DEPARTMENT OF CO-OPERATIVE GOVERNANCE AND TRADITIONAL AFFAIRS

NOTICE 416 OF 2017

DISASTER MANAGEMENT ACT, 2002 (ACT NO. 57 OF 2002)

GUIDELINE ON THE MINIMUM INFRASTRUCTURE REQUIREMENTS FOR DISASTER MANAGEMENT CENTRES

I, Mmaphaka Tau, in my capacity as the Head of the National Disaster Management Centre hereby, in terms of section 12(1)(a) read with section 22(a) of the Disaster Management Act, 2002 (Act No. 57 of 2002), to the extent mentioned in the schedule hereto, give guidance in terms of the minimum infrastructure requirements of disaster management centres

Dr M TAU

DEPUTY DIRECTOR-GENERAL (HEAD): NATIONAL DISASTER MANAGEMENT CENTRE

DATE: 10.04.2017

GUIDELINE

MINIMUM INFRASTRUCTURAL REQUIREMENTS FOR DISASTER MANAGEMENT CENTRES

Prepared by:

Directorate: Policy Development and Regulatory Frameworks

1 April 2017

Version 1.1

Guideline

Minimum Infrastructural Requirements for Disaster Management Centres

Version Control

Version	Version 1.1
File number	21/1/1 (Guidelines)
Short description	Guide to provide information on the minimum physical infrastructure requirements for a Disaster Management Centre.
Relevant to	Disaster management officials in the three spheres of government
Authority	This procedure has been approved by the Head: National Disaster Management Centre in terms of Section 12 of the Disaster Management Act, 2002 read with Sections 15(d) and 22(a).
Responsible officer	Director: Policy Development & Regulatory Frameworks
Responsible Chief Directorate	Policy and Legislative Management
Date introduced	1 April 2017
Date(s) modified	First Issue
Next scheduled review date	31 March 2019
Related documents	None
Related legislation	Disaster Management Act, 2002 (Act 57 of 2002) National Disaster Management Framework, 2005
Key words	Guideline, Procedure, Disaster Management, National Disaster Management Centre, NDMC, NDMF, Best Practice Guide, Disaster Management Centre, Disaster Operations Centre, Central Communication Centre, Information Technology and Communication System

Acknowledgements

Many individuals participated in the process to prepare this guideline. Appreciation goes to all those who have given their time and inputs in this regard. The National Disaster Management Centre would specifically like to acknowledge the following individuals and organisations for their contributions.

Ms Ane Bruwer	National Disaster Management Centre
Mr Jurgens Dyssel	National Disaster Management Centre
Ms Prudence Dlamini	National Disaster Management Centre
Ms Benedetta Gualandi	OXFAM
Mr. Hannes Steyn	Mopani District Municipality
Ms. Lindokuhle Ngubane	Gauteng PDMC
Ms Lavenia Nicholson	Western Cape PDMC
Mr. Prince Morare	Bojanala District Muncipality
Mr Shane Brown	Nelson Mandela Bay Metropolitan
Mr. Wilfred Mkhwanazi	City of Ethekwini Metropolitan
Ms Erna Wiese	Department of Public Works

Guideline

Minimum Infrastructural Requirements for Disaster Management Centres

Contents

Acronyms

COC	Central Communication Centre
CCTV	Closed Circuit Television
DMA	Disaster Management Act, 2002 (Act No. 57 of 2002)
DMC	Disaster Management Centre
DMC's	Disaster Management Centres
DMP	Disaster Management Plan
DOC	Disaster Operations Centre
GIS	Geographic Information System
NDMC	National Disaster Management Centre
NDMF	National Disaster Management Framework, 2005
MMS	Multimedia Messaging Service
SANS	South African National Standards
SMS	Short Messaging Service
T.V's	Televisions
USB/2	Universal Service Bus 2
UPS	Uninterruptable Power Supply

Definitions

The following words and expressions will, unless the context otherwise requires, or the Disaster Management Act, 2002 (Act No. 57 of 2002), or National Disaster Management Framework, 2005 otherwise provides, have the meanings thereby assigned to them namely—

