



The Msunduzi Municipality

CELLULAR TELECOMMUNICATION INFRASTRUCTURE POLICY

APPROVED BY FULL COUNCIL

12 DECEMBER 2012

1. AIM

- 1.1 The aim of this policy for cellular telecommunication infrastructure is to establish a uniform and comprehensive set of standards and assessment criteria to assist in the control, development and installation of cellular telecommunication infrastructure in the area of jurisdiction of the Msunduzi Municipality. This policy is intended to protect the social and physical environment from potential negative impacts, while at the same time not restricting the development of essential cellular telecommunication infrastructure.

2. SCOPE

- 2.1 This policy is intended for the Council, members of the public and cellular telecommunication infrastructure providers seeking approval for the erection or modification of cellular telecommunication infrastructure. As present this policy focuses on the Cellular Telecommunication industry, but it is intended to revise the policy to include all parties, i.e. commercial, public and state, current and future in accordance with the Telecommunications Act of 1996.

3. DEFINITIONS

- 3.1 **Cellular Telecommunication Infrastructure:** means, but is not limited to, any one or more of the following:
- 3.1.1 **Antenna Structure:** any system of wires, poles, rods, or devices used to receive or transmit electromagnetic waves (antenna) and the associated feeder cables between the cellular communication equipment (equipment) and the antenna. The antenna can be mounted directly on the telecommunication equipment or attached to a building or any other antenna support structure.
- 3.1.2 **Base station site:** the antenna support structure, and all associated infrastructure, e.g., antenna, microwave dish, equipment room, electrical supply, the land occupied by such structure and such infrastructure, and the access road.
- 3.1.3 **Equipment room:** a structure to house cellular telecommunication equipment associated with an antenna support structure and/or antenna. This can be a separate building used exclusively for the equipment or it can be a container or a room or rooms within a building with another predominant use.
- 3.1.4 **Antenna Support Structure:** any solid or lattice structure (mast pole, monopole, guyed tower, lattice tower, freestanding tower or other structure) designed and primarily used to support antenna.
- 3.1.5 **Microwave dish:** any device incorporating a reflective surface that is solid, open mesh, or bar configured that is shaped as a shallow dish, cone, horn or other, and is used to transmit and/or receive electromagnetic signals.

- 3.2 **Council:** means the Council of Msunduzi Municipality and includes anybody or persons empowered by it to assess and resolve on cellular telecommunication infrastructure applications.
- 3.3 **EIA:** means Environmental Impact Assessment.
- 3.4 **ICNIRP:** means International Commission of non-ionizing Radiation Protection.
- 3.5 **KZNPDA:** means the KZN Planning and Development Act, 2008 (Act 6/2008).
- 3.6 **Modification of cellular telecommunication infrastructure:** means the modification to the change of physical structure or radio frequency emission of cellular telecommunication infrastructure.
- 3.7 **NBR or NATIONAL BUILDING REGULATIONS:** means the National Building Regulations and Building Standards Act No. 103 of 1977.
- 3.8 **NEMA:** means the National Environmental Management Act No. 107 of 1998.
- 3.9 **RF:** means Radio Frequency.
- 3.10 **CO-LOCATION:** means the sharing of a site or infrastructure by two or more network providers.

4. EXISTING STATUTORY FRAMEWORK

- 4.1 The installation of Cellular Telecommunications Infrastructure is regulated by the Electronic Communications Act No 36 of 2005, the Constitution Act 108 of 1996, the National Environmental Management Act No 197 of 1998, the National Building Regulations and the KwaZulu-Natal Planning and Development Act 6 of 2008 and any other relevant legislation, bylaws and Council Policy.

4.2 The Constitution Act 108 of 1996 the Bill Of Rights: Chapter two

The rights enshrined within the Bill of Rights (BOR) are applicable to all law, and binds the legislature, executive, the judiciary and all organs of state. It therefore follows that all Council policies and bylaws should be compliant with the BOR.

- (a) S 24 of the BOR, states that everyone has the right to an environment which is not harmful to their health and wellbeing, *and*
- (b) To have the environment protected, for the benefit of present and future generations, through reasonable legislative and other measures *that*
- (i) Prevent pollution and ecological degradation
 - (ii) Promote conservation *and*
 - (iii) Secure ecologically sustainable development and use of natural resources while promoting justifiable economic and social development.

