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MUNICIPAL DISASTER RISK MANAGEMENT PLAN



REVISION 7 - JUNE 2014

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Date : 2014-06-26	Date : 2014-06-27

DISTRIBUTION

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AMENDMENTS / UPDATES

New amendments or updates will be added to the Amendments and Updates Listing below and it is the responsibility of the individual to regularly check the currency of their Plan copy.

Proposals for amendment or additions to the text of this Plan should be forwarded to:-

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AMENDMENTS AND UPDATES LISTING

REV. NO.	DATE OF ISSUE	DETAILS OF PAGE(S) AMENDED OR REPLACED
1	2007/05/12	Total Revision of the previous version (all pages)
2	2008/05/06	Update of the entire document (all pages)
3	2008/10/03	Transport, Roads & Stormwater Directorate functionality amendments (pages 9, 21, 22 & 23)
4	2011/03/01	Revision of entire document & updating of disaster risk assessment information (all pages)
5	2012/06/21	Updating of the revised CCT Organisational Structure - inclusion of the new Directorates and their DRM responsibilities (pages 13 to 25)
6	2013/09/11	Update of the entire document, incorporating the revised CCT Organisational Structure of 2013 and comprehensive disaster risk assessment summary (all applicable pages)
7	2014/06/18	Updating of new CCT Logo, change JIMS to JIMS, CCT Directorates and Hazard names (pages 1, 4, 5, 8, 9, 12, 13, 14, 36, 37, 38, 41, 43)

CCT MUNICIPAL DISASTER RISK MANAGEMENT PLAN

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CITY OF CAPE TOWN

MUNICIPAL DISASTER RISK MANAGEMENT PLAN

1 INTRODUCTION

The Municipal Disaster Risk Management (DRM) Plan serves to confirm the organisational and institutional arrangements within the City of Cape Town to effectively prevent disasters from occurring and to lessen the impact of those hazards that cannot be avoided. Essentially, this DRM Plan serves as the **strategic co-ordination and co-operation mechanism between all the relevant Entities / Stakeholders** and is therefore the DRM Master Plan at the highest hierarchical level. The hazard/risk-specific DRM Plans, the CCT Directorate and any External Entity/Organisation DRM Plans and their related emergency procedures are to be focussed at the *tactical and operational levels* and should therefore be considered as being subsidiary to the CCT Municipal Disaster Risk Management Plan.

Disaster Risk Management is defined as “a continuous and *integrated multi-sectoral and multi-disciplinary process* of planning and implementation of measures aimed at disaster prevention, -mitigation, -preparedness, -response, -recovery, and -rehabilitation” - as per Section 1 of the Disaster Management Act, 57 of 2002.

The *slogan* to best describe this initiative is: “**Disaster Risk Management is Everybody's Business**”

2 BACKGROUND

The preventative, risk-reduction and preparedness elements of the Municipal DRM Plan must be implemented and maintained on a continuous basis. The emergency response or re-active elements of the Municipal DRM Plan will be implemented in the City of Cape Town whenever a major incident, emergency or disaster occurs or is threatening to occur within the municipal area.

The definition of a **disaster** is: “a *progressive or sudden, widespread or localised, natural phenomena or human-caused occurrence which –*

- (a) *causes or threatens to cause –*
 - (i) *death, injury or disease;*
 - (ii) *damage to property, infrastructure or the environment; or*
 - (iii) *disruption of a community; and*
 - (b) *is of a magnitude that exceeds the ability of those affected by the disaster to cope with its effects using only their own resources”.*
- (Disaster Management Act, 57 of 2002)

Related terminology

In terms of the City of Cape Town's Joint (Unified) Incident Management System (JIMS), which advocates a **co-ordinated and standardised approach to incident response activities** in the City, an **incident** is defined as: “a *general description of a hazard occurrence or situation requiring intervention ranging from a limited co-ordination of emergency resources to a more extensive multi-disciplinary operation. This scenario may also develop into a major incident or emergency or disaster situation*”.

A **major incident** is defined as: “a *more complex situation requiring the co-operation and co-ordinated response of multiple emergency disciplines and resources and operations as set out in the JIMS. This scenario may also develop into an emergency or disaster situation*”.

An **emergency** is defined as: “an *event that requires the prompt implementation of actions, or the special regulation of persons or property, to limit the risk to health, safety or welfare of people, or to limit damage to property or the environment. Response actions should be co-ordinated on the basis of the JIMS*”.

The Disaster Management Act places the responsibility for the implementation of the Municipal Disaster Risk Management Plan for the City on the appointed Head (Manager) of the Disaster Risk Management Centre.

The Disaster Management Act requires the City to take the following actions:

- to prepare a Municipal Disaster Risk Management Plan for its area according to the circumstances prevailing in the area and incorporating all municipal entities/administrative units and relevant external role-players;
- to co-ordinate and align the implementation of its Municipal DRM Plan with those of other organs of state, institutional and any other relevant role-players; and
- to regularly review and update its Municipal DRM Plan
(*ref. Disaster Management Act 57 of 2002 - Section 48*).

The City must submit a copy of its Municipal Disaster Risk Management Plan and any amendment to the said Plan to the National Disaster Management Centre and to the Disaster Management Centre of the Western Cape Province. The Municipal Disaster Risk Management Plan must also be included into the City's Integrated Development Plan (IDP).

The Municipal Disaster Risk Management Plan should:

- form an integral part of the City's IDP so that disaster risk reduction activities can be incorporated into its developmental initiatives,
- anticipate the likely types of disaster that might occur in the City's area and their possible effects,
- identify the vulnerable/communities at risk,
- provide for appropriate prevention, risk reduction and mitigation strategies,
- identify and address weaknesses in capacity to deal with possible disasters,
- facilitate maximum emergency preparedness,
- establish the disaster risk management policy framework and organisation that will be utilized to mitigate any significant emergency or disaster affecting the City of Cape Town,
- establish the operational concepts and procedures associated with day-to-day operational response to emergencies by City Departments and other entities/organisations, as per their own mandates. These SOPs will also form the basis for a more comprehensive disaster response, as referred to in the CCT JIMS document,
- incorporate all hazard/risk-specific DRM Plans, as well as Directorate/Entity DRM Plans and related emergency procedures that are to be used in the event of a disaster. These will provide for –
 - (i) the identification and understanding of the risk that hazards/treats may pose;
 - (ii) the allocation of responsibilities to the various role-players and the co-ordination required in the carrying out of these responsibilities;
 - (iii) risk reduction and preparedness strategies;
 - (iv) prompt disaster response and relief;
 - (v) disaster recovery and rehabilitation focused on future risk elimination or mitigation;
 - (vi) the procurement of essential goods and services;
 - (vii) the establishment of strategic communication links;
 - (viii) the dissemination of relevant information.

3 PURPOSE

The Municipal Disaster Risk Management Plan is designed to establish the framework for implementation of the provisions of the Disaster Management Act, 57 of 2002, as well as the related provisions of the Municipal Systems Act, 32 of 2000.

The purpose of the Municipal DRM Plan is to outline policy and procedures for both the pro-active hazard and risk assessment, followed by disaster prevention (if possible), risk reduction, preparedness and the re-active disaster response, relief and rehabilitation phases of Disaster Risk Management.

The Municipal DRM Plan is intended to facilitate multi-agency and multi-jurisdictional co-ordination in both pro-active and re-active related programmes.

4 THE CITY OF CAPE TOWN'S APPROACH TO DISASTER RISK MANAGEMENT

4.1 CITY OF CAPE TOWN'S DISASTER RISK MANAGEMENT POLICY FRAMEWORK (DISASTER MANAGEMENT ACT 57 OF 2002 - SECTION 41)

The City of Cape Town's Municipal Disaster Management Advisory Forum (MDMAF) must establish and implement a policy framework for Disaster Risk Management in the municipality aimed at ensuring an **integrated and common approach to Disaster Risk Management (DRM) entities in its area.**

The City of Cape Town Municipal Disaster Risk Management Policy Framework is –

- (a) consistent with the provisions of the Disaster Management Act;
- (b) consistent with the National Disaster Risk Management Framework; and
- (c) consistent with the Disaster Risk Management Policy Framework of the Provincial Government: Western Cape.

The Disaster Risk Management Centre (DRMC) is the custodian of the City of Cape Town Municipal Disaster Risk Management Plan, drafted at the strategic level. Individual Directorates, Departments and other Role-players/Entities will be responsible for the compilation and maintenance of their own Service's/Entity's Disaster Risk Management Plans and Procedures, at the tactical and operational levels). The various Hazard/Risk-specific DRM Plans (covering the assessed risks to the City in detail) that have been drafted on an integrated basis (*refer to Section 9*), as well as all the Directorate, Department and Entity/Role-player DRM Plans and Procedures will be considered as integral parts of the CCT Municipal Disaster Risk Management Plan.

The processes involved in Disaster Risk Management can best be explained through the Disaster Risk Management Continuum.

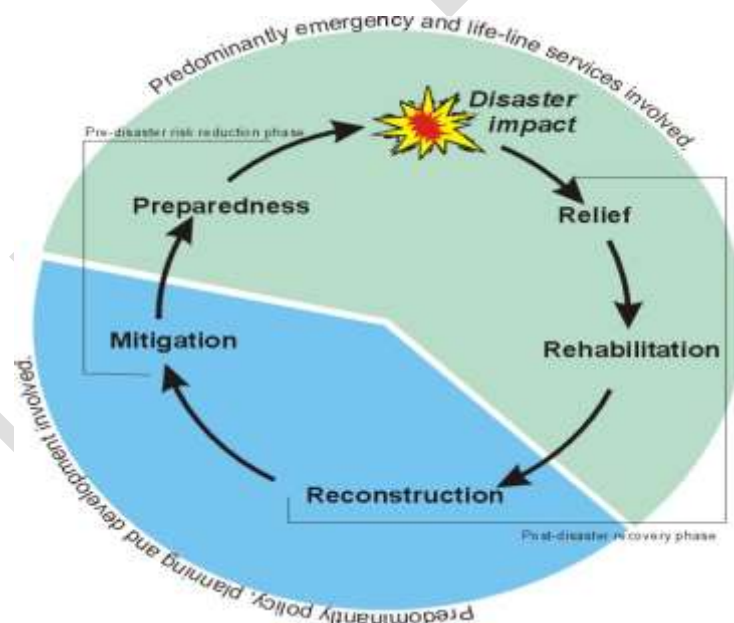


Figure 1: Disaster Risk Management Continuum

Figure 1 illustrates the DRM Continuum – it should be noted that Disaster Risk Management is not only re-active, but also involves actions aimed at preventing disasters, or mitigating the impact of disasters, i.e. disaster risk reduction and preparedness. Different line functions and departments must contribute in varying degrees to Disaster Risk Management in the various phases of the Disaster Risk Management Continuum. The needs identified in the Municipal Disaster Risk Management Plan will indicate where the different Directorates, Departments, Branches and other Entities should contribute. **These contributions must then be included in the respective Directorate's or Entity's Disaster Risk Management Plans and in the special risk-specific DRM Plans which have been drafted.**

Disaster Risk Management (DRM) Plans must cover the whole Disaster Risk Management continuum and must address all actions before, during and after disasters. Disaster Risk Management Plans are compiled on the basis of a generic plan which will include references to any Standard Operating Procedures (SOP's), legislation and best practice of the respective Services or Entities. These generic plans can be adapted to suit type of hazard / disaster-risk being dealt with. The respective Directorate/Department/Service/Entity Disaster Risk Managements Plans must be integrated with the relevant multi-disciplinary Hazard/Risk-specific DRM Plans so that all aspects are covered.

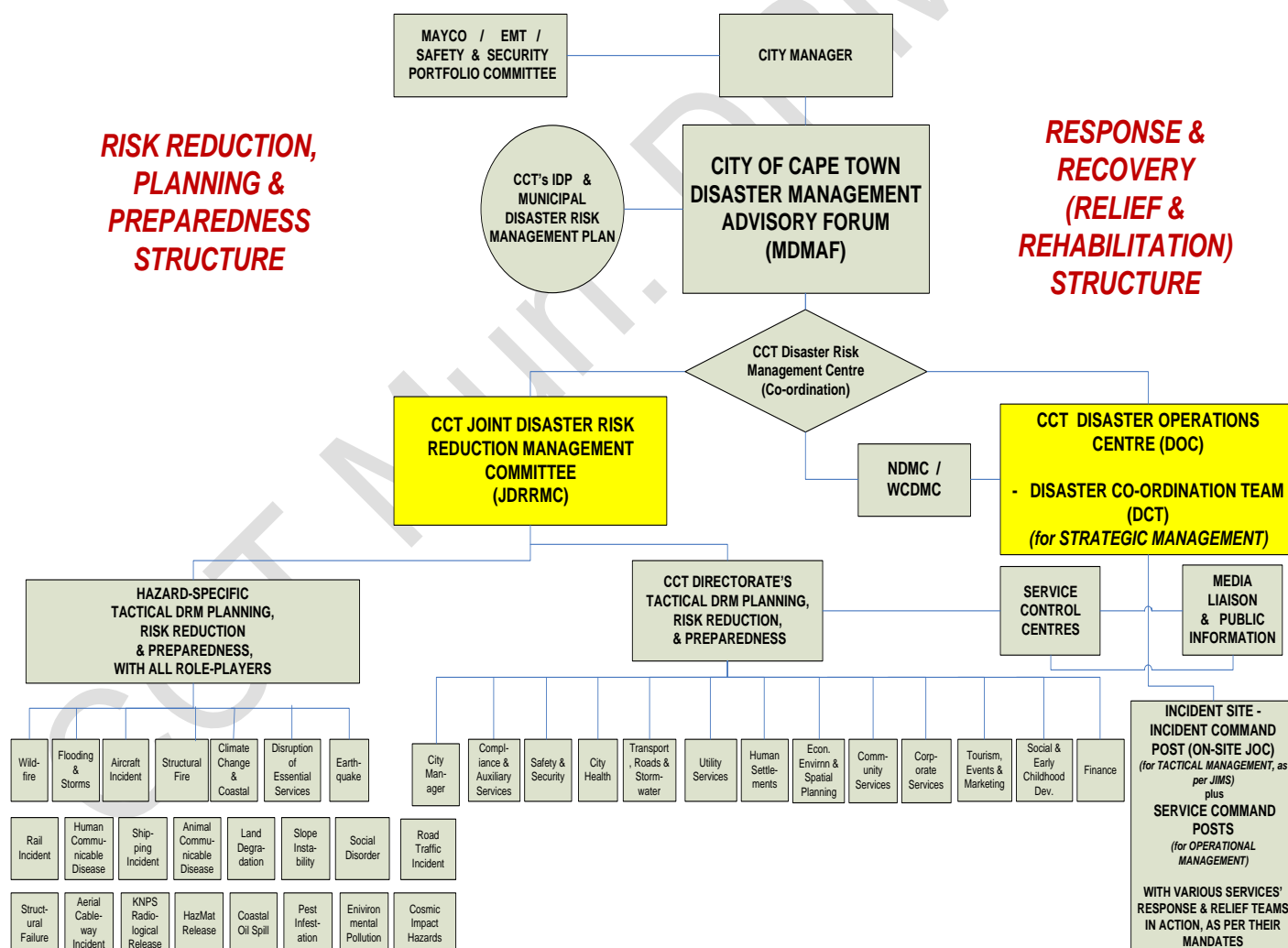
5 INSTITUTIONAL ARRANGEMENTS FOR DISASTER RISK MANAGEMENT

5.1 MUNICIPAL MANAGEMENT STRUCTURE AND ARRANGEMENTS

In terms of a management structure for Disaster Risk Management, the principle of functioning within the established structure of the City of Cape Town as far as possible will be adhered to. This will serve to link the appropriately mandated and functional Services/Departments/Branches.