'Assimilate', means to take in, absorb and integrate information to fully understand the context of concepts (Kavanagh, 2002: 65);

'Disaster Management Centre' means a Centre established in terms of Part 1 of Chapter 3, Part 2 of Chapter 4 or Part 2 of Chapter 5 of the Disaster Management Act, 2002 (Act No. 57 of 2002);

'**Internalise'** means to make disaster management part of an organs of state's operations through learning, practicing and assimilation (adapted from Kavanagh, 2002: 602);

'Interrogate', means to ask questions of someone or something closely, or formally, or to obtain data from a computer file, database, storage device, or terminal (adapted from Kavanagh, 2002: 603);

'Physical infrastructure' means physical structures and facilities needed for the operation of a disaster management Centre;

'Well Maintained' means the maintenance of the building namely regular painting, repair work etc. as well as the maintenance of all equipment to ensure information technology and communication systems operate optimally.

Interrelation / compatibility with other guidelines

This guideline should be read in conjunction with the Disaster Management Act, 2002 (Act No. 57 of 2002), the National Disaster Management Framework, 2005, the applicable South African National Standards, other relevant legislation and the South African Disaster Risk Management Handbook Series[1].

Furthermore, it should also be read in conjunction with the organisational business continuity plan(s) and applicable policies of the respective organ of state. Existing memoranda of understanding between provincial, metropolitan, district and local municipalities with regard to the disaster management centres should also be considered.

This guideline also interrelates with the Guideline for Conducting Comprehensive Disaster Risk Assessments, Part 1: Hazard Identification, Analysis and Prioritisation issued[2] by the National Disaster Management Centre on 25 October 2016.

.

[1] The DMHS can be downloaded from www.ndmc.gov.za
[2] Government Gazette No. 40393 GN 1363 on 2 November 2016

1. Introduction

The Disaster Management Act, 2002 (Act No. 57 of 2002) (DMA) places a legal obligation[3] on national, provincial and local[4] government to establish Disaster Management Centre's (DMC's), each with similar powers and duties[5], to integrate and coordinate a system of disaster management within and across the spheres of government.

The DMA, in Section 15, assigns various powers and duties to the National Disaster Management Centre (NDMC) which, amongst others, includes not only advisory and consultative functions, but also, in Section 22, the power to give guidance and advice to stakeholders with regards to disaster management.

2. Purpose of this guideline

This guideline, developed in terms of paragraph 1.5 of the National Disaster Management Framework, 2005 (NDMF) read with paragraph 1.2.2.2, sets out the minimum physical infrastructure requirements of a DMC, a satellite DMC and disaster related support Centre's.

3. Scope

This guideline provides guidance on the minimum physical infrastructure requirements for a DMC to effectively implement its legislated mandate.

[3] See sections 8, 29, and 43
[4] Metropolitan and District Municipalities
[5] See sections 15, 30 and 44

In this regard, this guideline provides information for the minimum infrastructure characteristics of a DMC; the physical location of the DMC; the minimum physical facilities of a DMC; the supporting facilities to be available to a DMC; and the design standards and considerations.

It is important to note that this guideline is not intended to be a 'paint by number' solution nor is it to be construed as a 'one size fits all' approach. Organs of state enjoined to establish a DMC must therefore interrogate, assimilate and internalize the concepts put forward by this guideline and the NDMF to enable them to identify the minimum infrastructure requirements applicable to their specific functional environment.

4. How to use this guideline

This guideline recognises that the respective DMC's established across the spheres of government is in different stages of development and functional maturity. As such this guideline may be used in two ways. Firstly, as an audit tool to assess the existing facilities at the disposal of a DMC to determine its baseline infrastructure and improve that where needed, and secondly as an instrument to assist with the redesign of an existing DMC should the need therefore be identified.

