provider in South Africa, TSA supports the overall contribution by other African telecommunications players in playing a role of ensuring accessibility of broadband services to all the people. In its quest of democratizing broadband, TSA congratulates and supports the ACE cable system initiative by MTN as part of the broader plan in achieving Africa's economic growth as envisaged in NEPAD.

TSA welcomes the additional cable on the west coast as it can create redundancy especially for WACS cable system. This comes as a relief for South Africa and the rest of other African countries who could continually access European pops even at the unfortunate loss of WACS cable system. It is a breeze of fresh air to finally find the South African Mobile Network Company being the first to own its submarine cable system which shows how Africa has grown in terms of the liberalizing the all-important telecommunication sector.

## ALTERNATIVES

Two alternative shallow water alignments (starting about 50 km offshore) were surveyed during the project planning phase and the findings from these surveys have not identified any fatal flaws along both of the alignments which could prevent the implementation of the project based on sea bed topography and characteristics (rocky, sandy, muddy, etc.). It must be noted, however, that the southern shallow water alignment will require the ACE Cable System to cross the SAFE and SAT-2 Cable Systems which is not desirable from an installation and operational perspective.



**Figure 11 Alignment of the ACE Cable System in relation to existing telecommunication cable systems landing along the Western Cape coastline**

According to ICPC handbook (Section 28), should there be any cable crossing, an agreement between concerned parties should be formulated

In light of the above developments, TSA, as member of SAT-2 & SAFE submarine cable's consortium, would like to propose that the cable crossing agreement between MTN and owners (SAT-2 & SAFE) cables be reached as stipulated in section 28 of the International cable protection committee (ICPC handbook).

NB: Although SAT-2 cable has been decommissioned, however the cable still exists and is deemed for future use by TSA

Although the ICPC does not prescribe the contents of the agreement to concerned parties, however TSA will strongly support the contents of the cable crossing agreement as recommended by ICPC

## PROJECT DESCRIPTION

DSR clearly stipulate that the technical survey is yet to be done, however the ICPC recommendations and guidelines indicates that the following will have to clearly indicated:

- Different Optic fibre cable type to be used during the construction of ACE cable system
- Cable route which is still to be surveyed
- Cable route clearance which clearly shows what equipment to be used
- The installation type from the Cable landing station (CLS), beach manhole (BMH) and throughout the sea till the other sea shore end
- Indicated the routes from the suggested BMH to the CLS which are clearly marked on the DSR

The DSR clearly shows the actual suggested routes from both BMH to the CLS. As the ICPC recommends that prior to any installation of the submarine cable, cable crossing agreement needs to be entered into by parties involved.

TSA is a member of consortia for SAT3/WASC/SAFE and WACS cable which enters into the country on the west (Yzerfontein and Melkbosstrand) coast as ACE will do, we believe there will a cable crossing on either of the cable which will be found during the survey, TSA recommend a notification to be sent through to evaluate the cable crossing and an agreement will have to be entered into by all affected parties, which will detail all risks involved, liabilities, future maintenance and etc. as stipulated on the ICPC recommendations and guidelines.

**PUBLIC PARTICIPATION**

ICPC recommendation (No.6, issue 8) states the importance of dissemination of cable route information to all stake holders, i.e. Hydrographic offices, Military authorities, Commercial and Scientific organization, Port authorities, Cable maintenance authorities, local authorities and environmental authorities.

On Page 9 of the DSR, Project schedule for authorization process is clearly defined as below

<b>Activity</b>	<b>Anticipated Dates</b>
Project Announcement/Draft Scoping Report Public Review Period/Application to DEA	October/November 2016
Submit Final Scoping Report and Plan of Study for Impact Assessment to the Competent Authority	January 2017
Specialist Study Investigations	October – December 2016
Preparation of Draft Environmental Impact Assessment Report	January/February 2017
Draft Environmental Impact Assessment Report and Environmental Management Programme Public Review Period	March/April 2017
Submit Final Environmental Impact Assessment Report and Environmental Management Programme to the Competent Authority	June/July 2017

TSA commends MTN for notifying the public of its intention, and the fact that the legislative process and procedure were followed, as it is mentioned on the DSR about the project schedule below, it is noted that once all the stakeholders have put their concerns forward then a final document will be put forward for implementation purposes.

## CONCLUSION

TSA supports and commends the initiative taken by MTN in adding another optic fibre submarine cable to enhance connectivity through the African West Coast.

MTN ACE cable DSR has largely followed the recommendations and guidelines by ICPC except where TSA has indicated its concerns (Alternatives on page 9). TSA hopes that its concerns are going to be incorporated in the Final Scoping Report which will be submitted to the DEA for consideration and acceptance

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