The various levels making up the management structures for Disaster Risk Management in the City will respectively plan to maintain existing services and adapt to deal with the changed circumstances during major incidents or disasters. The planning, risk reduction, preparedness and response management structure for the City of Cape Town is as follows:-

CITY OF CAPE TOWN'S CORPORATE DISASTER RISK MANAGEMENT STRUCTURE



The first objective of the disaster risk management structure indicated above is to achieve disaster prevention, risk reduction/mitigation and preparedness efforts in the day-to-day activities of the relevant Entities/Administrative Units in the City of Cape Town. The second, but equally important, objective is to ensure rapid and effective response, relief and rehabilitation efforts in the event of an emergency or disaster occurrence.

The CCT's strategic Disaster Response and Recovery actions are described in Section 11.

5.2 **DISASTER RISK MANAGEMENT MULTI-DISCIPLINARY CO-ORDINATION ARRANGEMENTS**

The CCT Municipal Disaster Management Advisory Forum (MDMAF) will comprise of the following functionaries:-

a. Internal to the City:-

City Manager
Strategic Advisor
Director: Integrated Strategic Communication & Branding
Executive Director: Compliance & Auxiliary Services
Director: Legal Services
Director: Internal Audit
Director: Integrated Risk Management
Director: Integrated Development Plan (IDP)
Director: Organisation Performance Management
Director: Executive Support
Director: Sub-councils and Councillor Support
Executive Director: Corporate Services
Director: Specialised Technical Services
Director: Customer Relations
Director: Strategic Development Information & GIS
Director: Information Systems & Technology
Director: Human Resources
Director: Occupational Health, Safety & Wellness
Executive Director: Finance (Chief Financial Officer)
Director: Supply Chain Management
Director: Budget
Director: Revenue
Director: Expenditure
Director: Property Management
Director: Inter-Service Liaison
Executive Director: City Health
Director: Primary Health Care
Director: Environmental Health Services
Director: Specialised Health Services
Executive Director: Economic, Environmental and Spatial Planning
Director: Environmental Resource Management
Director: Spatial Planning & Urban Design
Director: City Development Strategy and Integrated Development Planning
Director: Planning & Building Development Management
Director: Development Facilitation
Director: Economic Development
Director: Markets & Trading
Executive Director: Social and Early Childhood Development
Director: Performance & Operational Co-ordination
Director: Special Projects
Director: District Services
Director: Substance Abuse
Executive Director: Community Services
Director: Sport, Recreation and Amenities
Director: City Parks
Director: Public Space Management
Director: Zoned Public Open Space Management
Director: Cemeteries, Funeral Parlours & Crematoria
Director: Library & Information Services
Executive Director: Human Settlements
Director: Strategy, Support & Co-ordination
Director: Existing Settlements
Director: New Settlements
Director: Informal Settlements
Director: Housing Land and Forward Planning
Director: Urbanisation Implementation

Director: National Housing Programmes
 Director: Urban Renewal Programme
 Director: Development Services
 Executive Director: Safety and Security
 Manager: Disaster Risk Management Centre
 Chief: Fire & Rescue Service
 Manager: 107 Public Emergency Communications Centre
 Chief: Metropolitan Police
 Chief: Traffic Services
 Chief: Law Enforcement & Security
 Commissioner: Transport for Cape Town
 Director: TCT Performance & Co-ordination
 Director: Planning
 Director: Contract Operations
 Director: Infrastructure
 Director: Maintenance
 Director: Network Management
 Director: Regulations
 Executive Director: Utility Services
 Director: Water & Sanitation
 Director: Cape Town Electricity
 Director: Solid Waste Management
 Executive Director: Tourism, Events and Marketing
 Director: Tourism
 Director: Events & Film Office
 Director: Place Marketing
 Project Manager: World Design Capital 2014

**** NOTE:** Representation may be adjusted by the Forum in accordance with the identified risks to the City that are being dealt with over a particular period.

b. External Entities / Organisations:-

WCG Disaster Management Centre
 WCG Emergency Medical Services
 WCG Forensic Pathology Services
 WCG Social Services and Poverty Alleviation
 WCG Traffic Control
 SA Police Services - Western Cape
 SA National Defence Force - Western Cape
plus representation from other Provincial and National Government Departments, the CTIA, the V & A Waterfront, SANParks, Port of Cape Town, PRASA/Metrorail, Transnet FreightRail, Robben Island Museum, Commerce & Industry, the Disaster Relief NGO's and from the broader Community of Cape Town.

**** NOTE:** Representation may be adjusted by the Forum in accordance with the identified risks to the City which are being dealt with over a particular period.

5.3 LINES OF COMMUNICATION AND INTER-GOVERNMENTAL RELATIONS

In terms of Section 43 (1) of the Disaster Management Act, 57 of 2002, it is incumbent on the City to establish in its administration, a Disaster Risk Management Centre for its municipal area. Lines of communication and the relationship between the various Disaster Risk Management formations of the different spheres of government are illustrated in *Figure2*.

The City of Cape Town's Disaster Risk Management Centre liaises with the Provincial Disaster Management Centre, which in turn liaises with the National Disaster Management Centre.



Figure 2: Lines of Communication

5.4 CITY OF CAPE TOWN DISASTER RISK MANAGEMENT CENTRE (DRMC)

The DRMC must specialise in issues concerning disasters and Disaster Risk Management within the City of Cape Town. In this regard it must promote an integrated and co-ordinated approach to the function, with special emphasis on prevention and mitigation.

The DRMC must perform functions and exercise powers as stipulated in Section 44 of the Disaster Management Act, 57 of 2002.

The DRMC will act as a repository and conduit for information concerning disasters, impending disasters and Disaster Risk Management in the municipal area.

The Disaster Risk Management Centre will perform its functions –

- (a) within the national, provincial and municipal Disaster Risk Management frameworks;
- (b) subject to the City IDP and other directions of the City Council; and
- (c) in accordance with the administrative instructions of the municipal manager.

It will liaise with and co-ordinate its activities with those of the National Disaster Management Centre and the Western Cape Provincial Disaster Management Centre and render assistance as required in legislation.

The Hazard/Risk-specific and Departmental Planning Teams, the functioning of the Disaster Co-ordination Team (DCT) in the Disaster Operations Centre (DOC) and the On-site (mobile) Joint Operations Centre, etc. will be described in other sections of this document.

6 RESPONSIBILITIES OF STAKEHOLDERS

The main stakeholders in the City of Cape Town's Municipal Disaster Risk Management Plan and their respective specific disaster risk management responsibilities in the pro-active phases, viz. **hazard identification, risk assessment, disaster prevention, risk reduction, planning and preparedness**, and in the re-active phases, viz. **disaster response, relief and rehabilitation**, are indicated in this Section.

In terms of the CCT Municipal DRM Plan, the primary objective of each Stakeholder's disaster risk management involvement must be to prevent the occurrence of emergencies or disasters that threaten life, property, the environment or economic activity in the City of Cape Town. If prevention of any major hazard(s) is not possible, the secondary objective is to reduce disaster risk and vulnerability and thus lessen the possible impact of an emergency/disaster. **Preparedness** is also vital in order to increase the Stakeholder's **ability to cope**, when required, with all identified hazard occurrences so that the community can be assisted in the quickest and best possible way.

6.1 CCT MUNICIPAL DISASTER MANAGEMENT ADVISORY FORUM (MDMAF)

It is the responsibility of the CCT Municipal Disaster Management Advisory Forum to approve the compilation and maintenance of a Municipal Disaster Risk Management Plan which will be compiled and maintained by the CCT Disaster Risk Management Centre, as well as the incorporation of the relevant supportive hazard or risk-specific and the various Service/Entity DRM Plans.

The Disaster Management Advisory Forum shall review of the Municipal DRM Plan on an annual basis. It must make recommendations for changes that are considered appropriate and that the required support documents, organisation, resources, training and facilities are in place at **all** of the participating Entities to ensure a viable emergency/disaster response structure for the City.

The Municipal DMAF will direct the Joint Disaster Risk Reduction Management Committee (JDRRMC) to oversee the assigning of project teams to address specific risks and in the development hazard-specific disaster risk management plans - *refer to the functions of the JDRRMC in Paragraph 6.2 below*.

The Municipal DMAF must ensure that the following actions, which are in line with the benchmarked disaster risk management principles, take place during the following disaster phases:

Hazard Identification, Disaster Risk Assessment, Risk Reduction and Preparedness Phases:

- ensuring that regular Disaster Risk Assessments are undertaken in the City,
- assessing capacity of the City to implement emergency/disaster response actions,

- to oversee the formulation of plans and projects to **reduce disaster risk, including the integration with the CCT Integrated Development Plan's (IDP) development projects and initiatives.**

During any major Emergency or Disaster Response and Relief Phases:

- respond to any incident, emergency or disaster occurrence with falls within the Service / Entity's mandate, as a lead or supporting role-players,
- assess the impact of any disaster which has occurred in the City and examine any further consequences and subsequent disaster risk to the emergency area(s) – for large-scale impacts this effort will be led by the City's Disaster Co-ordination Team (DCT) – *refer to Paragraph 11.1,*
- assess the consequences and disaster risk, when applicable, to the remainder of the City,
- assess all response actions by the Entities participating in this Plan, and
- advise and formulate strategic recommendations to the Disaster Co-ordination Team on the response and recovery actions after any major hazard occurrence, including the mitigation of any further disaster risk, as required.

During the Recovery and Rehabilitation phases:

- ensuring a return to normal functioning of affected communities as soon as possible,
- provide input on the lesson's learned on any adjustments that may be required for continuing disaster prevention/mitigation and preparedness through disaster risk elimination or reduction.

6.2 JOINT DISASTER RISK REDUCTION MANAGEMENT COMMITTEE (JDRRMC), SPECIAL HAZARD / RISK-SPECIFIC AND SERVICE / DEPARTMENTAL TASK TEAMS

The CCT Joint Disaster Risk Reduction Management Committee (JDRRMC) will comprise designated senior personnel from each of the City's Directorates who will be the "links" or "nodal points" into their respective Directorates and will be the conduit for especially the pro-active (risk reduction and disaster preparedness) initiatives. Senior staff of external entities/organisations' may also serve on the JDRRMC and will fulfil similar roles to those of the City representatives.

As delegated by the Municipal DMAF the JDRRMC will co-ordinate special hazard-specific teams, which will be convened on a highest-risk priority basis to plan, manage and complete multi-disciplinary projects for pre-disaster risk reduction and preparedness and to draft the necessary integrated hazard-specific DRM Plans, i.e. for hazards such as structural fires, wildfires, radiological release/nuclear emergencies, flooding and storms, climate change, earthquakes, transport incidents, hazardous materials Incidents, etc., as well as for mass events' preparedness. Policies, plans and procedures that address efficient incident management and inter-disciplinary co-operation during incidents are to be included in these DRM Plans. The input of specialist advisers in the various fields must be obtained on an on-going basis and DRM Plan maintenance and readiness programmes will continue.

Special Task Teams may also be convened to address specific risk-mitigation issues during the *post-disaster recovery and rehabilitation phases*. These project teams will take over responsibility for recovery and rehabilitation from the Disaster Co-ordination Team (DCT) once the DCT is demobilised and/or in cases where recovery and rehabilitation takes place over an extended and protracted period. A Special Task Team under a specific line function / Department may also be convened to take responsibility for activities that address the causal factors of any disaster or major incident occurrence. Such Teams will receive a brief from, and report back to, the Municipal Disaster Management Advisory Forum and to senior management. They will work in close co-operation with the CCT Disaster Risk Management Centre. Their recommendations must then be incorporated into the respective Hazard-specific and Departmental DRM Plans and, if necessary, be incorporated into the CCT Municipal DRM Plan.

Such Teams will determine their respective terms of reference and deliverables under the direction of the Disaster Co-ordination Team (DCT), the CCT Municipal Disaster Management Advisory Forum (MDMAF) and the JDRRMC, as may be required by the nature and extent of the Incident and the needs requirement.