5. Minimum Infrastructure Requirements

5.1 Physical infrastructure characteristics

DMCs are essential for the effective execution of the disaster management mandate. An assessment of a DMC shall consider the following characteristics in determining the needs and functionality.

a) **Flexibility** – in that operations must be scalable and the operational space adaptable to the disastrous event e.g., have sufficient space, equipment, furniture[6], administrative supplies, telecommunications, computer support, etc., available to implement the applicable disaster management contingency plan(s) in a coordinated way amongst the stakeholders.

b) **Sustainability** – to support operations for an extended duration; e.g., be able to sustain operations for five consecutive 24-hours days during all emergency situations without interruption, including generators, UPS solutions for uninterrupted power supply, water supply etc.

c) **Security** – to guard against potential risks and protect operations from the unauthorized access or disclosure of sensitive information e.g., have sufficient security and structural integrity to protect the facility, its occupants, and communications equipment and systems from relevant threats and hazards.

d) **Survivability** – to withstand the effects of a realized risk so as to continue with operations from the DMC, or from a fully-capable alternate location, e.g., have an alternate DMC that can be activated and used if the primary facility is destroyed, damaged, or not accessible.

e) **Interoperability** – to share common principles of operations, exchange routine and time-sensitive information with other DMCs, e.g., be able to communicate with Satellite DMCs where established, disaster related support centres, emergency response teams at or near an incident site, etc.

[6] Ergonomics should be taken into consideration when procuring furniture. Furniture must be designed to ensure that officials can work comfortably for long periods of time.

5.2 Physical location

A DMC must be located in an area that will minimise its exposure to any known risks. The following factors should be taken into consideration when selecting a site for a DMC.

a) **Natural environment risk exposure** - The DMC should for instance not be located within the 100-year flood line; or where landslip/landslides or subsidence may occur. The guideline for Conducting Comprehensive Disaster Risk Assessments, Part 1: Hazard Identification, Analysis and Prioritisation issued[7] by the NDMC on 25 October 2016 should be used to assess the current or potential DMC site.

b) **Proximity to high risk sites** - The DMC should not be located within close proximity to,

   (i) polluting sites;

   (ii) bulk hazardous materials storage sites;

   (iii) bulk fuel re-filling or storage stations;

   (iv) bulk chemical manufacturing facilities;

   (v) power stations, high voltage distribution lines or electricity distribution facilities;

   (vi) refineries etc.

c) **Past, present and future land use** - The DMC should not be located on sites where past shallow underground mining occurred; or where old landfill sites were located; or within densely populated areas; or close to heavy industrial zones; or where new land use plans includes zoning for high risk sites etc.

[7] Government Gazette No. 40393 GN 1363 on 2 November 2016

d) **Distances to DMCs** - The DMC should not be located in proximity to other DMC's in the functional area so as to avoid concurrent loss or disruption by the same disastrous occurrence.

e) **Travel duration** - The DMC should be located within a reasonable travelling duration of other entities and residential areas to enable stakeholders and staff to travel to the facility using various modes of transport (public and private).

f) **Availability of communication networks** - The DMC should be located in an area where the current terrestrial network(s) installed, enables the information and communications services. The ability (or impediments) to transmit two-way radio signals to and from the site must also be considered.

g) **Access roads to the DMC** - The DMC should be located so that disastrous occurrences that may occur, do not block access to the site. Paved roads are preferable to unpaved roads.

h) **Disruptions to utility services** - The DMC should be located on a site where present and future power, water and sanitation interruptions is unlikely to occur. Sanitation disruption(s) analysis should include backflow in the sewer system due to flooding that occurs elsewhere.

i) **Local crime rates** - The DMC should be located in a low crime area. Unsafe areas may lead to security breaches or operational disruptions.

j) **Existing neighbouring tenants** - The DMC should be located away from neighbouring tenants that may pose as sources of disruption. These tenants may be targets for radicals, demonstrators or protestors which may disrupt the DMC operations.

k) **Co-tenancy or sharing a premises** - The DMC should as far as possible not be a co-tenant of a building or share a premises unless the facility provides central security services to all tenants equally. The security arrangements must be under the control of the DMC.

l) **Site longevity** - The DMC should, especially if the site is government-owned, be located on a site that has longer term viability at its core as the investment in the physical infrastructure requires significant fiscal resources.

5.3 Minimum DMC facilities

A DMC must at least have the following well maintained facilities to operate effectively.