S 152 of the Constitution under Chapter 7, (Objects of Local Government) provides the specific objects of local government, one of which is, *inter-alia*

(d) “to promote a safe and healthy environment”

Apart from the specific powers and functions allocated to local government by the Supreme Law of the country, the Constitution, and other relevant legislation, it is clear that local government must therefore take cognizance of S 24 and S 152 in its decision-making processes where ever necessary. As Cellular Telecommunications Infrastructure has significant environmental impact which may affect the rights referred to in S 24 and 152 of the Constitution, including *inter-alia* visual, electromagnetic, zoning and spatial, it is therefore a legal requirement that any policy framework must take into account the requirements of the BOR.

- 4.3 In terms of the Municipal Systems Act and the Constitution, Local Government is now a separate sphere of government, and as such, the Msunduzi Municipality must satisfy itself that it is addressing responsibly *inter alia* its duties towards its community placed upon it by such legislation; in this case the safety and welfare of its community, as well as the economic wellbeing of the area. Therefore, while there are National and Provincial Departmental Policy Statements in respect of Cellular Telecommunication Infrastructure, and while it takes cognizance of same, Council has a primary responsibility to its community to apply its own mind and set its own policy.
- 4.4 The assessment of applications for the erection or modification of cellular telecommunication infrastructure within the jurisdiction of the Msunduzi Municipality is directed by the provisions of KZNPDA and NBR together with this policy.
- 4.4.1 All cellular telecommunication infrastructures are defined as ‘buildings’ in terms of NBR (cf definitions in that Act), as they are a structure for the rendering of a service. Therefore all cellular telecommunication infrastructures will require Building Plans to be submitted to Council.
- 4.4.2 All cellular telecommunication infrastructures must comply with the relevant scheme regulations approved in terms of KZNPDA.
- 4.5 **THE NATIONAL ENVIRONMENTAL MANAGEMENT ACT, 1998 (Act No. 107 of 1998)**
(HEREINAFTER REFERRED TO AS “NEMA”)

A listed activity is defined as an activity identified in terms of S 24 (2) and 24D of NEMA, as one which may not commence without an environmental authorization from a competent authority, and in respect of which the investigation, assessment and communication of potential impact activities must follow the procedure as described in Regulations 26 to 35 of the Environment Impact Assessment Regulations,

In terms of GNR 546, Government Gazette 33306, issued on 18th June 2010, and Sections 24(2) and 24D of NEMA, the installation of cellular networks is a listed activity. Listed activity 3 of GNR 546 states:

The construction of masts or towers of any material or type used for telecommunication broadcasting or radio transmission purposes where the mast (a) is to be placed on a site not previously used for this purpose, and (b) will exceed 15 metres in height but excluding attachments to existing buildings and masts on rooftops. In Kwa-Zulu Natal outside urban areas in (amongst others) (cc) Sensitive areas as identified in an environmental management framework as contemplated in Chapter 5 of the Act and as adopted by the competent authority and inside urban areas (aa) Areas zoned for use as public open space; (bb) Areas designated for conservation use in Spatial Development Frameworks adopted by the competent authority or

zoned for a conservation purpose.

It is further noted that the specific site identified for a proposed mast may trigger Activities for which a Basic Assessment would be required (GNR 544) such as i.e. Activities 11, 18 and 24

Greenfields sites, including access roads, which fall outside the thresholds listed above, will be subject to screening and evaluation through the Msunduzi Environmental Management Framework (EMF) process. Environmental sensitivities and or constraints identified by the EMF may require further evaluation and assessment by the Applicant as specified by the Municipal Environment and Conservation Unit.

All Greenfields sites, including access roads, which fall outside of the NEMA thresholds, and as such are not subject to a formal EIA process, will require a construction and operational phase Environmental Management Plan (EMP) to be prepared by the Applicant and approved by the Municipal Environment and Conservation Unit prior to the commencement of any site works.

5. APPROACH

5.1 The approach should focus on:

5.1.1 Co-location of cellular telecommunication infrastructure where at all possible, in order to limit proliferation, ameliorate visual impact, and facilitate effective control. This Policy seeks to strike a balance between cellular telecommunication infrastructure and economic development on the one hand, and the conservation of visual, tourist, environmental and heritage characteristics on the other hand.

5.1.1.1 All possible location alternatives consistent with minimising proliferation of antennas should be explored early in the planning process in order to minimize the impact of the antenna support structure, rather than relying only on camouflage to reduce the impact.

5.1.2 All aspects of Environmental Impact in a holistic manner, and responsible precautionary measures in regard to health of the relevant community and security of the cellular telecommunication infrastructure as prescribed by NEMA.