The to ensure that Hazard/Risk-specific Task Teams, as well as Service / Departmental Teams are convened and maintained to address risk-specific Disaster Risk Management plans which have the highest risk to the City.

6.3 SUMMARY OF THE CCT DIRECTORATES' DISASTER RISK REDUCTION AND PREPAREDNESS RESPONSIBILITIES

CITY MANAGER, ASSISTED BY THE DIRECTORATES

The City Manager, together with the City's Directorates, supported by the Disaster Risk Management Centre (DRMC), are to support disaster risk management activities such as hazard identification, disaster risk, vulnerability and manageability assessments, disaster prevention, disaster risk reduction/mitigation, planning and preparedness, as well as incident response, relief and rehabilitation, are integrated in an effective and efficient manner into the functions/mandates of each Administrative Unit within the organisation of the City of Cape Town.

With over 70 different hazards to deal with (refer to Section 9), aspects of disaster risk management will also fall within the mandates of **nearly all the Administrative Units/Services within the municipal structure**. This will therefore also incorporate the City's caring and safer city policy approach. In addition, the City of Cape Town's Integrated Development Plan can also serve to reduce disaster risk to communities by targeting the highest risk and most vulnerable areas when integrated development projects are identified.

**** Refer below to the disaster risk management responsibilities of each of the City's Directorates.**

For any **responses** to major incidents/emergencies/disasters, the City Manager, will need to be **prepared, either personally or through a designated official, to:**

- report, liaise and consult with councillors and provincial and national government departments,
- assist with the mechanisms for the possible declaration of a local state of disaster,
- report on emergency impact and response to the Executive Mayor,
- report on emergency impact and response to the councillor(s) for the affected area(s),
- report on emergency impact and response to the remaining Councillors,
- co-ordinate, as appropriate, with the DRMC and Integrated Strategic Communication & Branding and communicate with City management and staff, including call centres dealing with the public, on any significant aspects and updates concerning any incident, emergency or disaster occurrence,
- notify next-of-kin when a City employee is injured, missing or killed during any emergency situation,
- authorize any extraordinary expenditures (access to disaster funding and/or any alternative emergency funding sources),
- identify persons/organisations to receive recognition for contributions made to emergency response.

The **CITY MANAGER** must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management, both pro-actively and re-actively, for the Integrated Strategic Communication & Branding Department and the Strategic Advisor.

Specifically, the **Director: Integrated Strategic Communication & Branding** must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk elimination or reduction and for disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management procedures to ensure service continuation during emergency/disaster situations,
- providing information to persons at emergency facilities, e.g. assembly points, evacuation centres and mass care facilities,
- providing information to persons at special incident-related meetings,
- providing information to City employees and their families who are affected by emergencies/disasters,
- arranging site visits for persons affected by the emergency, e.g. families of deceased persons,
- arranging anniversary events of disasters for affected persons in support of efforts to facilitate psychosocial coping mechanisms,
- regularly updating on emergency situation to councillors,
- supporting the DRMC in communicating status reports and public safety notices,

- supporting the DRMC in risk-reducing public education and awareness programmes,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: COMPLIANCE & AUXILIARY SERVICES

The Executive Director: Compliance & Auxiliary Services must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management for the Departments of Executive Support, Forensics, Integrated Development Plan (IDP), Organisation Performance Management, Internal Audit, Legal Services, Ombudsman, Sub-councils and Councillor Support and Integrated Risk Management, with *general reference* to the following:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency / disaster situations,
- executive support,
- forensics,
- integrated risk management initiatives,
- ensuring the incorporation of the appropriate risk reduction initiatives into the City's IDP by all the project leaders,
- monitor organisational performance and disaster risk management integration,
- internal audits,
- provision of legal assistance, both pro-actively and after any disaster occurrence,
- assist with Sub-council & Councillor awareness of disaster risk management issues,
- assist the Disaster Co-ordination Team (DCT) during times of disaster, as required,
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes),

and with *specific reference* by the following Departments to these aspects:

Director: Internal Audit

The Director: Internal Audit must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management with *specific reference* to the following aspects:

- auditing and informing the relevant Disaster Risk Management Plans of Council Installations to ensure pro-active disaster risk reduction, preparedness and compliance with relevant legislation, codes and regulations,
- audit compliance of City Services with the stipulations of the Municipal Disaster Risk Management Plan, their Directorate DRM Plans and with the relevant hazard-specific DRM Plans of the City,
- supplying available resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT) during any major emergency situation.

Director: Integrated Development Plan (IDP)

The Director: IDP must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management to:

- ensure that the Municipal Disaster Risk Management Plan and the DRM Chapter Template form an integral part of the City's Integrated Development Plan, *and*
- ensure that hazard identification, disaster risk assessment and that risk prevention and/or risk reduction/mitigation principles are applied for *all* development projects which are being undertaken.

Director: Legal Services

The Director: Legal Services must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department, with *specific reference* to the following aspects:

- monitoring compliance with relevant legislation, regulations, licenses and by-laws,
- documenting information for potential legal actions,
- documenting information for potential compensation claims,
- identifying information to be documented for inquests or investigations under the applicable laws.

Director: Integrated Risk Management

The Director: Integrated Risk Management must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department, with *specific reference* to the following aspect:

- monitoring internal compliance by all CCT Administrative Units with relevant risk management legislation and regulations.

EXECUTIVE DIRECTOR: CORPORATE SERVICES

The Executive Director: Corporate Services must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management of the Specialised Technical Services, Customer Relations Management, Strategic Development Information & GIS, Information Systems and Technology, Human Resources and the Occupational Health, Safety & Wellness Departments, with *specific reference* to the following Departments:

Director: Human Resources

The Director: Human Resources must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- providing information to CCT staff and their families regarding aspects of any emergency or disaster,
- documenting information for remuneration of municipal employees involved in emergency response,
- documenting information for potential municipal labour relations issues.

Director: Customer Relations Management

The Director: Customer Relations Management must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- customer relations enquiries of the City of Cape Town,
- operation of a Call Centre for non-urgent matters & assistance with emergency information dissemination, as required.

Director: Specialised Technical Services

The Director: Specialised Technical Services must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- **Fleet & Workshop Management** are to ensure that:-
 - appropriate staff have been placed on standby to cater for such occasions (supervisors, drivers, operators and labourers),
 - appropriate vehicles are available for timeous response,
 - permits for low bed trailers, etc. are valid for such emergency response,
 - supplementary resources are available from private sector,
 - procedural guide and lists of internal and external contacts are available for standby teams,
 - call out procedures and contacts details are lodged with Haardekraaltjie Technical Operations Centre (TOC) call centre and updated weekly,
 - appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities are identified to assist with disaster risk reduction efforts,
 - establish a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes) is established and maintained.
- **Radio and Technical Services** management are to ensure continued reliable operation of the City's radio trunking communication system, especially in times of emergencies, as it is utilised by all the City's emergency services. For this the radio trunking infrastructure is currently being upgraded to ensure an effective and reliable infrastructure available at all times. This includes installation of dedicated carrier grade microwave links to all remote sites with redundancy in critical components and ring-feeds to the more important sites to improve the reliability, generator back-up at each site and redundancy in all critical equipment installed. Further, radio staff are on 24/7 standby, as well as 24/7 maintenance and support agreements with external contractors are in place for service continuity.

The technology is to be of such a standard that even if the Network Control Centre (NCC) should be destroyed, the remote sites will continue operating in local service (users in a specific area can

still communicate). The system will only lose its capability for users to communicate in wide area functionality. Even so, as services are co-ordinated over the entire City of Cape Town Municipal area, it could disrupt communications, and therefore Radio and Technical Services are investigating the provision of a back-up centre for the Radio Network Control Centre (RNCC) to reduce the possibility of sabotage.

The City operates the most advanced and reliable radio trunking network currently in South Africa which provides for a significant part of the City's inter-communication requirements.

Appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities are identified to assist with disaster risk reduction efforts,

Establish a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes) is in place.

Director: Information Systems and Technology

The Director: Information Systems and Technology must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- rendering ICT support and advice to all role-players throughout all phases of Disaster Risk Management planning and preparedness processes,
- compiling, exercising and carrying out adequate disaster recovery procedures for ICT infrastructure and information management,
- establishing and maintaining required informatics links to supply ICT Infrastructure and assets to host and maintain the DRMC's Disaster Risk Management Resources Database (DisRes) and other relevant databases and to facilitate integrated GIS and other ICT systems which can assist in the overall disaster risk management in the City.

Director: Strategic Development Information and GIS

The Director: Strategic Development Information and GIS must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- rendering GIS support and advice to all role-players throughout all phases of Disaster Risk Management planning and preparedness processes,
- compiling, exercising and carrying out adequate disaster recovery procedures for information management and ICT infrastructure,
- establishing and maintaining required informatics links to supply ICT Infrastructure and assets to host and maintain the DRMC's Disaster Risk Management Resources Database (DisRes) and other relevant databases and to facilitate integrated GIS and other ICT systems which can assist in the overall disaster risk management in the City.

Director: Occupational Health, Safety and Wellness

The Director: Occupational Health, Safety and Wellness must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department, with *specific reference* to the following aspects:

- monitoring internal compliance by all CCT Administrative Units with relevant occupational health and safety management legislation and regulations,
- assist with employee wellness/assistance, including any staff involved in any traumatic incidents and when dealing with major emergencies and disasters.

EXECUTIVE DIRECTOR: FINANCE (CHIEF FINANCIAL OFFICER)

The Executive Director: Finance must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to lead and direct financial functions of the City of Cape Town so that the current and future effectiveness of Council services, programmes and operations are insured. Departments include Treasury, Revenue, Expenditure, Supply Chain Management, Valuations, Budget, , Shareholder & Contract Management, Housing Finance and Leases, Inter-Service Liaison and Property Management, with *specific reference* to the following aspects by these Departments:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Procedures to ensure service continuation during emergency/disaster situations,
- enterprise risk management,
- documenting information for potential municipal insurance claims,
- managing donations for emergency response,
- facilitating emergency procurement,
- initiating and facilitating efforts to make funds available for pro-active and re-active disaster management within the municipal area,
- supplying financial resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: CITY HEALTH

The Executive Director: City Health must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- take steps to eliminate disaster risks presented by communicable diseases,
- isolate person(s) in order to decrease or eliminate disaster risk presented by a communicable disease,
- protect the health and safety of emergency responders,
- monitor large groups of people for contamination and/or health effects,
- preventative issues around communicable diseases for disrupted populations (may be general population or limited to vulnerable populations and essential service operators),
- immunize large groups of people,
- assist with the management of emergency shelter, evacuation assembly points and mass care facilities for persons displaced by emergencies or disasters,
- seize and dispose of food that poses a health hazard,
- monitor the environment (air, water, and ecosystem) for contamination,
- identify victims, responders or affected persons who may require medical follow-up and/or who may require psychosocial support and to facilitate this support which may be provided by the appropriate governmental and non-governmental agencies as applicable,
- identify persons/organisations to contribute to post-emergency reports/debriefs regarding health matters,
- supplying resources for Disaster Risk Management purposes as requested by the City Health representative(s) on the Disaster Co-ordination Team (DCT), if convened,
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes),

- liaise with the WCG Health Department who are responsible for the provision of curative and operative interventions during any major incident regarding:
 - the care for emergency evacuees and victims,
 - the provision of curative health care i.r.o. communicable diseases for disrupted populations (may be general population or limited to vulnerable populations and essential service operators).

EXECUTIVE DIRECTOR: ECONOMIC, ENVIRONMENTAL AND SPATIAL PLANNING

The Executive Director: Economic, Environmental and Spatial Planning must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management of the Spatial Planning & Urban Design, Environmental Resource Management, Planning & Building Development Management, Economic Development, Development Facilitation, City Development Strategy and Integrated Development Planning, and Markets and Trading Departments, with *specific reference* to the following Departments:

Director: Spatial Planning and Urban Design

The Director: Spatial Planning and Urban Design must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with specific reference to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness, through the long term spatial development framework to ensure integrated, pro-active and decisive decision making on major infrastructure, investment, development and settlement issues, including directives for local area integrated human settlement planning and the provision of Urban Design inputs for corporate strategic programmes to improve settlement planning,
- ensure that risk reduction and mitigation principles are applied as part of the environmental input into all development projects, including the identification of possible environmental disasters,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- identifying persons/organisations to contribute to post-emergency reports/debriefs,
- plan and ensure that risk reduction and disaster mitigation principles are adhered to in the recovery and redevelopment phases,
- include the reduction of natural disasters as an element in environmental education programmes,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Environmental Resource Management

The Director: Environmental Resource Management must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and must provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction, adaptation or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- identifying persons/organisations to contribute to post-emergency reports / debriefings,
- plan and ensure that risk reduction and disaster mitigation principles are adhered to in the recovery and redevelopment phases,
- ensure that risk reduction and mitigation principles are applied as part of the environmental input into all development projects,
- include the reduction of natural disasters as an element in environmental education programmes,
- monitoring the environment (ground, air, water and the ecosystem) for contamination and degradation,
- assist and advise on HazMat clean-up and decontamination of the environment,

- identification of land for mass burials if required,
- ensure linkages between this plan and infrastructure development framework,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Planning and Building Development Management

The Director: Planning and Building Development Management must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness, through the planning and building development initiatives being undertaken under the guidance of the department,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations, especially where buildings and other structures have been affected by the Incident,
- identifying persons / organisations to contribute to post-emergency reports/debriefs,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- plan and ensure that risk reduction and disaster mitigation principles are adhered to in the recovery and redevelopment phases,
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: SOCIAL DEVELOPMENT AND EARLY CHILDHOOD DEVELOPMENT