5.3.1 Disaster Operations Centre (DOC).
5.3.2 Central Communications Centre (COC).
5.3.3 Training, Media and Public Information Centre.
5.3.4 Administrative offices.
5.3.5 Information Technology and Communication System.
5.3.6 Security and parking.
5.3.7 Open area.

5.3.1 Disaster Operations Centre

(a) The DOC is a dedicated facility located within the DMC and must be capable of accommodating any combination of emergency and essential services' representatives, including all relevant role players and stakeholders identified in response and recovery plans for the purpose of multidisciplinary strategic management of response and recovery operations, when a local, provincial or national disaster occurs or is threatening to occur. All disaster management response and relief activities are supported, coordinated and executed from the DOC.

(b) The DOC has the following minimum requirements.

(i) **Functionality** - The DOC must have strategic and tactical rooms which are preferably separated from each other. The strategic room or boardroom may have dual functionality in terms of providing a venue for other disaster management meetings with stakeholders, strategic

planning, and other related multi-party disaster management activities[8]. The tactical section is a dedicated facility equipped to facilitate the operational activities by the respective stakeholders during response operations.

(ii) **Size** – The size and facilities of the DOC should be appropriate to comfortably accommodate the multidisciplinary strategic management and tactical coordination of response and recovery operations when disasters occur or are threatening to occur, or when a neighbouring event poses a threat to the jurisdictional area. There should be sufficient private caucus rooms to facilitate bilateral discussions between the parties deployed in the DOC.

(iii) **Equipment** - The DOC must be equipped with the sufficient furniture, technology and audio-visual equipment e.g. smart televisions (T.V's), voice recording facilities[9], telephones, computers, fax machines, photo copiers, printers, document scanners, shredders, wall charts, white boards, public address systems etc. to facilitate intergovernmental coordination. The facility must be air-conditioned.

(iv) **Power and amenities** - The DOC must have an uninterruptible power supply (UPS) and adequate and compatible computer hardware, software and ancillary equipment to enable ready and easy access to information, including geographic information system (GIS) data and resource data. It must also provide ready access to the Internet and e-mail, Short Messaging Service (SMS) and Multimedia Messaging Service (MMS) facilities etc. There should be adequate power outlets located strategically around the DOC for easy connectivity for laptops including Universal Service Bus 2 (USB/2) prong plugs outlets for charging of cell phones and other devices.

[8] These activities may include meetings of the disaster management advisory forum, technical task teams established by the DMC, intergovernmental relations forums etc.
[9] Must be able to record all incoming and outgoing telephonic and radio communications

5.3.2 Central Communications Centre

(i) The COC is a dedicated facility located within the DMC and must be capable of accommodating any combination of early warning specialists[10] to develop, identify, monitor, react to, report, communicate and disseminate early warnings.

(ii) The COC is also responsible for establishing, developing, and maintaining a 24-hour effective communications system and operational call centre for reporting purposes as well as co-ordinating the activation of stakeholders to respond to significant events and disasters.

(c) The COC has the following minimum requirements.

(i) **Functionality** - The COC must develop, identify, monitor, react to, report, communicate and disseminate early warnings. The COC must also serve as the central reporting and call-taking point where stakeholders may report a significant event and or disastrous occurrence. The COC must further provide communities with mechanisms for obtaining access to assistance in the event of an emergency. The COC must also be able to provide the public with basic disaster management information.

(i) **Size** – The size and facilities of the COC should be appropriate to comfortably accommodate the officials staffing the COC. There should be private caucus rooms to facilitate bilateral discussions between parties deployed in the COC.

(ii) **Equipment** - The COC must be equipped with the sufficient furniture, technology and audio-visual equipment e.g. smart T.V's, voice recording facilities[11], telephones, computers, fax machines, photo copiers, printers[12], document scanners, shredders, wall charts, white boards etc. to facilitate the functional responsibilities. The facility must be air-conditioned and may house the data centre (server room).