6. POLICY

6.1 Applications for the erection or modification to the change of physical structure or RF emissions of the cellular telecommunication infrastructure will be considered *inter alia* in accordance with:

6.1.1 Compliance with the ICNIRP public exposure guideline;

6.1.2 The findings of any environmental assessment carried out in terms of the NEMA;

6.1.3 KZNPDA;

6.1.4 NBR and SANS 10400;

6.1.5 This Policy,

- and any other relevant legislation, Council policies and bylaws, and Council shall approve or refuse any such application, with or without conditions.
- 6.2 No cellular telecommunication infrastructure or combination of such infrastructure may at any time cause the public to be exposed to RF levels that exceed the appropriate ICNIRP public exposure guideline in any location to which the public reasonably has access.
- 6.3 The projected RF exposure levels within the area to which the public reasonably has access, as certified by a qualified person, as well as the ICNIRP public exposure guideline, shall be provided as part of each and every application for the erection or modification of cellular telecommunication infrastructure.
- 6.4 All antenna support structures are to be designed to blend in with the local environment or associated building(s) with the use of natural, non-reflective, compatible colours and finishes where possible.
- 6.4.1 The base station must be suitably designed to blend in with the surrounding environment, i.e. the equipment room could either be walled or fenced (metal / wood / brick) or could be housed in a specially designed building.
- 6.4.2 The applicant has to demonstrate that all efforts available to assimilate the structure with its surrounding environment have been made.
- 6.5 This Policy seeks to strike a balance between cellular telecommunication infrastructure and economic development on the one hand, and the conservation of visual, tourist, environmental and heritage characteristics on the other hand. Therefore applications with any visual impact are not encouraged on or near heritage sites, national monuments, urban conservation areas, buildings older than 60 years, special scenic areas, tourist sites of interest, view sites and scenic drives.
- 6.6 In the event that a container is used as an equipment room on a rooftop, such container must be set back as far as possible from the edges of the roof.
- 6.7 If the base station is to be walled or fenced, the fenced area must be suitably maintained.
- 6.8 Surrounding vegetation is to be retained as far as possible. Any proposed removal of vegetation is to be shown on the submission of site plans and is to be approved by Council prior to removal.
- 6.9 Council may require that indigenous and water-wise landscaping be provided around the above walled or fenced areas, to the satisfaction of Council.
- 6.10 Paint work of the antenna support structure, equipment container and 'fencing' or of the building that houses the equipment (colour to be in keeping with the surrounding environment) must be kept in a good condition.
- 6.11 No advertising signage will be permitted on cellular telecommunication infrastructure.
- 6.12 Advisory/warning signage including a pictogram will be required on cellular telecommunication infrastructure. Such signage shall identify the property and the network provider and shall warn the general public of such infrastructure. Such signage shall be to Council's satisfaction and may not be larger than 400mm x 500mm.

- 6.13 As a general rule, the following broad guidelines are to be applied in order to ensure that the cellular telecommunication infrastructure fits into its surrounding environment or is camouflaged or disguised, so as to impact as little as possible on the visual environment:

Site / property characteristics	Mitigation Guidelines
Existing fences with a common style / predominant colour (that are a positive feature in the environment).	Fence around the base station site must match the style and colour of the other fences on the property.
Mostly brick walls instead of fences (that are a positive feature in the environment).	Brick wall around the base station site must match the style of the other walls on the property.
Existing buildings have a single architectural theme.	The base station site must carry this theme through.
Open exposed locations where the background is mostly sky.	Structure to be left unpainted in a galvanized finish.
Existing building with one or two predominant colours / design elements, e.g. brick building with pitched roof.	Structure to be painted the same colour as the building. House the base station equipment in a similar building with similar roof.
All antenna support structures.	The requirements of the Civil Aviation Authority must be determined and met.
An open space or natural area dominated by large rocks.	Equipment container may be camouflaged physically, e.g. Flintstone containers. Otherwise the equipment room, fence and antenna support structure should be suitably painted.
Natural, semi-natural or suburban area or an open space area.	Antenna support structure and equipment room should be suitably painted (dark matt green is usually appropriate).
Trees are an important feature of the residential landscape.	Camouflage antenna support structure as a tree (this should not include pine trees or palm trees where they are not part of the local landscape). Otherwise the antenna support structure should be painted a suitable colour (dark matt green is usually appropriate).
Sites that have mature trees that could screen the antenna support structure from view.	The trees at the location are important for the screening / lessening of the visual impact on the structure. Place the antenna support structure in between the trees in such a way that it will not cause any long term damage to the trees.
Sites in visually exposed positions with poor screening.	A mixture of fast and slow growing indigenous trees that are suitable for the area should be planted around the base station site to lessen its long term visual impact.
Industrial area or high-rise urban areas or where the existing structures have a predominant colour.	Antenna support structure and base station site should be painted to blend in with the predominant colour.