The Executive Director: Social Development and Early Childhood Development must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management to the Social Development, Early Childhood Development, Youth Development, Poverty Alleviation and Reduction, Social Entrepreneurship and Innovation, Gender and Women Empowerment, Disability and the Substance Abuse Departments, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness, where social development, poverty alleviation and reduction and substance abuse plans are able to contribute to this effort,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: COMMUNITY SERVICES

The Executive Director: Community Development must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management to the Sport, Recreation & Amenities, City Parks, Public Space Management, Zoned Public Open Space Management, Cemeteries, Funeral Parlours & Crematoria and the Library & Information Services Departments, with *specific reference* to the following Departments:

Director: Sports, Recreation and Amenities

The Director: Sports, Recreation and Amenities must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- emergency/contingency planning together with all role-players for Council amenities and facilities that are used for mass events,
- make available Council amenities and facilities for emergency assembly and/or shelter and mass care of persons displaced by emergencies or disasters,
- plan for, and assist with, the management of emergency shelter and mass care facilities, as well as for any designated assembly points, for persons displaced by emergencies or disasters,
- undertake facility management preparations in terms of the emergency evacuation plans for each amenities and facility,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: City Parks

The Director: Sports, Recreation and Amenities must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- assist with the removal of vegetation proving to be hazardous, both pro-actively and re-actively after any Incident,
- supplying any specific resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Cemeteries, Funeral Parlours and Crematoria

The Director: Cemeteries, Funeral Parlours & Crematoria must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Department and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- assist with the identification of mass burial sites, as may be required by any emergency/disaster occurrence,
- assist with the management of mass mortality after any emergency/disaster occurrence,
- supplying any specific resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: HUMAN SETTLEMENTS

The Executive Director: Human Settlements must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management of the Informal Settlements, Existing Settlements, New Settlements, Housing Land & Forward Planning, Development Services, Urbanisation Implementation and the National Housing Programmes Departments, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness, especially i.r.o. the high-risk informal settlements and other vulnerable communities,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- identify and make available alternative land and emergency housing/shelter for persons displaced by an emergency/disaster,
- to plan for, and assist with, the management of emergency shelter and mass care facilities, as well as at any evacuation assembly points, of persons displaced by any emergency or disaster,
- ensure that all human settlements and servicing projects promote disaster risk reduction,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: SAFETY AND SECURITY

The Executive Director: Safety and Security must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management of the DRMC, Fire & Rescue Service, 107 PECC, Metropolitan Police, Traffic Services, Law Enforcement & Security, with *specific reference* to the following aspects:

- establish and ensure the effective functioning of the Municipal Disaster Risk Management Advisory Forum,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- when necessary, and assisted by the Head: DRMC, submit reports containing recommendations for changes to the Municipal Disaster Risk Management Plan to Council.

The *specific responsibilities* of the following Departments and Services in this Directorate i.r.o. dealing with disaster risk management aspects are as follows:

Manager (Head) of the Disaster Risk Management Centre (DRMC)

The Manager (Head): DRMC is responsible for providing the strategy and management of the Disaster Risk Management Centre, focussing especially on the planning and functioning throughout all the phases of the Disaster Risk Management Continuum. He/she is also responsible for the performance by the DRMC of its disaster risk management functions, as per Section 44 of the Disaster Management Act, 57 of 2002. Amongst others, this includes the compilation, maintenance, distribution and the implementation and co-ordination, with the participation of all role-players, of the City's Municipal Disaster Risk Management Plan and supporting Hazard/Risk-specific and Departmental Disaster Risk Management Plans, including their risk reduction and resilience linkage to the CCT Integrated Development Plan's (IDP) projects.

Pro-actively, he/she must ensure that Disaster Risk Management Plans are compiled and maintained through integrated and co-ordinated mechanisms with all role-players identified for each hazard risk to the City, with *specific reference* to the following:

- establishment and maintenance of the City of Cape Town Disaster Risk Management Centre,
- establishment of the City of Cape Town's Disaster Management Advisory Forum (MDMAF),
- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction, adaptation and disaster preparedness,
- monitor integrated development projects for incorporation into the CCT's IDP in order to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,

- compilation of re-active departmental Disaster Risk Management plans to ensure service continuation during emergency/disaster situations,
- co-ordinating preparedness, response and mutual aid agreements with adjacent District Councils in the Western Cape and with Provincial and National Government Departments and with various external Entities including NGO's and Business,
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Re-actively, when a significant Incident, Emergency or Disaster situation occurs, the Manager: DRMC, in consultation with the Disaster Co-ordination Team (DCT), when convened, will assess and determine the appropriate response structures, represented by the various role-players. They will also determine when these structures can be scaled down or de-activated. *Specifically*, during the Disaster Response Phase, the Manager: DRMC must:

- consider the initiation of the declaration of a local state of disaster process, as per the Disaster Management Act, 57 of 2002, if/when this is deemed necessary and in consultation with all the relevant role-players,
- liaise with provincial and national officials,
- ensure effective media liaison and public early-warning regarding the emergency situation,
- provide situation reports to all internal and external role-players on a regular basis,
- co-ordinate response with CBO'S, NGO'S and business entities as appropriate,
- co-ordinate the protection of the health and safety of emergency responders,
- establish and maintain the required telecommunications links with all the relevant departments and entities,
- identify available resources to be utilised for disaster risk management purposes and as requested by the DCT,
- maintaining a central registry of evacuees,
- identifying persons who may require long term care and accommodation,
- identifying target audiences for post-emergency communications,
- ensuring acceptable level of emergency and essential services delivery for areas outside of the emergency/disaster area(s),
- after consultation with the DCT and the on-site responders, authorise emergency area re-entry when it is declared safe,
- initiate emergency area rehabilitation and reconstruction efforts with the identified role-players,
- identify persons/organisations to contribute to post-emergency debriefs and reports,
- identify persons/organisations to receive recognition for contributions to the emergency response.

Chief Fire Officer: Fire and Rescue Service

The Chief Fire Officer must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of reactive departmental Disaster Risk Management plans to ensure service continuation during emergency/disaster situations,
- preventing the outbreak or the spread of fires,
- fighting and the extinguishing of fires,
- protecting life and property from fire or other threatening danger,
- rescuing of life or property from fire or other danger,
- evacuating designated area(s) threatened by fire of both persons and animals,
- assist and manage hazardous material decontamination facilities and operations,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- identifying persons / organisations to contribute to post-emergency debriefs and reports,
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Manager: Public Emergency Communications Centre (107 PECC)

The Manager of the PECC must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management plans to ensure service continuation during emergency/disaster situations,
- provide and support the DRMC with a 24-hour communication facility for the notification of Major Incidents and any subsequent communication needs,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- identifying persons/organisations to contribute to post-emergency debriefs and reports,
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Chief: Metropolitan Police

The Chief: Metropolitan Police must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of reactive departmental Disaster Risk Management plans to ensure service continuation during emergency/disaster situations,
- co-ordinating Incident response with the South African Police Service and the other responding Emergency and Essential Services,
- protecting the safety of emergency responders, evacuated areas, affected communities and damaged or threatened property,
- controlling and dispersing crowds in and around emergency areas, as required,
- support the evacuation of designated area(s) which are threatened by any emergency of both persons and animals,
- control of access to and egress from the incident/emergency area(s),
- protecting private and public property, as required,
- identifying persons/organisations to contribute to post-emergency debriefs and reports,
- protecting essential service facilities and infrastructure, as required,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Chief: Traffic Services

The Chief: Traffic Services must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of reactive departmental Disaster Risk Management plans to ensure service continuation during emergency/disaster situations,
- co-ordinating Incident response with the South African Police Service and all the other responding emergency and essential services,

- assist the police with the controlling and dispersing crowds on the roadways in and around the emergency area(s),
- support the evacuation of designated area(s) which are threatened by any emergency of both persons and animals,
- managing and controlling traffic in and around emergency area(s), on evacuation routes and on emergency vehicles' access and egress routes,
- identifying persons/organisations to contribute to post-emergency debriefs and reports,
- protecting essential service facilities and infrastructure, as required,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Chief: Law Enforcement and Security

The Chief: Law Enforcement and Security must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of reactive departmental Disaster Risk Management plans to ensure service continuation during emergency/disaster situations,
- co-ordinating Incident response with the South African Police Service and the other responding Emergency and Essential Services,
- assist with the protection of emergency responders, evacuated areas, affected communities and damaged or threatened property,
- support the evacuation of designated area(s) which are threatened by any emergency of both persons and animals,
- control of access to and egress from emergency area(s),
- protecting public and private property, as required,
- identifying persons/organisations to contribute to post-emergency debriefs and reports,
- protecting essential service facilities and infrastructure, as required,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that is integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

COMMISSIONER: TRANSPORT FOR CAPE TOWN (TCT)

The Commissioner: Transport for Cape Town must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management to the Transport for Cape Town's Departments of Performance and Co-ordination, Planning, Contract Operations, Financial Management, Infrastructure, Maintenance, Network Management and Regulations, with *specific reference* to the following Departments:

Director: Performance and Co-ordination

The Director: Performance and Co-ordination must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its overarching performance monitoring and co-ordination roles in the TCT Directorate and assisting with change management, communication, HR and the training academy of this Directorate,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,

- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Planning

The Director: Planning must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its roles regarding the three core components in the integrated transport management process: the medium to long term plan and related policies, sector plans and strategies, including the Integrated Transport Plan (ITP) and the related strategies, standards and sector plans; and focus on systems planning and network design, including business development and long term strategic planning,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Contract Operations

The Director: Contract Operations must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its role regarding the new function that is to be assigned to the City and then combines the existing functions related to the operational management of the Integrated Rapid Transit (IRT) contracts, in order to make up the composite whole of scheduled road-based public transport services - essentially, all vehicle operator contracts will be managed in a unified manner, ensuring seamless public transport at a premium,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- taking appropriate measures to accommodate the transport network in the most expedient manner under the prevailing circumstances,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Financial Management

The Director: Financial Management must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its overall financial management role for the TCT Directorate,

- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations.

Director: Infrastructure

The Director: Infrastructure must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its role in transport infrastructure, including: all construction and capital investment related to public transport, non-motorised transport (NMT), roads and related local stormwater, and facilities; focus on the registration; management and monitoring of the public transport permanent assets, as well as the road network; undertake the registration as well as investment planning and infrastructure asset management profiling; and the new self-sufficient and sustainable premix plant will be developed and made operational,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Maintenance

The Director: Maintenance must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its role within the TCT Directorate for the following: the overall management and maintenance of all assets falling under the auspices of TCT; manage the districts and depots as well as a number of critical elements, including the registration and management of all plant for the rollout of the management and maintenance of the infrastructure; and will include the team that will be responsible for the road and stormwater interventions into informal settlements,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- confining and containing flood water where possible,
- providing technical advice in preventing or reducing the effects of flooding and storm-damage,
- liaison with the Department of Water Affairs as required,
- removing debris and other obstacles from transportation routes and other sites as required,
- repairing any damaged or dysfunctional road infrastructure to restore optimal functioning of the transport network in the shortest possible time,
- taking appropriate measures to accommodate traffic on the transport network in the most expedient manner under the prevailing circumstances,
- liaison with the Provincial Roads Department and SA National Roads Agency (SANRAL), as required,
- assist and advise on HazMat clean-up and decontamination of infrastructure and the environment,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Network Management

The Director: Network Management must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its role within the TCT Directorate for the following: to deal with the added functions in terms of the systems management; deal with the traffic-related systems, as well as the traffic management and public transport law enforcement and it will focus on the City's responsibility for what happens on its integrated transport network,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- taking appropriate measures to accommodate traffic on the transport network in the most expedient manner under the prevailing circumstances,
- liaison with the Provincial Transport Department and National Transport Department as required,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Regulations

The Director: Regulations ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness in its role within the TCT Directorate for the following:- when the City is assigned the Municipal Regulatory Entity function, as determined in the NLTA, it is essential that all related functions in terms of regulation are consolidated in one Department so that there can be synergy and the efficient management of regulation - included will be industry management and transition to, and managing of, operating licences,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation and functional performance during emergency/disaster situations,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: UTILITY SERVICES

The Executive Director: Utility Services must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management to the Cape Town Electricity, Water and Sanitation and Solid Waste Management Departments, with *specific reference* to the following Departments:

Director: Cape Town Electricity

The Director: Cape Town Electricity must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,

- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- co-ordinating response with businesses and industries affected by the emergency,
- co-ordinating response with National and Provincial Public Works Departments,
- co-ordinating response with Eskom regarding electricity supply to the City and regarding their Cape Town distribution areas,
- allocating available electricity supply,
- planning for alternate electricity distribution and supply,
- arranging for an alternate telephone or communication service, if required,
- controlling telecommunications system load,
- identifying buildings which are electrically unsafe,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Water and Sanitation

The Director: Water and Sanitation must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- co-ordinating response with businesses and industries affected by the emergency,
- controlling consumption of public water supply,
- providing alternate water supplies (potable, industrial and for fire-fighting usage),
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Solid Waste Management

The Director: Solid Waste Management must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- disposing of non-hazardous waste and refuse when and where required,
- advising and providing facilities for the disposal of hazardous waste,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXECUTIVE DIRECTOR: TOURISM, EVENTS AND MARKETING

The Executive Director: Tourism, Events and Marketing must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Directorate and to provide strategy and management to the Arts & Culture, Tourism, Major Events, Marketing, Strategic Assets, Film Office and World Design Capital 2014 Departments, with *specific reference* to the following Departments:

Director: Strategic Assets

The Director: Strategic assets must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- during major/mass events at the Cape Town Stadium, the Green Point Urban Park, the CTICC or at any other of the City's strategic assets, to ensure that the appropriate integrated DRM Plans and Procedures are drafted, according to the assessed disaster-risk for the event and as per the requirements of the Safety at Sports and Recreational Events Act, 2 of 2010,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Major Events

The Director: Major Events must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,
- that the appropriate integrated DRM Plans and Procedures are drafted for major / mass events at any public venue in the Cape Town municipal area, according to the assessed disaster-risk for the event and as per the requirements of the Safety at Sports and Recreational Events Act, 2 of 2010,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Film Office

The Director: Film Office must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation during emergency/disaster situations,

- that the appropriate integrated DRM Plans and Procedures are drafted for any major / mass events at a public venue in the Cape Town municipal area (as applicable), according to the assessed disaster-risk for the event and as per the requirements of the Safety at Sports and Recreational Events Act, 2 of 2010,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

Director: Tourism

The Director: Tourism must ensure that Disaster Risk Management Plans are compiled and maintained in his/her Service and to provide strategy and management, with *specific reference* to the following aspects:

- compilation of pro-active Departmental Disaster Risk Management programmes to support disaster risk reduction or elimination and disaster preparedness,
- identify appropriate integrated development projects for incorporation into the CCT's IDP to target the highest hazard risk areas and the most vulnerable communities to assist with disaster risk reduction efforts,
- compilation of re-active Departmental Disaster Risk Management Plans to ensure service continuation during emergency / disaster situations,
- identifying and prioritising essential services that may require restoration as the result of an emergency or disaster,
- supplying resources for Disaster Risk Management purposes as requested by the Disaster Co-ordination Team (DCT),
- establishing and maintaining a resources database that can be integrated with the DRMC's Disaster Risk Management Resources Database (DisRes).