[10] May include officials of other organs of state seconded to the DMC
[11] Must be able to record all incoming and outgoing telephonic and radio communications
[12] Large scale printers up to A0 size

(iii) **Power and amenities** - The COC must have an UPS and adequate compatible computer hardware, software and ancillary equipment to enable ready and easy access to information, including GIS data, resource data and a spatial software suite to aid cartographic operations. It must also provide ready access to the Internet and e-mail, SMS and MMS facilities etc. There should be adequate power outlets located strategically around the COC for easy connectivity for laptops including USB/2 prong plugs outlets for charging of cell phones and other devices.

5.3.3 Administrative offices

(a) The administrative offices are a dedicated facility located within the DMC. The offices should have adequate furnishings, equipment and the necessary administrative technology applications[13] to enable the Head of the Centre and all DMC staff to execute their duties.

(b) The administrative offices have the following minimum requirements.

(i) **Functionality** – The administrative offices functions as the core component from which the implementation of the disaster management programme is managed[14].

(ii) **Size** – The size and facilities of the administrative offices should be appropriate to comfortably accommodate the Head of the Centre and the staff of the DMC. There must be a reception or receiving area, appropriately equipped to receive visitors. There should also be a stationary store room as well as a document archive. There should be sufficient private caucus rooms, of various sizes, to facilitate meetings.

[13] Program(s) designed to perform a specific function directly for the user or, in most cases, for another application program. Examples of applications include word processors, database programs, Web browsers, development tools, drawing, paint, image editing programs, and communication programs etc.
[14] Planning, Organising, Staffing, Directing, and Controlling.

(iii) **Equipment** - The administrative offices must be equipped with the relevant technology as well as audio-visual equipment, adequate telephones, printers, computers, fax machines, photo copiers, document scanners, shredders, wall charts, white boards etc. to facilitate the functional responsibilities of the DMC.

(iv) **Power and amenities** - The administrative offices must have an UPS and adequate and compatible computer hardware, software and ancillary equipment to enable ready and easy access to information, including GIS data and resource data. It must also provide ready access to the Internet and e-mail etc. There should be adequate power outlets located strategically around the offices for easy connectivity for laptops including USB/2 prong plugs outlets for charging of cell phones and other devices.

5.3.4 Training, Media and Public Information Centre

(a) The Training, Media and Public Information Centre is a dedicated facility which may be located within the DMC. The offices should have adequate furnishings, equipment and the necessary administrative technology applications[15] to enable the staff to execute their duties.

(b) The Training, Media and Public Information Centre have the following minimum requirements.

(i) **Functionality** – The Training, Media and Public Information Centre is responsible for promoting the recruitment, training and capacity building of volunteers and other role players across the sphere of government, the private sector and civil society. It is also responsible for establishing and

[15] Program(s) designed to perform a specific function directly for the user or, in most cases, for another application program. Examples of applications include word processors, database programs, Web browsers, development tools, drawing, paint, image editing programs, and communication programs etc.

maintaining capacity and capabilities for knowledge management for the purpose of disaster management. This includes the development and implementation of an integrated public awareness strategy for the organ of state. The Training, Media and Public Information Centre also provides an environment or mechanism to conduct effective media relations and communications in order to provide the public with information.

(ii) **Size** – The size and facilities of the Training, Media and Public Information Centre should be scalable and may be interchangeable. It should be located in the same facility to conduct training sessions, media briefings or public information sessions. There must be a reception or receiving area, appropriately equipped to receive visitors. Attached to the Centre, or in close proximity thereof, must be an appropriately resourced room to serve as a library and research centre.

(iii) **Equipment** - The Training, Media and Public Information Centre must be equipped with the relevant technology, audio-visual equipment, a public address system, voice recording facilities, audio-visual aids etc. to facilitate the functional responsibilities of the Training, Media and Public Information Centre.

(iv) **Power and amenities** - The Training, Media and Public Information Centre must have adequate and compatible computer hardware, software and ancillary equipment to enable ready and easy access to information. There should be adequate power outlets located strategically around the offices for easy connectivity for laptops including USB/2 prong plugs outlets for charging of cell phones and other devices.

5.3.5 Information Technology and Communication system

(a) The information technology and communication system of the DMC should be housed onsite in a dedicated server room[16].

[16] The server room must be designed and built according to the applicable SANS standards.