- 6.14 All applications must be accompanied with a copy of the property title deed and the owner of the property is to certify that the proposal, as applied for, does not conflict in any way with the property title deeds.
- 6.15 No antennae will be permitted on listed buildings / monuments, as listed by AMAFA, unless written authorisation is obtained thereto from AMAFA.
- 6.16 The rating of properties bearing cellular telecommunication infrastructure will be done in terms of Council's Rates Policy, as amended, each financial year.
- 6.17 The lease-holder is to make application and will be responsible for the installation of electricity on the site, payment of the account and the submission to the Municipality's Process Manager: Electricity of a valid compliance form in terms of the Electrical Installation Regulations of the Occupation Health and Safety Act.
- 6.18 A normal service connection will be provided with credit metering at the applicable connection fee as laid down in the Electricity Supply Bylaws.
- 6.19 A metering kiosk or meter box fixed to a formal structure must be provided and installed by the consumer at a suitable position to be determined by the City Electrical Engineer and the lessee would then be liable for all service charges in respect thereof in accordance with the Municipality's Credit Control and Debt Collection Policy.
- 6.20 Any redundant cellular telecommunication infrastructure must be removed from the site within thirty days of the date of being declared redundant or where replaced by another antennae on a new site.

Biophysical Impacts

- 6.21 Council shall have regard to the following, and impose appropriate conditions in the approval, where necessary:
- 6.21.1 Where the proposal impacts on the biophysical environment, all possible location alternatives consistent with minimising proliferation of antenna should be explored early in the planning process in order to minimize the impact of antenna support structures, rather than relying only on camouflage to reduce the impact.
- 6.21.2 Sites with high erosion position due to, e.g. steep slopes, dispersive soils, unstructured, sandy or gravelly soil and poor vegetation cover must have specific erosion control measures put in place, e.g. erosion control gabions, contouring.
- 6.21.3 The access road must in no way increase the potential for soil erosion. The network provider is to plant indigenous plants and ground covers at the sides of the road. Should the road no longer be needed on the decommissioning of a base station site, the area should be planted with indigenous plants.
- 6.21.4 Environmentally sensitive construction methods must be employed in the construction of base station sites so that the surrounding vegetation is not disturbed.
- 6.21.5 Any disturbance to soil/vegetation caused must be rehabilitated as a matter

of course.

- 6.21.6 Any un-vegetated areas around the 'fenced' area must be re-vegetated with appropriate local indigenous plants, or must be stabilised with suitable ground cover. In urban areas, planning can be complimentary to local planting patterns.
- 6.21.7 Areas disturbed during construction and after decommissioning of the base station site, must be rehabilitated and planted with indigenous water-wise plants.
- 6.21.8 On-going maintenance of the area must take place by the applicant.
- 6.21.9 Waste generated during construction must be disposed of at a waste disposal site.
- 6.21.10 The location and design of access roads must be included in the EIA and or the EMP. Alignments that are too steep, cut across contour lines, require multiple stream crossings or which may cut across important ecosystems/microhabitats must be avoided.

Security and Safety of Base Station Sites and Antenna Support Structures

- 6.22 Except where structures are located on base station sites where there is no possibility of public access, structures must be fenced with a minimum 2,1m high fence or wall. If the base station consists of a security building, sufficient precautions must be made to prevent access to the antenna support structure to the satisfaction of Council.
- 6.23 In the event of installation on a rooftop, if the building occupants and/or the public have unrestricted access to areas on such rooftops for utility, entertainment or recreation purposes, then access to such installations shall be restricted by an appropriate method (e.g. a fence, wall, locked gate or locked door) together with warning signage at applicant's cost to the satisfaction of Council.
 - 6.23.1 In the event of the base station being housed in a room(s) within the building on which rooftop antennas are proposed, then access to such room(s) must be strictly controlled by means of locked door(s) or gate(s) at applicant's cost to the satisfaction of Council.
 - 6.23.2 Care shall be exercised by the applicant to ensure that such security measures do not inhibit emergency exit (e.g. fire escape) procedures.
- 6.24 Security lights (tilted downwards) can only be attached to the cellular structure with the surrounding land-owner's consent and if Council is satisfied that light pollution will not be created. Screens should be placed around these lights to prevent vandalism. Any such measures are required to be indicated on application plans.
- 6.25 The network provider shall indemnify Council against all claims of whatsoever nature, howsoever arising from third parties relating to the erection and operation of such cellular telecommunication infrastructure as may be approved, as part of the application documentation. Such indemnity to be provided by the network provider to Council's satisfaction.