EXTERNAL ENTITIES' DISASTER RISK REDUCTION AND PREPAREDNESS RESPONSIBILITIES

External Entities, which are role-players in dealing with the various identified hazards that have a disaster-risk potential, have been identified in the various Hazard/Risk-specific Disaster Risk Management Plans produced by the CCT. These Entities have participated in the DRM planning processes and are aware of the disaster risk reduction and preparedness initiatives required from them for these hazards. These are contained in the relevant Hazard/Risk-specific DRM Plans along with the response strategies and other relevant information. *Some of these External Entities are:-* the various National and Western Cape Government Departments, Eskom, SANRAL, SANParks, PRASA/MetroRail, Transnet/Port of Cape Town, ACSA, SA Weather Service, Robben Island Museum, V & A Waterfront, TMACC, the various disaster relief agencies and other NGO's and CBO's, SPCA, Commerce and Industry and others, as identified.

The DRMC and the different line-functions are also engaging with the broader community of Cape Town, especially the most vulnerable to the different hazards that *may* affect them at some time, using various communication methodologies to make them aware and prepared for the hazards.

7. DISASTER FUNDING ARRANGEMENTS

If the execution of obligations and duties as outlined in this Plan entails costs for any Service, provision must be made in the relevant Service's own budget.

Under certain circumstances the City will be reimbursed by National Government for disaster response efforts. However, the Disaster Management Act, 57 of 2002, Chapter 6, states that the Minister of Provincial Affairs and Local Government, may in the case of disaster relief funding, prescribe a percentage of the budget of a local authority which can be used as a threshold for accessing additional funding from the Department for response efforts.

This implies that the amount set as a threshold will have to be spent by the City on disaster response and relief before financial assistance may be considered by National Government.

The financial assistance to be provided by National Government may take into account what planning, prevention and mitigation measures were taken pro-actively and whether the situation could have been avoided or minimised had the City implemented the aforementioned actions.

If planning and prevention strategies have not been implemented the local authority may be penalised from a financial point of view. It is therefore vital that comprehensive Disaster Risk Management Plans are in place to substantiate any possible future financial claims.

8. ENTITY/DISCIPLINE DISASTER RISK MANAGEMENT PLANS

Each individual Directorate, Department or Service of the City of Cape Town, as well as applicable External Entities/Organisations, as indicated in the City's Disaster Risk Management Framework, are responsible for submitting their respective Entity's Disaster Risk Management Plan to the CCT Disaster Risk Management Centre, as per Section 52 of the Disaster Management Act, 57 of 2002. Disaster risk reduction aspects contained in these Entity/Discipline DRM Plans should also be incorporated into that Entity's submission to the Integrated Development Plan (IDP) to achieve the development targets of the City.

All Entity/Discipline DRM Plans, especially where they are identified as the Lead or as a Support Discipline to deal with one or more of the identified hazards, should primarily be directed at hazard prevention or disaster risk reduction as well as preparedness, but disaster response, relief and rehabilitation aspects must be included in their Plans and should be regularly exercised to ensure the Entity's/Discipline's readiness for any catastrophic event in the City.

SUGGESTED CONTENTS FOR THE DRAFTING OF A DISASTER / EMERGENCY RISK MANAGEMENT PLAN BY AN ORGANISATION / ENTITY

Aspects that should be addressed in the drafting of all Disaster/Emergency Risk Management Plans (for both the Hazard/Risk-specific and Organisational/Discipline DRM Plans) should encompass the following aspects:-

- ♦ **Planning Framework & Scope of the DRM Plan**
 - how the concept and principles of Disaster Risk Management are to be applied within the Entity's functional area;
 - the relevant Entity's role and responsibilities in terms of the national, provincial or municipal Disaster Risk Management frameworks.
- ♦ **Applicable References, Statutory Requirements and Linked Documents / SOP's**
- ♦ **Abbreviations and Definitions Used in the Plan**
- ♦ **Hazard Identification with risk (including disaster-risk), vulnerability and manageability assessments which will also indicate a priority rating**
- ♦ **The Entity's Disaster Risk Management Efforts for the:**
 - a. **evaluation and description of Infrastructure / Organisation available**, e.g. the Entity's own Disaster Risk Management Resources Database (its capacity to fulfil its role and responsibilities)
 - b. **hazard prevention through risk elimination efforts**, e.g. The Entity's initiative to remove hazards, alternative processes (particulars of its Disaster Risk Management strategies), **or**, if prevention is not possible, to focus on:
 - c. **hazard mitigation through risk reduction efforts**, e.g. The Entity's education, awareness and training programmes, engineering and technical solutions (including budgets and project management), legislative compliance, safety culture, economic incentives, and preparedness.
- ♦ **Preparedness planning for major risks that cannot be eliminated**

The Entity's contingency strategies and emergency procedures in the event of a hazard occurrence leading to an emergency or disaster, including measures to finance these strategies, and –

 - a. **Response planning**

The Entity's role and responsibilities regarding a response to an emergency/disaster situation, and –

 - (i) draft general and specific response plans and procedures for the identified hazards, i.e. structural fire, chemical spills, flooding, service disruptions, strikes, vandalism, etc.
 - (ii) establish an emergency management structure and the allocation of responsibilities, including Standard Operating Procedures (SOPs), education and training requirements
 - (iii) set-up integrated communications systems and other resources
 - (iv) draft notification and activation procedures, including:
 - stand-by Lists; emergency contact numbers
 - resources to be used; additional resources

(v) draft communication and liaison protocols with other Services and Responders = Internal and external communication lines (who informs who, who reports to whom).

b. Other Planning

Do any other required contingency planning and also develop business continuity and disaster recovery plans for their own Organisation/Entity, including the provision for possible disaster-related community rehabilitation projects and programmes.

c. Awareness and Education Efforts

Ensure that the Entity's strategies = BEFORE (Prevention, Mitigation and Preparedness), DURING THE INCIDENT (Notifications, actions and advisories) and AFTER (Advisories, public information and education), are communicated to all staff members and other role-players.

d. Evaluation and Maintenance programmes

The DRM Plan must be regularly reviewed and updated. Evaluate any incident occurrences and adjust as necessary, to be ready to deal with the next hazard.

9. SUMMARY OF THE COMPREHENSIVE DISASTER-RISK, VULNERABILITY AND MANAGEABILITY ASSESSMENT FOR THE CITY OF CAPE TOWN

An independent comprehensive disaster risk assessment for the City, incorporating both city-wide (technical) and community-based aspects, was undertaken during 2009/10 by an external service provider, Aurecon, in order to comply with the standards envisaged by the Disaster Management Act, 57 of 2002 and the National Disaster Management Framework, 2005.

Some definitions i.r.o. the terminology used in this Section are given below:-

COPING CAPACITY (MANAGEABILITY) - The ability of people, organizations and systems, using available skills and resources, to face and manage adverse conditions, emergencies or disasters. *Comment: The capacity to cope requires continuing awareness, resources and good management, both in normal times as well as during crises or adverse conditions. Coping capacities contribute to the reduction of disaster risks.*

CRITICAL FACILITIES - The primary physical structures, technical facilities and systems which are socially, economically or operationally essential to the functioning of a society or community, both in routine circumstances and in the extreme circumstances of an emergency. *Comment: Critical facilities are elements of the infrastructure that support essential services in a society. They include such things as transport systems, air and sea ports, electricity, water and communications systems, hospitals and health clinics, and centres for fire, police and public administration services.*

DISASTER RISK REDUCTION - The concept and practice of reducing disaster risks through systematic efforts to analyse and manage the causal factors of disasters, including through reduced exposure to hazards, lessened vulnerability of people and property, wise management of land and the environment, and improved preparedness for adverse events.

EARLY WARNING SYSTEM - The set of capacities needed to generate and disseminate timely and meaningful warning information to enable individuals, communities and organizations threatened by a hazard to prepare and to act appropriately and in sufficient time to reduce the possibility of harm or loss.

EXPOSURE - People, property, systems, or other elements present in hazard zones that are thereby subject to potential losses.

HAZARD - A potentially dangerous phenomenon, substance, human activity or condition that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage.

MITIGATION - The lessening or limitation of the adverse impacts of hazards and related disasters.

PREPAREDNESS - The knowledge and capacities developed by governments, professional response and recovery organizations, communities and individuals to effectively anticipate, respond to, and recover from, the impacts of likely, imminent or current hazard events or conditions.

PREVENTION - The outright avoidance of adverse impacts of hazards and related disasters.

RECOVERY - The restoration, and improvement where appropriate, of facilities, livelihoods and living conditions of disaster-affected communities, including efforts to reduce disaster risk factors.

RESILIENCE - The ability of a system, community or society exposed to hazards to resist, absorb, accommodate to and recover from the effects of a hazard in a timely and efficient manner, including through the preservation and restoration of its essential basic structures and functions.

RESPONSE - The provision of emergency services and public assistance during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected.

RISK (or DISASTER RISK) - The measure of potential harm from a hazard or threat. Risk is usually associated with the human inability to cope with a particular situation. In terms of disaster management it can be defined as the probability of harmful consequences, or expected losses death, injury, damage to property and the environment, jobs, disruption of economic activity or social systems. Hazards will affect communities differently in terms of ability and resources with which to cope. Poorer communities will be more at risk than others.

RISK ASSESSMENT - A methodology to determine the nature and extent of risk by analysing potential hazards and evaluating existing conditions of vulnerability that together could potentially harm exposed people, property, services, livelihoods and the environment on which they depend.

RISK MANAGEMENT - The systematic approach and practice of managing uncertainty to minimize potential harm and loss.

VULNERABILITY - The degree to which people, property, the environment or social and economic activity - in short, all elements-at-risk - are susceptible to injury, loss of life, damage, disruption, exploitation or incapacitation by all hazards.

The Disaster Risk Assessment, where the **PREDICTABILITY, IMPACT (SEVERITY / CONSEQUENCES), VULNERABILITY AND THE COPING CAPACITY (MANAGEABILITY)** requirements that a particular hazard poses, will determine the priorities for disaster risk management programmes and projects. The amount of possible benefit to be derived from a risk reduction and preparedness project in terms of lives protected, livelihoods secured and property or the environment/natural resources defended, will be the criteria that determines these priorities.

Note that disaster risk assessments should be undertaken on a regular basis so that all the above-mentioned aspects can be re-assessed for each hazard and the appropriate risk reduction and preparedness adjustments made.

9.1 COMPREHENSIVE DISASTER RISK ASSESSMENT: DETERMINATION OF THE RELATIVE DISASTER RISK PRIORITISATION

Disaster Risk Quantification

The disaster risk profiling assessment normally produces so many hazards that must be addressed that the sheer volume of work tends to be overwhelming. Consequently, a **Relative Disaster Risk Prioritisation Assessment** is conducted to assist the Municipality in their disaster risk management planning.

The **Relative Disaster Risk Prioritisation Assessment** involves the following action steps:-

- **Quantify the Hazard**
- **Quantify Vulnerabilities**
- **Quantify the Disaster Risk Manageability/Coping Capacity**
- **Determination of the Hazard's Overall Disaster Risk Score and Relative Priority Rating.**

Description of the (Simplified) Measurement Criteria to Quantify each Hazard

The Hazard Score has two components, the Probability of Occurrence and Estimation of Maximum Impact/Severity and Consequences that the particular hazard poses. They are all described below along with the Vulnerabilities, Disaster Risk Manageability/Coping-capacity and the Determination of the Hazard's Overall Disaster Risk Score and Relative Priority Rating.

Probability of Occurrence

Each hazard's characteristics, past occurrences and any other relevant aspects are assessed and a general probability of occurrence rating is then assigned. Due to the different hazards being very wide-ranging and yet striving to assign a reasonable comparative rating to each of hazards, these ratings are broadly defined as follows:-

Very Likely = the probability of one or more occurrences of this type of hazard within a relatively short period, i.e. one or more times within a month;

Likely = the probability of one or more occurrences of this type of hazard within the short-to-medium period, i.e. one or more times with 6 months;

Possible = the probability of one or more occurrences of this type of hazard within the medium to long term, i.e. one or more occurrences in 20 years;

Unlikely = the probability of one or more occurrences of this type of hazard in the long term, i.e. one or more occurrences in 50 or more years.