(b) The components of the information technology and communication system must be able to fulfil the requirements of Sections 16 and 17 of the DMA, and Enabler 1 of the NDMF. It has the following minimum requirements.

(i) **Hardware** – This category refers to all the hardware needed by the DMC to perform its functions. This includes smart T.V's, voice recorders, telephones, computers, fax machines, photo copiers, printers, document scanners, shredders, public address systems, servers, network cables, routers, cabling, trunking, etc.

(ii) **Software** – This category refers to all the software programs needed by the DMC to perform its functions. This includes applications such as word processors, spreadsheets, database programs, e-mail programs, Web browsers, development tools, drawing tools, paint tools, image editing programs, GIS, communication programs, etc.

(iii) **Data or databases**- This category refers to all the raw qualitative and quantitative information obtained by or provided to the DMC for storage, processing and analysis to produce useful disaster management information.

(iv) **Networks** - This category refers to all the computer networks[17] and data links needed to allow computer nodes to share resources or to communicate. Access to reliable high speed internet using more than one connection type[18] is a key component.

(v) **Policies and Procedures** - This category refers to the rules governing the information technology and communication system within the DMC. It relates to the policies and procedures needed for,

[17] Local Area Network, Wide Area Network, Internet etc.
[18] Wireless; Mobile; Digital Subscriber Line; Cable TV lines; fibre optic Integrated Services Digital Network; Satellite etc.

a. purchasing hardware policy which includes procedures for server systems, desktops, portable computer systems, computer peripherals, mobile telephones, etc.

b. purchasing software policy which includes procedures for requesting software, purchase software, obtaining open source or freeware software, etc.

c. using software policy which includes procedures for software licencing, software installation, usage, etc.

d. using personal devices policy which includes procedures for registration of personal devices for business use, keeping personal devices secure, caching information on personal devices, etc.

e. a security policy which includes procedures for physical security of servers and devices, information security, antivirus systems, the need for passwords and unique technology access codes, etc.

f. an administration policy which includes procedures for listing administration rights, etc.

g. the Website policy which includes procedures for maintaining the Website register, website content, etc.

h. the electronic transactions policy which includes procedures for facilitating electronic fund transfers, electronic purchasing, electronic signatures and approvals, etc.

i. an information technology service agreements policy which includes procedures for service agreements that may be entered into, etc.

j. an emergency management of information policy which includes procedures for data backup and recovery, hardware failure, service interruptions, virus or security breaches, Website disruptions, etc.

(vi) **People** - This category refers to the information technology and communication specialists and technicians needed to establish, maintain and operate the information technology and communication system.

5.3.6 Security and Parking facilities

(a) For the DMC to operate effectively, it must have adequate facilities to ensure that security is maintained and adequate parking is provided for staff, visitors and deployed stakeholders.

(b) The security facilities have the following minimum requirements.

(i) Good perimeter security should be maintained around the entire perimeter of the DMC by means of a boundary wall, palisade, welded mesh or vertical bar fence which is at least 6-foot high.

(ii) Access control to the premises must be maintained and should not be universal in nature. Only authorised persons, with separate authorisation, should have access to sensitive areas such as the server room, utility entry points, plant rooms, the DOC, the COC, the administrative offices etc.

(iii) Lighting on the boundary perimeter and the grounds should be considered.

(iv) Additional security features should be considered for the peripheral physical infrastructure (e.g. the generator, fuel tanks, UPS, fire suppressant cylinders, utility entry points, chillers, air intakes etc.).

(v) Security around delivery areas, windows that can be opened and the fire escape routes should receive special attention.

(vi) Consideration should be given to installing monitored closed circuit television (CCTV) to external areas and within the server room. Motion-

activated CCTV can be particularly helpful in ensuring the CCTV operators' attention.

(c) The parking facilities have the following minimum requirements.

(i) Adequate parking away from the building must be provided for visitors and deployed stakeholders.

(ii) Staff parking should be separated from the visitors' parking.

(iii) Visitors and staff should not be allowed to park in the basement of the building unless the basement is fire sprinkler protected.

(iv) Lock-up garages should be the preferred option to park official disaster management vehicles.