Impact on Existing Services and Utilities

- 6.26 Power supply to base station sites must not interfere with existing radio equipment installed in the vicinity.
- 6.27 Rooftop installations must be situated in such a manner that they do not interfere with other utility functions.
- 6.28 Electricity supply to cellular telecommunication infrastructure must, where practically possible, be by underground cables. Also all electrical installations must be as per ESKOM or Council's requirements and standards. Rooftop base station sites should have cabling placed in a properly sealed metal channelling.
- 6.29 Where power to a base station site is required and excavation works are undertaken, all vegetation is to be reinstated and maintained by the network provider.
- 6.30 Any interference that cellular telecommunication infrastructure may have on satellite or television reception, must be investigated by the network provider, and in the event that the fault lies with the cellular telecommunication infrastructure, the network provider shall rectify the matter at own cost.

Sharing/Co-location

- 6.31 In any application, the benefits of co-location shall be assessed against any possible negative effects (e.g. a possible increase of antenna support structure height needed to accommodate the other providers and the possible increase of power output from one location). Council may refer such assessment for further investigation.
- 6.32 When preparing conditions of approval, Council shall have regard to the following:
 - 6.32.1 The possibility of network providers entering into a legal agreement to share a location in order to minimise the total number of structures across the city.
 - 6.32.2 Unless the investigation provided for in 6.31 above indicates otherwise, provision shall be made by the applicant, in the design of the mast or tower that it can physically cope with accommodating infrastructure of all other network providers.
 - 6.32.3 Unless otherwise recommended based on independent technical advice, no antenna support structures shall be closer than 1km of each other in urban areas.
 - 6.32.3.1 For any application submitted, Council reserves the right to request and be furnished with more information, such as, inter-alia, a map and photographs showing other existing tall structures (for example, masts, or towers, tall buildings and other structure), all exceeding a given height and for a radius specified around the site.
 - 6.32.4 The proximity to other developments including the potential to restrict the Development of future infrastructure and expansion of existing infrastructure.
- 6.33 Each Network Operator shall supply to Council and electronic spread sheet indicating the latitude and longitude co-ordinates of their cellular communication structures in the

municipal area (existing and applied for).

Monitoring and Compliance

- 6.34 All cellular telecommunication infrastructures in the area of jurisdiction of Council shall be monitored by Council in the field on a regular and a random basis to ensure compliance with this policy and the conditions of approval, and to verify sharing and co-location considerations as put forward by the network provider.
- 6.34.1 The right of Council to enter the property and the installation at reasonable times and to carry out such measurements and testing as may be necessary shall be embodied in the conditions of approval.
- 6.34.2 An electronic report shall be furnished to Council in this regard on a regular basis, and as and when requested.
- 6.35 In the event that evidence of non-compliance with the conditions imposed in terms of land use approvals and/or zoning scheme regulations and/or building plan approval is found by Council or its agents, the Council shall immediately notify the relevant network provider of such in writing. Such operator shall then be entitled to test such findings and to conduct measurements on the relevant cellular telecommunication infrastructure, and submit a written report with the measurement findings, endorsed by a qualified authority (such as the SABS) to Council within fourteen (14) days of receipt of Council's written notification.
- 6.36 In the event that such report confirms non-compliance with the conditions imposed in terms of zoning scheme regulations and/or land use approvals granted in terms of KZNPDA and/or building plan approval granted in terms of NBR, such network provider shall be afforded a further 14 days from receipt of Council's written notification to rectify same to the satisfaction of Council, failing which Council may withdraw such approvals and cause the cellular telecommunication infrastructure to be decommissioned and demolished at cost of the network provider, or at its option to approach the High Court for an interdict for an appropriate order prohibiting the continued use of the base station site and requiring its demolition.
- 6.37 Sections 6.28 to 6.30 shall be embodied in the conditions of the land use approvals granted in terms of KZNPDA and building plan approvals granted in terms of NBR for the erection of cellular telecommunication infrastructure.

Public Participation

- 6.38 Public participation shall be carried out by the applicant in accordance with the NEMA EIA Regulation process, provided that even though the requirements of NEMA do not require it, any proposal for an antenna mounted on a building or roof which will protrude more than 3.00 metres above the roof-top shall be subject to a public participation process in accordance with Council's Public Participation Policy and processes.