Estimation of Maximum Impact/Severity and Consequences of the Hazard

Each hazard's characteristics, the assessment of severity and consequences of hazard occurrences elsewhere, the area's and population's profile and various other factors are considered in order to estimate the possible maximum impact that an occurrence of this hazard may have. Also, due to the different hazards being very wide-ranging and yet striving to assign a reasonable comparative rating to each of hazards, these ratings are broadly defined as follows:-

Extreme = the description of the *possible maximum impact and consequences* of major emergency/disaster proportions that this type of hazard may have, i.e. hazard will hold extreme consequences to a community or area;

Moderate = the description of the *possible maximum impact and consequences* of smaller emergency proportions that this type of hazard may have, i.e. hazard will hold moderate consequences to a community or area;

Insignificant = the description of the *possible maximum impact and consequences* of incident or major incident proportions that this type of hazard may have, i.e. hazard will hold relatively minor consequences to a community or area.

Quantification of Vulnerability to the Community and/or Environment and/or the Economy

The hazard vulnerability incorporates *various factors* which, on their own or together, indicate the degree to which a community is vulnerable to each of the hazards in the region. These factors are:-

Societal = the prevailing community/societal circumstances and characteristics, which will be further weakened due to a particular hazard occurrence

Environmental = the prevailing environmental circumstances and characteristics, which will be further weakened due to a particular hazard occurrence

Infrastructure, especially critical facilities and services = the prevailing infrastructure and services' characteristics, which will be further weakened due to a particular hazard occurrence

Economy = the prevailing characteristics of a particular community's economy, which will be further weakened due to a particular hazard occurrence, due to the replacement and installation costs for damaged critical assets or loss of use or even revenue income due to service outage, etc.

N.B. Political and Legal Vulnerabilities may also be required to be assessed, depending on the Community's circumstances, but these have only been broadly considered for this vulnerability quantification.

The above-mentioned vulnerability factors are each assessed and the results then grouped together to indicate only a broad vulnerability description, as follows:-

Small Vulnerability = the prevailing societal, environmental, infrastructure and economic circumstances and characteristics which will decrease their vulnerability only in a small measure on the occurrence of the hazard;

Vulnerable = the prevailing societal, environmental, infrastructure and economic circumstances and characteristics which will decrease their vulnerability only moderately on the occurrence of the hazard;

Very Vulnerable = the prevailing societal, environmental, infrastructure and economic circumstances and characteristics which will decrease their vulnerability to a large extent on the occurrence of the hazard.

Manageability/Coping-capacity to offset the Hazard's Impact and Prevailing Vulnerabilities

The general rating of the overall preparedness for response to any hazard occurrence is quantified, considering the effectiveness or placement of the following aspects:-

- **Public Awareness:** The over-all awareness of people living in a potential impact area of a hazard to that hazard is one of the factors that determine the risk manageability of a community.
- **Legislative Framework:** The legislative framework that governs a particular hazard event is one of the factors that determines the risk manageability of a community.
- **Early Warning Systems:** The early warning systems for a hazard occurrence.
- **Government Response:** The response of the municipality, the provincial and national government to a hazard occurrence.
- **Government Resources:** The resources available to the municipality and to the provincial and national government for a hazard occurrence.
- **Existing Risk Reduction Measures:** The existing risk reduction measures of the municipality, the provincial and national government to a hazard occurrence.
- **Public Participation Measures:** The existing public participation measures of the municipality and the provincial government to a hazard event.
- **Municipal Management Capabilities:** The over-all management capability of the relevant municipality for a hazard event.

A simple model has been utilised to quantify the degree to which a community (this word must be seen in the holistic context, i.e. the population together with the local services and support) can intervene and manage the negative consequences of a hazard event. For the purpose of this Disaster Risk Assessment (DRA) description all the above-mentioned hazard management aspects' ratings are grouped together to indicate one of the following 4 ratings, viz. **Good, Adequate, Basic** and **Poor**.

Good: Indicates that the community has a *high level of manageability* for this type of hazard and it is unlikely that the hazard occurrence will impact negatively on the community.

Adequate: Indicates that the community has an **average level of manageability** for this type of hazard and it is possible that the hazard occurrence *may* impact negatively on the community.

Basic: Indicates that the community has a **basic level of manageability** for this type of hazard and it is **likely that the hazard occurrence will impact negatively** on the community.

Poor: Indicates that the community has a **poor level of manageability** for this type of hazard and it is **highly likely that the hazard occurrence will impact negatively** on the community.

Determination of the Hazard's Overall Disaster Risk Score and Relative Priority Rating

The **OVERALL DISASTER RISK SCORE** and **RELATIVE PRIORITY RATINGS** for each hazard, incorporates **ALL** the factors indicated above so that a comparison and prioritisation can be made between all the identified hazards which may have a disaster potential.

In the risk analysis by Aurecon they focused on calculating the relative risk priorities of a hazard event, **using a simplified risk prioritisation model to calculate the relative priorities of the disaster risk** to which communities in a specific area are exposed:-

Relative Disaster Risk Priority Score = Hazard score X Vulnerability score / Manageability score.

The result will then indicate their priority for efforts of hazard prevention or risk reduction/mitigation, greater planning, awareness and preparedness (incl. increasing coping capacities for response) efforts to lower the risk. The indicator ratings through using this methodology the following priority indicators have been used:-

Very High (intolerable) Risk Priority, with a very high Relative Risk Priority: Should the relative risk priority of a particular hazard event impacting on a community be very high, that community faces a potentially **destructive** risk with a high probability of hazard occurrence, for which they are **unprepared**. This combination equates to an **intolerably high risk** and may be a disaster in the making. For these **very high risks urgent risk reduction interventions are then required!**

High Risk Priority, with a high Relative Risk Priority: If the relative risk priority of a particular hazard event impacting on a community is high, the risks to which these communities are exposed are potentially **destructive**, but the community is modestly prepared for this hazard occurrence. This combination equates to a **high risk** and a combination of **risk reduction interventions** and **preparedness plans** must be initiated for these risks.

Medium Risk Priority, with a medium Relative Risk Priority: The relative risk priority of a particular hazard event impacting on a community is medium - this translates in very little risk for a largely prepared community for this hazard occurrence. This combination equates to a **medium risk** and **preparedness plans** for these risks must be prepared, with less risk reduction efforts being required.

Lower Risk Priority, with a low Relative Risk Priority: Relative risk priority of a particular hazard event impacting on a community is of a **lower risk**, indicating a prepared community, but on-going preparedness and basic risk reduction is still required.

INDICATION OF THE INTEGRATION OF FACTORS FOR EACH HAZARD'S RELATIVE PRIORITY DETERMINATION

Measurement Criteria for each Hazard Assessed	Criteria's Assessment Rating	Integration of factors to determine the Relative Priority	Hazard's Relative Priority Rating (incorp. ALL factors)
Probability of Occurrence	Very Likely		
	Likely		
	Possible		
	Unlikely		
Maximum Impact / Severity & Consequences	Extreme		Very High Priority
	Moderate		
	Insignificant		
Vulnerability of Community and/or Environment and/or Economy	Very Vulnerable		
	Vulnerable		High Priority
	Small Vulnerability		Medium Priority
			Lower Priority
Manageability/Coping-Capacity by Responders to offset Hazard's Impact & Vulnerabilities	Good		
	Adequate		
	Basic		
	Poor		

- 9.2 The hazards identified through the independent Comprehensive Disaster Risk Assessment for the City of Cape Town during 2009/2010 (refer to the Table overleaf) have all been incorporated into the City's Disaster Risk Reduction, Planning & Preparedness Programme and, using the above-mentioned risk assessment methodology, will be prioritised according to their relative priority ratings.

OVERLEAF IS THE 2009/10 COMPREHENSIVE DISASTER RISK ASSESSMENT TABLE INDICATING THE RELEVANT HAZARD PRIORITIES AND THEIR RESPECTIVE DISASTER RISK MANAGEMENT PLANS ...

SUMMARY OF OUTCOME OF THE COMPREHENSIVE DISASTER RISK ASSESSMENT OF 2009/10 FOR THE CITY OF CAPE TOWN METROPOLE (BY AURECON)

HAZARD TYPE	CATEGORY	HAZARD INCORPORATED INTO THE RELEVANT DISASTER RISK MANAGEMENT PLAN:-	RATING OF PROBABILITY OF THE HAZARD OCCURRENCE	RATING OF EST. MAXIMUM IMPACT, IF THE HAZARD OCCURS	VULNERABILITY RATING (sections of the community or infrastructure or economy)	MOST VULNERABLE AREA(S) IN CAPE TOWN	GENERAL RATING OF RESPONDERS' COPING-CAPACITY	OVERALL DISASTER RISK & THE RELATIVE PRIORITY RATING, INCORP. ALL FACTORS
River & Flash Flood Hazard	Hydro-meteorological	Flooding & Storms Hazards	Likely (1 in 6 months)	Moderate	Very vulnerable	Along all river system's floodplains	Good	High
Water-table Flooding Hazard	Hydro-meteorological	Flooding & Storms Hazards	Very likely (1+ in 1 month)	Extreme	Very vulnerable	All low-lying areas, especially those without adequate drainage	Adequate	Very high
Storm-water Overflow Flood Hazard	Technological	Flooding & Storms Hazards	Very likely (1+ in 1 month)	Extreme	Vulnerable	All formal stormwater systems	Adequate	Very high
Severe Storms Hazard	Hydro-meteorological	Flooding & Storms Hazards	Very likely (1+ in 1 month)	Extreme	Vulnerable	Entire municipal area	Adequate	Very high
Gale-force Wind Hazard	Hydro-meteorological	Flooding & Storms Hazards	Very likely (1+ in 1 month)	Moderate	Vulnerable	Entire municipal area	Adequate	High
Tornado Hazard	Hydro-meteorological	Flooding & Storms Hazards	Possible (1 in 20 years)	Extreme	Vulnerable	Entire municipal area	Adequate	Medium
Lightning Strike Hazard	Hydro-meteorological	Flooding & Storms Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	Lower
Sea-level Rise Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Possible (1 in 20 years)	Extreme	Very vulnerable	Along flatter areas of entire coastline	Adequate	Very high
Storm (Sea) Surge Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Very likely (1+ in 1 month)	Moderate	Vulnerable	Along flatter areas of entire coastline	Adequate	High
Coastal Erosion Hazard	Environmental	Climate Change & Coastal Zone Process Hazards	Very likely (1+ in 1 month)	Moderate	Vulnerable	Table Bay coastline	Adequate	Medium
	Environmental	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Insignificant	Vulnerable	Atlantic Seaboard coastline	Adequate	Lower
	Environmental	Climate Change & Coastal Zone Process Hazards	Very likely (1+ in 1 month)	Moderate	Vulnerable	False Bay coastline	Adequate	Lower
Sand-dune Migration Hazard	Geological	Climate Change & Coastal Zone Process Hazards	Very likely (1+ in 1 month)	Insignificant	Vulnerable	Table Bay coastline	Adequate	Lower
	Geological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Atlantic Seaboard coastline	Adequate	High
	Geological	Climate Change & Coastal Zone Process Hazards	Very likely (1 in 1 month)	Insignificant	Vulnerable	False Bay coastline	Adequate	Medium
Saline Intrusion of Aquifers Hazard	Geological	Climate Change & Coastal Zone Process Hazards	Very likely (1 in 1 month)	Moderate	Vulnerable	Atlantis Aquifer	Adequate	Medium
	Geological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Cape Flats Aquifer	Adequate	Medium
	Geological	Climate Change & Coastal Zone Process Hazards	Very likely (1 in 1 month)	Extreme	Vulnerable	Langebaan Aquifer	Adequate	High
	Geological	Climate Change & Coastal Zone Process Hazards	Unlikely (1 in 50 years)	Moderate	Vulnerable	Table Mountain Aquifer Group	Adequate	Lower
Tsunami Hazard	Geological	Climate Change & Coastal Zone Process Hazards	Possible (1 in 20 years)	Extreme	Very vulnerable	Table Bay coastline - low-lying areas	Basic	Medium
	Geological	Climate Change & Coastal Zone Process Hazards	Unlikely (1 in 50 years)	Extreme	Vulnerable	Atlantic Seaboard coastline - low-lying areas	Basic	Lower
	Geological	Climate Change & Coastal Zone Process Hazards	Unlikely (1 in 50 years)	Extreme	Very vulnerable	False Bay coastline - low-lying areas	Basic	Lower
Harmful Algal Bloom (Red Tide)- Marine (Sea) - Hazard	Biological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Along entire coastline	Adequate	Lower
Stranding of Whales & Other Marine Animals	Environmental	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Along entire coastline	Adequate	Medium
Change in Rainfall Pattern Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Extreme	Very vulnerable	Entire municipal area	Adequate	Medium
Drought Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	Medium
Change in Aquifer Recharge Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Atlantis Aquifer	Adequate	Medium
	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Cape Flats Aquifer	Adequate	Medium
	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Langebaan Aquifer	Adequate	Medium
	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Insignificant	Vulnerable	Table Mountain Aquifer Group	Adequate	Lower
Heat Wave Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	Lower
Ultra-violet (UV) Radiation Exposure Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	Lower
Cold Spell Hazard	Hydro-meteorological	Climate Change & Coastal Zone Process Hazards	Likely (1 in 6 months)	Moderate	Very vulnerable	Homeless & poor communities in the municipal area	Adequate	Lower

SUMMARY OF OUTCOME OF THE COMPREHENSIVE DISASTER RISK ASSESSMENT OF 2009/10 FOR THE CITY OF CAPE TOWN METROPOLE (BY AURECON)