5.3.7 Open area

The DMC must be located on a site with a large open area. This area should have a hard level surface and be away from any obstacles. It can be used, as the need arise, as a spill-over parking, a site to locate temporary rehabilitation quarters for staff during ongoing operations of the DOC, as a helicopter landing pad etc.

5.4 Supporting facilties

Provision must be made within the DMC for the following support facilities.

a) Ablution facilities, including showers.
b) A fully equipped kitchen that can be used to cater for operations during ongoing operations of the DOC.
c) A recreational area.
d) Sufficient space to store relief material and other goods.

6. Design standards and considerations

a) **Building standards** - The facility must be designed and built to comply with the national building legislation, issued in terms of the National Building Regulations and Building Standards Act, 1977 (Act No. 103 of 1977).

b) **Design considerations** – The following factors should be taken into consideration when (re)designing a facility.

(i) If not already in place, the facility must support the addition of high voltage power supplies, transformers, switchgear and an UPS.

(ii) An emergency electrical power generator must be provided which is large enough to power the DMC and all its installed facilities (heating ventilation air-conditioning system, telephones, electronic office equipment, essential lights, radios, elevator, computer systems, etc.) unassisted for at least 12 hours without refuelling being required. It must be permanently wired to the DMC with an automatic start and transfer system. It should be located on the premises but placed in such a position that the noise or fumes generated for its operation do not interfere with the operational functioning of the DMC.

(iii) Wherever possible, all necessary water-bearing pipe-work should be located outside of the computer equipment rooms.

(iv) Doors and access routes within the building must be of sufficient size and capacity to support the installation and maintenance of equipment.

(v) Lightning and surge protection should be provided.

(vi) Tack mats must be provided at entry points.

(vii) Easy-clean and low maintenance materials must be used for the interior and exterior finishing.

(c) The DOC; COC; Training, Media and Public Information Centre; and the open plan offices shall be treated acoustically.

(d) The position of sleeping accommodation (where needed) should be considered in relation to the noisy operational areas of the DMC.

(e) Ablutions shall be provided in accordance with South African National Standard (SANS) 10400, Part P.

(f) The DOC must be accessible to disabled persons in accordance with SANS 10400, Part S.

(g) Sustainability principles such as water storage and solar power should be considered.

(h) The design must take ergonomics principles into account to provide for a work space that is less stressful even during longer working hours.

.

7. Recommendations

It is recommended that all organs of state across the spheres of government, enjoined by the Disaster Management Act, 2002 (Act 57 of 2002) and the National Disaster Management Framework, 2005 to establish a Disaster Management Centre, have regard and consider this guideline.

8. Approval

Mr Jurgens Dyssel

Director: Policy Development and Regulatory Frameworks

Date: 28/03/2017

Ms Ane Bruwer

Chief Director: Policy and Legislation Management

Date: 28/3/2017

Guideline approved/.....

Dr Mmaphaka Tau

Deputy Director-General (Head): National Disaster Management Centre

Date: 10/04/2017

9. List of References

SA. ***see*** SOUTH AFRICA.

SOUTH AFRICA. 2002. Disaster Management Act No. 57 of 2002. Cape Town: Government Printers.

SOUTH AFRICA. Department of Provincial and Local Government. 2005. National Disaster Management Framework. Pretoria: Government Printer.

SOUTH AFRICA Disaster Risk Management Handbook Series: Handbook 2: Pat Reid: May 2008

SOUTH AFRICA. 1977. National Building Regulations and Building Standards Act No. 103 of 1977. Cape Town: Government Printers.

UNITED NATIONS INTERNATIONAL STRATEGY DISASTER REDUCTION (UNISDR). 2005. Hyogo Framework of Action 2005-2015: Building the Resilience of Nations and Communities to Disasters. Geneva: UNISDR.

…ooo0ooo…

Switchboard: 012 848 4600

Fax: 012 848 4635/6/7/8

Jurgens Dyssel

Director: Policy Development and Regulatory Frameworks

jurgensd@ndmc.gov.za

Tel: 012 848-4608

Fax: 086 535 1383