HAZARD TYPE	CATEGORY	HAZARD INCORPORATED INTO DISASTER RISK MANAGEMENT PLAN:-	RATING OF PROBABILITY OF THE HAZARD OCCURRENCE	RATING OF EST. MAXIMUM IMPACT, IF THE HAZARD OCCURS	VULNERABILITY RATING (sections of the community or infrastructure or economy)	MOST VULNERABLE AREA(S) IN CAPE TOWN	GENERAL RATING OF RESPONDERS' COPING-CAPACITY	OVERALL DISASTER RISK & RELATIVE PRIORITY RATING INCORP. ALL FACTORS
Wildfire (Veld, Forest, Mountain & Urban-Edge Fires) Hazards	Biological	Wildfire Hazards	Very likely (1+ in 1 month)	Moderate	Vulnerable	All "open" areas, incl. veld, forest, mountain and urban-fringe areas in CT	Good	High
Human Communicable/Infectious Disease Outbreak Hazards	Biological	Human Communicable Disease Outbreak	Likely (1 in 6 months)	Moderate	Very vulnerable	Possible in all communities, but especially in Informal Settlements	Good	Medium
Animal Communicable/Infectious Disease Outbreak Hazards	Biological	Animal Communicable Disease Outbreak	Likely (1 in 6 months)	Moderate	Vulnerable	Possible in all agricultural areas, as well as in animals living in all suburban communities	Adequate	Medium
Pest Infestation and Plant Disease Outbreak Hazards	Biological	Pest Infestation Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Possible in all agricultural areas, in Informal Settlements and around older buildings	Adequate	High
Earthquake - Strong Ground Motion/Shaking - Hazards	Geological	Earthquake (Seismic) Hazards	Unlikely (1 in 50 years)	Moderate	Vulnerable	Peninsula mountain chain region	Adequate	Lower
	Geological	Earthquake (Seismic) Hazards	Unlikely (1 in 50 years)	Extreme	Very vulnerable	Cape Flats region	Adequate	Medium
	Geological	Earthquake (Seismic) Hazards	Unlikely (1 in 50 years)	Extreme	Very vulnerable	West coast region	Adequate	Medium
	Geological	Earthquake (Seismic) Hazards	Unlikely (1 in 50 years)	Moderate	Vulnerable	Northern Suburbs & Helderberg region	Adequate	Lower
Earthquake - Fault Rupture - Hazards	Geological	Earthquake (Seismic) Hazards	Unlikely (1 in 50 years)	Extreme	Very vulnerable	Possible along Milnerton Fault (N/west to S/east from Milnerton to Macassar)	Adequate	Medium
Earthquake - Soil Liquefaction - Hazards	Geological	Earthquake (Seismic) Hazards	Unlikely (1 in 50 years)	Extreme	Very vulnerable	Possible in the Cape Flats sandy areas if occurrence during high water table	Adequate	Medium
Rockfall, incl. Landslide & Mudslide Hazards	Geological	Slope Instability Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Along all mountain slopes and steep hillsides	Adequate	High
Solar Storm / Geomagnetic 'space weather' Hazards	Geological	Cosmic Impact Hazards	Unlikely (1 in 50 years)	Moderate	Vulnerable	Entire municipal area	Adequate	Lower
Bolide (Asteroid/Meteorite) Impact & "Space Debris" Impact Hazards	Geological/Technological	Cosmic Impact Hazards	Unlikely (1 in 50 years)	Extreme	Very vulnerable	Entire municipal area	Adequate	Lower
Structural Fire - formal structures - Hazards	Technological	Structural Fire Hazards	Very likely (1+ in 1 month)	Moderate	Vulnerable	All formal structures in entire municipal area	Adequate	High
Structural Fire - informal settlement - Hazards	Technological	Structural Fire Hazards	Very likely (1+ in 1 month)	Extreme	Very vulnerable	All informal settlements and backyard shacks in the entire municipal area	Adequate	Very high
Aircraft Incident Hazards	Technological	Aircraft Incident	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area, but mainly below flight paths & near airport/airfields	Good	Lower
Rail Incident Hazards	Technological	Rail Incident	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area, along railway network	Good	Lower
Shipping Incident Hazards	Technological	Shipping Incident	Likely (1 in 6 months)	Moderate	Vulnerable	Along entire coastline, especially whole north-western seaboard and harbours	Good	Lower
Road Incident Hazards	Technological	Road Incident	Very likely (1+ in 1 month)	Moderate	Very vulnerable	Along entire road network in the municipal area, especially highways & at intersections	Good	High
Aerial Cableway Incident Hazards	Technological	Aerial Cableway Incident	Unlikely (1 in 50 years)	Moderate	Vulnerable	Table Mountain, on TMACC system	Good	Lower
Structural Failure/Collapse hazards	Technological	Structural Failure Hazards	Unlikely (1 in 50 years)	Moderate	Vulnerable	All built structures in the entire municipal area	Adequate	Lower
Expansive Soils Hazard	Geological	Structural Failure Hazards	Unlikely (1 in 50 years)	Insignificant	Vulnerable	Northern suburbs & Helderberg region where clay soils occur	Adequate	Lower
Koeberg Nuclear Power Station Radiological Release Hazard	Technological	Koeberg Nuclear Power Station Radiological Release Hazard	Unlikely (1 in 50 years)	Extreme	Very vulnerable	Mainly within 16km radius from KNPS, but up to 80km radius possible, dependant on the wind direction & amount of release	Adequate	High
Accidental HazMat Release (fire/spill/leak/explosion) Hazards	Technological	Accidental HazMat Release Incident	Very likely (1+ in 1 month)	Moderate	Vulnerable	Entire municipal area, especially at places using Hazardous materials & on transport routes	Adequate	High
Ocean / Coastal Oil Spill Hazard	Technological	Coastal Oil Spill Hazard	Likely (1 in 6 months)	Moderate	Vulnerable	Along entire coastline, especially whole north-western seaboard and harbours	Adequate	Medium

SUMMARY OF OUTCOME OF THE COMPREHENSIVE DISASTER RISK ASSESSMENT OF 2009/10 FOR THE CITY OF CAPE TOWN METROPOLE (BY AURECON)

HAZARD TYPE	CATEGORY	HAZARD INCORPORATED INTO DISASTER RISK MANAGEMENT PLAN:-	RATING OF PROBABILITY OF THE HAZARD OCCURRENCE	RATING OF EST. MAXIMUM IMPACT, IF THE HAZARD OCCURS	VULNERABILITY RATING (sections of the community or infrastructure or economy)	MOST VULNERABLE AREA(S) IN CAPE TOWN	GENERAL RATING OF RESPONDERS' COPING-CAPACITY	OVERALL DISASTER RISK & RELATIVE PRIORITY RATING INCORP. ALL FACTORS
(Prolonged) Disruption of Electricity (Power) Supply Hazard	Technological	Disruption of Essential Services & Critical Infrastructure	Very likely (1+ in 1 month)	Extreme	Very vulnerable	Entire municipal area	Adequate	High
(Prolonged) Disruption of Water Supply (Bulk Water, Water Transfer Tunnels or Urban Reticulation) Hazard	Technological	Disruption of Essential Services & Critical Infrastructure	Very likely (1+ in 1 month)	Extreme	Vulnerable	Entire municipal area	Adequate	High
Dam or Local Water Service Reservoir Failure or Break Hazard	Technological	Disruption of Essential Services & Critical Infrastructure	Unlikely (1 in 50 years)	Extreme	Very vulnerable	Entire municipal area at or near to dams & water reservoir locations	Adequate	Medium
(Prolonged) Disruption of the Sewerage / Sanitation System Hazard	Technological	Disruption of Essential Services & Critical Infrastructure	Very likely (1+ in 1 month)	Moderate	Vulnerable	Entire municipal area	Adequate	High
(Prolonged) Disruption of Other Essential Services & Critical Infrastructure Hazards = Health Services; Transportation Services (various Modes); Solid Waste Management Services; Telecommunications & ICT Services; Government Administration Services; Other Critical / Strategic Infrastructure, Services & Activities – Governmental, Commercial, Industrial, Agricultural & Tourism;	Technological	Disruption of Essential Services & Critical Infrastructure	Likely (1 in 6 months)	Extreme	Very vulnerable	Entire municipal area	Adequate	Medium
Bomb Threat & Hostage-taking Hazards	Socio-Economic-Political	Social Disorder Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	Medium
Bombing & Terrorism Hazards	Socio-Economic-Political	Social Disorder Hazards	Unlikely (1 in 50 years)	Moderate	Vulnerable	Entire municipal area	Adequate	Lower
Deliberate Chemical or Biological or Radio-active (CBR) Material's Release Hazard	Socio-Economic-Political	Social Disorder Hazards	Unlikely (1 in 50 years)	Moderate	Vulnerable	Entire municipal area	Adequate	Lower
Civil Unrest & Vandalism Hazard	Socio-Economic-Political	Social Disorder Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	High
Xenophobia / Social Conflict Hazard	Socio-Economic-Political	Social Disorder Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	Medium
Air Pollution Hazard	Environmental	Environmental Pollution Hazards	Very likely (1+ in 1 month)	Moderate	Vulnerable	Entire municipal area	Adequate	High
Ground / Soil Pollution Hazard	Environmental	Environmental Pollution Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	Medium
Illegal / Uncontrolled Solid Waste Disposal / Dumping Hazard	Environmental	Environmental Pollution Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Entire municipal area	Adequate	High
Surface Water Pollution / Eutrophication (Harmful or Toxic Algal Blooms - inland waterbodies) Hazards	Environmental	Environmental Pollution Hazards	Likely (1 in 6 months)	Extreme	Vulnerable	Entire municipal area	Adequate	High
Groundwater (Sub-surface Water / Aquifer) Pollution Hazard	Environmental	Environmental Pollution Hazards	Likely (1 in 6 months)	Extreme	Vulnerable	Atlantis Aquifer	Adequate	Lower
	Environmental	Environmental Pollution Hazards	Very likely (1+ in 1 month)	Extreme	Very vulnerable	Cape Flats Aquifer	Adequate	Medium
	Environmental	Environmental Pollution Hazards	Likely (1 in 6 months)	Extreme	Vulnerable	Langebaan Aquifer	Adequate	Lower
	Environmental	Environmental Pollution Hazards	Unlikely (1 in 50 years)	Moderate	Small vulnerability	Table Mountain Aquifer Group	Adequate	Lower
Land Degradation Hazards	Environmental	Land & Biodiversity Degradation Hazards	Likely (1 in 6 months)	Extreme	Vulnerable	Entire municipal area	Adequate	Medium
Soil Erosion Hazards	Environmental	Land & Biodiversity Degradation Hazards	Likely (1 in 6 months)	Moderate	Vulnerable	Mainly in agricultural and mountainous areas	Adequate	Medium
Desertification Hazard	Environmental	Land & Biodiversity Degradation Hazards	Unlikely (1 in 50 years)	Moderate	Not vulnerable	Mainly in the agricultural areas	Adequate	Lower
Extinction of Species (Fauna) Hazards	Environmental	Land & Biodiversity Degradation Hazards	Likely (1 in 6 months)	Extreme	Vulnerable	Entire municipal area, especially in the remaining natural "open" areas	Adequate	Medium
Extinction of Species (Flora) - Loss of Fynbos, Renosterveld & Strandveld Ecosystems & Deforestation Hazards	Environmental	Land & Biodiversity Degradation Hazards	Likely (1 in 6 months)	Extreme	Very vulnerable	Entire municipal area, especially in the remaining natural "open" areas	Adequate	Medium
Depletion of Wetlands Hazard	Environmental	Land & Biodiversity Degradation Hazards	Likely (1 in 6 months)	Extreme	Very vulnerable	In the wetland areas of False Bay and the entire north-western seaboard	Adequate	Medium

COMMENT BY AURECON, THE INDEPENDENT SERVICE PROVIDER, ON THEIR FINDINGS REGARDING THE CITY OF CAPE TOWN'S COMPREHENSIVE DISASTER RISK ASSESSMENT OF 2009/10

The Top 10 disaster risks include hazards less familiar to Disaster Risk Management based on current reality. The threat of climate change is not to be negated, and has resulted in three hazards being elevated to posing high levels of risk to the City. The nature of the topography of the Peninsula makes itself extremely vulnerable to sea level rise and the intrusion of salt water into the aquifers. Other surprising results are the inclusion in the Top 10 risk are: a change in aquifer recharge, a change in rainfall patterns and the relatively low risk score of some of the flooding hazard types. In explaining this, it must again be emphasized that a risk score is determined by **hazard, vulnerability and coping capacity** scores. Even if a hazard is a frequent and familiar occurrence (such as floods), it will not necessarily have a high risk score, due to, for example, a high level of coping capacities, *inter alia* government response and awareness. The opposite is also true, and is the reason for the elevated relative risk scores of the previously 'unknown' hazards. It must also be mentioned that the **probability and severity of a hazard** affects the risk score to a large extent. Even though a hazard has a low probability of occurrence, the sheer magnitude of the impact (the severity) may be extreme (a so-called low probability high impact event). This is the case in the occurrence of strong ground motion and tsunamis. Adding to that, due to the low probability of occurrence and the unknown impacts (lack of awareness for example), the risk scores are even further elevated due to a small coping capacity score.

The importance of key services has also become apparent in the priority list. Loss or disruption of services, whether it be water, electricity, sewerage, solid waste disposal, or governmental and commercial service delivery (strikes, possible lack of basic provisions, etc.) is a major threat to the City. Except for economic losses, the overwhelming impacts of most of these are of biological nature, resulting in human communicable disease. Although human disease per se is not considered as having a high disaster risk priority on the list, it must be noted that it is secondary impact of the bulk of identified hazards. Whether the hazard is flooding, changing in rainfall patterns, fires, structural collapse, wind, air pollution, and UV radiation exposure, disruption in waste disposal, storms, cable-theft incidents or radiological disease, *human welfare is affected*. It is therefore of utmost importance to ensure *copied capacity in the health sector, surpassing that of the emergency services*. Effort should concentrate on decreasing the vulnerability of the poor. It must however be stressed that communicable/infectious human disease can present itself to the area as a major risk, and can happen at any time. This same may also apply to animal communicable disease impact.

Ageing infrastructure of specifically reticulation systems is a hazard recognized in all cities and duly noted. It is apparent from the report that a major contributor to risk in the City is the high levels of vulnerability of the urban poor. Migration has been identified as a major problem, increasing the community at risk by 35 000 people per year. ***The spatial development policies of the City also indicate increased densification, implying an increased risk (higher exposure to risk) in the area.***

The internationally accepted and proposed paradigm shift from disaster response to risk reduction is highlighted by the findings, as many of the disaster risks can only be addressed via mitigation. It is imperative that the Disaster Risk Management Centre plays an active role in co-ordinating any efforts and therefore needs to be organisationally placed to be effective in this task. The results of this assessment indicated a shift in importance to risks induced by climate change. The current research on climate change is however limited in terms of regional impacts, but the effects should constantly be monitored to evaluate the resulting risks based on best practice knowledge.

THE CCT DRMC's COMMENT ON THE 2009/10 COMPREHENSIVE DRA REPORT

As can be seen from the Disaster Risk Profile Table (pages 36 – 38), all the communities in Cape Town have a degree of vulnerability to many of the disaster-causing hazards mentioned above, but especially those communities living in the informal settlements and backyards, viz. the poorer sector of the City's population, are the most vulnerable to most of these hazards. Excluding exposure to the natural disaster hazards which may occur anywhere, the communities living in the proximity of certain installations, industry or transport routes are exposed to a greater disaster risk, viz. more vulnerable, because of this technology.

In terms of capacity to address and therefore reduce risks, there currently is a strong emphasis on preparedness and response planning. This means that capacity and planning in terms of mitigation and prevention should be strengthened.

The following have been identified as critical Disaster Risk Management issues which should receive priority attention in the CCT Integrated Development Plan (IDP) :-

- **integrating Disaster Risk Management** plans & programmes of all Entities with those in the **IDP**;
- the adequate functioning of a **Disaster Risk Management Centre** for the City of Cape Town;
- establish **disaster prevention/risk reduction programmes** that focus on the most vulnerable communities and which endeavour to support sustainable livelihoods;
- design a programme in **support of fire protection** on the urban fringe;
- refine disaster **loss tracking** and establish a culture of **scientific disaster risk analysis** utilising the latest ICT technologies available in the City;
- establish and maintain **multi-disciplinary co-operation** and **co-operative partnerships** to ensure that **integrated programmes** are being undertaken;
- establish **pro-active media liaison** and rapid response to media inquiries;
- contribute to preventative and re-active management strategies for the HIV/AIDS & TB pandemics;
- undertake extensive **education and awareness programmes** on best practice before, during and after disasters;
- the development of an **extensive CCTV camera network** in the City to monitor and assist in the management of any disaster situation.

HAZARD-SPECIFIC DISASTER RISK MANAGEMENT PLANS

The CCT Disaster Risk Management Updated Planning Programme for Hazard/Risk-specific DRM Plans, which is to be co-ordinated by the DRMC, will continue over the coming year. There will be participation, on an integrated basis, by ALL identified Entities/Services which have a role to play in either in the prevention, risk reduction/mitigation, preparedness and/or response, relief or rehabilitation phases of the identified hazards which are at risk of occurring in the City of Cape Town.

The updated CCT Hazard/Risk-specific DRM Plans are made available to all role-players once their drafting is completed. The list of these DRM Plans is included in the Disaster Risk Assessment Summary Table on Pages 36 to 38.

10. PRE-DISASTER RISK REDUCTION AND PREPAREDNESS

Pre-disaster risk reduction and preparedness are the primary objectives of this Municipal Disaster Risk Management Plan. All City Departments/Services, supported by the relevant External Entities, must pursue disaster-risk reduction and mitigation in all their activities. The pre-disaster risk reduction responsibilities of each Department of the City of Cape Town are described under Section 6 of this Plan.

10.1 PREVENTION AND RISK REDUCTION / MITIGATION STRATEGIES

Integrated City-wide strategies must be developed and implemented covering disaster prevention and disaster risk reduction through the following:

- Policies and legislation
- Economic development programmes and the CCT IDP
- Continuing disaster-risk, vulnerability and manageability assessments
- Risk reduction studies and projects
- Training and community awareness
- Environmental Impact Assessments
- Hazard management
- Community education and capacity building
- Insurance
- Early warning systems

Each Directorate/Department/Service of the City is responsible for the compilation of pro-active Directorate and Departmental Disaster Risk Management programmes to support disaster-risk reduction or elimination and their own disaster preparedness.

10.2 DISASTER PREPAREDNESS

Integrated City-wide strategies must be developed and implemented covering disaster preparedness through the following:

- Emergency Response and recovery planning
- Contingency planning
- Drills, rehearsals and exercises
- Training and exercises
- Management and institutional arrangements
- Mutual Aid agreements
- Early warning systems

10.3 STANDARD OPERATING PROCEDURES (SOPs)

All Services/Entities should formulate SOPs outlining the details of their own systems of operating and actions under especially emergency conditions and to create this awareness amongst its staff members. These will be linked to their Service's/Entity's DRM Plans to expand on the specific operations required during a particular hazard occurrence situation.

11. DISASTER RESPONSE AND RECOVERY

11.1 DISASTER RESPONSE AND RELIEF CO-ORDINATION

At the notification of an occurrence of any significant hazard within the municipal area of the City of Cape Town the mandated Service/s will immediately respond to deal with the incident. These response initiatives are detailed in the City of Cape Town's Joint (Unified) Incident Management System (JIMS) documentation.

In addition to the Incident site(s) response activities and their support operations by the various Disciplines, the Disaster Co-ordination Team (DCT) *may* also be convened in the (off-site) Disaster Operations Centre (DOC) when an emergency or disaster has occurred or is likely to occur, that is within the following parameters:-

- where the size or seriousness of the emergency seems beyond the capability of one or more of the responding Services and, in the opinion of the most senior on-duty official of this Service/s, the DRMC can be requested to activate the DCT,
- or where the Head of the DRMC is of the opinion that it is necessary to activate the DCT in order to effectively manage an emergency which has occurred or is likely to occur, the DCT must convene in the DOC.

The activating Service shall, via the Disaster Operations Centre (DOC), contact the Disaster Risk Management Duty Co-ordinator or the Head of the DRM Centre, who shall immediately arrange to notify the designated members of the Disaster Co-ordination Team (DCT) to convene. The Disaster Co-ordination Team will be convened and chaired by the Head of the Disaster Risk Management Centre, or any other designated person, at the DOC in Goodwood or at another suitable facility which is appropriately removed from any direct hazard or risk, if the DOC is unavailable for whatever reason.

The DCT will evaluate the situation at the strategic level to support all the responding Entities and to collaborate with the Head of the DRM Centre regarding the need for a declaration of a Local State of Disaster, as well as the continued activation or standing-down of the DCT.

All incidents will be managed by the DCT in accordance with the principles and guidelines contained in the City of Cape Town Joint (Unified) Incident Management System (JIMS) and the Disaster Operations Centre's Standard Operating Procedures (SOPs) and with the support of all DCT members.

The CCT Disaster Operations Centre (DOC) staff (a section of the DRMC), as well as special project teams which can be designated by the DCT, will assist with any additional/supporting functions, under the guidance of the Disaster Co-ordination Team (DCT), so that the response, relief, rehabilitation and any reconstruction phases of the disaster can be effectively dealt with - see below.

These supporting functions can include:-

- maintaining records of communications, decisions, actions and expenditures,

- having continuous communication and liaison with all Services/Entities that are on-site through the Incident Command Post (On-site Joint Operations Centre (JOC) and the respective Service Command Posts deployed at the incident site at a safe location,
- designating emergency area(s) and sites,
- deciding on emergency measures and priorities,
- assessing the impact / consequences resulting from the Incident,
- referencing the DRMC's Disaster Risk Management Resources Database (DisRes) when required,
- requesting emergency partner assistance / implement any mutual aid agreements as are necessary,
- closing public buildings as required,
- issuing public warnings, orders and instructions as required,
- protecting the health and safety of emergency responders,
- ensuring an acceptable level of emergency services for the City outside emergency area(s),
- preparing lists of fatalities, casualties and missing persons,
- preparing lists of destroyed and damaged properties,
- considering the declaration of a Local State of Disaster,
- co-ordinating response with provincial and national government departments through the WCG and National Disaster Management Centres respectively,
- co-ordinating response with non-governmental disaster relief organisations, neighbourhood and community organisations,
- identifying all persons/Organisations which can contribute to emergency response,
- co-ordinating information for public release with emergency partners' communications staff and the provision of information to the media for dissemination to the affected population(s)/communities and the general public,
- responding to inquiries from the media and the general public,
- identifying target audiences for post-emergency communications,
- identifying persons/Organisations to contribute to post-emergency reports/debriefs,
- submitting information for payment of invoices and any special grants,
- assisting with any other tasks, as determined by the DCT.

11.2 CLASSIFICATION AND DECLARATION OF A LOCAL STATE OF DISASTER

When an event of disaster proportions occurs or is threatening to occur in any part of the City, the Head of the Disaster Risk Management Centre, assisted by the Disaster Co-ordination Team (DCT), will determine whether the event can be classified as a Local State of Disaster in terms of the Disaster Management Act, 57 of 2002 and, if so, the DRM Centre will immediately:-

- initiate efforts to assess the magnitude and severity or potential magnitude and severity of the disaster;
- alert all the disaster risk management role-players in the municipal area that may be of assistance in the circumstances;
- initiate the implementation the disaster response plan or any contingency plans and emergency procedures that may be applicable under the circumstances of the threat; and
- inform the Western Cape Government (WC DMC) and National Disaster Management (NDMC) Centres of the possible disaster and the initial assessment of the magnitude and severity or potential magnitude and severity of the disaster.

Approval from the City Council or Mayco is required to endorse the intention for a local state of disaster declaration (see below). When informing the Western Cape Provincial and National Disaster Risk Management Centres, the Head of the CCT DRM Centre may make recommendations regarding the intention for the classification of the local state of disaster as may be appropriate, in terms of Section 49 of the Disaster Management Act, 57 of 2002.

Irrespective of whether a local state of disaster has been declared or not, the City is primarily responsible for the co-ordination and management of local disasters that occur in its area, in terms of Section 55 (1) of the Disaster Management Act, 57 of 2002.

Whether or not an emergency/disaster situation is determined to exist, municipal and other Entities may take such actions under this Plan as may be necessary to protect the lives and property of the inhabitants of the City of Cape Town.

Declaration of a local state of disaster:- In terms of Section 55 of the Disaster Management Act, 57 of 2002, in the event of a local disaster, the City Council may, by notice in the Provincial Gazette ***declare a local state of disaster*** if existing legislation and contingency arrangements do not adequately provide for the municipality to deal effectively with the disaster, or if there are any other prevailing or special circumstances that warrant the declaration of a local state of disaster.

If a local state of disaster has been declared, the City Council of Cape Town may make by-laws or issue directions, or authorise the issue of directions to:-

- Assist and protect the public;
- Provide relief to the public;
- Prevent or combat disruption; or
- Deal with the destructive and other effects of the disaster.

11.3 REQUESTS FOR PROVINCIAL AND NATIONAL GOVERNMENT ASSISTANCE

Under certain circumstances, National Departments (including the SANDF and SAPS), Provincial Departments and even International assistance, may be requested from the Western Cape Provincial Disaster Management Centre or the National Disaster Management Centre. This will be in the instance where a ***local or a provincial or a national state of disaster***, when a ***joint disaster management co-ordination system will be put in place*** with the other spheres of government.

11.4 RECOVERY AND REHABILITATION OPERATIONS

Post-disaster recovery and rehabilitation operations, which may include reconstruction or redevelopment efforts, will normally take on the nature of special programmes and projects.

The Disaster Risk Management Centre will assist with the identification of needs and will facilitate recovery and rehabilitation operations. The function or department with the most direct involvement in the operation will take responsibility for project management and delivery. Project Teams convened for these purposes must report to the CCT Municipal Disaster Management Advisory Forum on a regular basis (as determined by the MDMAF).

In this regard the causal factors of disasters must be addressed and disaster prevention through risk elimination should be pursued in the rehabilitation, reconstruction or redevelopment efforts in order to avoid a repetition of the disaster.

12. REVIEW AND UPDATE OF THE MUNICIPAL DISASTER RISK MANAGEMENT PLAN

The City of Cape Town will regularly review and update the Municipal Disaster Risk Management Plan, as required by Section 53 of the Disaster Management Act, 57 of 2002.

13. ABBREVIATIONS

The following abbreviations are used in the Municipal Disaster Risk Management Plan:-

CCT	-	City of Cape Town
DCT	-	Disaster Co-ordination Team
DisRes	-	Disaster Resources Database
DRM	-	Disaster Risk Management
DRMC	-	Disaster Risk Management Centre
DOC	-	Disaster Operations Centre
EMS	-	Emergency Medical Services
IDP	-	Integrated Development Plan of the City of Cape Town
JIMS	-	Joint (Unified) Incident Management System
JDRRMC	-	Joint Disaster Risk Reduction Management Committee
JOC	-	Joint Operations Centre
MDMAF	-	Municipal Disaster Management Advisory Forum
MPD	-	Metropolitan Police Department
NDMC	-	National Disaster Management Centre
PECC	-	107 Public Emergency Communications Centre
SANDF	-	South African National Defence Force
SAPS	-	South African Police Service
SOPs	-	Standard Operating Procedures
WCG	-	Western Cape Government
WCDMC	-	Western Cape Government's Disaster Management Centre

14. REFERENCES

- Constitution of the Republic of South Africa, Act 108 of 1996
- Disaster Management Act, 57 of 2002
- Local Government: Municipal Systems Act, 32 of 2000
- The Policy Framework for Disaster Risk Management in South Africa, 29 April 2005
- Western Cape Disaster Risk Management Policy Framework
- City of Cape Town Disaster Risk Management Policy Framework
- Independent Comprehensive Disaster Risk Assessment for Cape Town, 2009/10 (Aurecon)

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