

**COMPREHENSIVE
DISASTER MANAGEMENT
STRATEGY (CDMS)**

(MEDIUM-TERM)

2005-2009

ANGUILLA

*Franklyn Michael
Disaster Management Consultant*

October 2004

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

CONTENTS

Executive Summary

1	Introduction	6
2	Purpose of the strategy	7
3	Summary review findings	7
4	Strategy overview	9
5	Implementing the strategy	10
6	Key Recommendations and activity options for the next five years	11
7	Integrated risk reduction and development planning	12
8	Priorities to consolidate preparedness planning	13
9	Requirements and next steps for effective implementation.....	15

Section A: Background to the Comprehensive Disaster Management Strategy

1	Goal of the comprehensive disaster management strategy (CDMS) for Anguilla.....	17
2	Objective of the CDM strategy	17
3	Scope of the CDM strategy proposed	18
4	Methodology	18
5	Definitions	18
6	Assumptions.....	19
7	CDM conceptual framework.....	19

Section B: Overview of disaster management in Anguilla

1	Public sector	23
2	Structures	23
3	Roles	24
4	Functions.....	24
5	Policy	24
6	Legislation.....	24

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMs**

7	Facilities.....	24
8	National Disaster Office (NDO).....	25
9	Response agencies.....	25
10	Non Public sector response(selected agencies).....	26
11	Assessment and analysis.....	30
12	Progress and achievements.....	32
13	Challenges and limitations.....	33
14	Observations and conclusions.....	34

Section C: The CDM strategy outline

1	Introducing a CDM strategy.....	38
2	CDM – A change of approach to managing risk.....	38
3	Integrated development planning.....	38
4	The strategic framework for comprehensive disaster management in Anguilla.....	39
5	Implementation framework.....	39
6	Guidelines for effective implementation.....	40

Section D: Key action and result areas - specific recommendations

1	A CDM implementation plan.....	44
2	The National Disaster Office (NDO).....	45
3	The National Disaster Preparedness Committee (NDPC).....	48
4	Legislation.....	51
5	Risk Reduction.....	52
6	A National mitigation strategy.....	54
7	Preparedness.....	55
8	Training.....	64
9	Public awareness and information.....	64
10	Strategic alliances.....	65
11	Use of technology and scientific data.....	66
12	Advocacy.....	67

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

13 Community-based organisations67

Postscript.....68

APPENDICES

Appendix 1 Acronyms and abbreviations70
Appendix 2 Preliminary cost estimates.....72
Appendix 3 NEMOT strategy.....76
Appendix 4 National Disaster Office functions (Draft)80
Appendix 5 Key terms and concepts81
Appendix 6 CDM/CDERA approach.....87
Appendix 7 Consultation contacts88
Appendix 8 Administrative context – Anguilla.....89
References91

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

FOREWORD

The consultancy that led to the development of this Comprehensive Disaster Management Medium–Term Strategy (CDMS) was executed under the authority of the Government of Anguilla.

The British Government through the Foreign and Commonwealth Office's Good Governance Fund provided financial support. The Disaster Management Adviser for Overseas Territories of the Department for International Development managed the consultancy.

The National Disaster Co-ordinator of Anguilla was responsible for administrative and logistical arrangements. He also functioned as Project Facilitator.

Franklyn V. Michael
Disaster Management Consultant

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

ACKNOWLEDGEMENTS

I acknowledge the outstanding levels of co-operation, support and assistance that I received from many individuals, agencies, Government departments, private sector entities and community-based organisations in Anguilla. I express sincere thanks to them all. A list of persons that were consulted is provided as an appendix to this document.

The contribution made by National Disaster Coordinator, Wycliffe Richardson, in making appropriate administrative and logistical arrangements is deeply appreciated.

I am grateful to Disaster Management Adviser for the Overseas Territories, Roger Bellers, for the many suggestions he made during all stages of the assignment.

The Regional Coordinator and staff of the Caribbean Disaster Emergency Response Agency (CDERA) provided valuable resource materials that enhanced the conceptual framework of this Comprehensive Disaster Management Strategy (CDMS).

Franklyn V. Michael
Disaster Management Consultant

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

Executive Summary

This Comprehensive Disaster Management Strategy (CDMS) for Anguilla is the primary output of a study undertaken by an independent disaster management consultant; Franklyn Michael, between February and June 2004. The final version of the document was written in October after review of the draft by officials in Anguilla and the Disaster Management Adviser (DMA) to the Overseas Territories.

The purpose of the assignment was:

“To provide a management framework of institutional structures and operational mechanisms and a package of recommendations that will enable the Government and people of Anguilla to significantly reduce vulnerability to hazards of all kinds by employing a well coordinated series of initiatives with the intention of supporting sustainable development of minimizing losses to hazard impacts through the concepts and principles of Comprehensive Disaster Management (CDM).”

1 Background

A variety of hazards, natural or human induced, large or small scale, threaten the sustainable development of Anguilla and the well being of the population. These include hurricanes, earthquakes, tsunamis and human induced or technological hazards such as mass transport accidents, hazardous materials (HAZMAT) and explosion. The only uncertainties are exactly when these hazards will strike, with what intensity and precise impact.

Anguilla, as a small island state is, and will continue to be, disproportionately vulnerable to any hazard impact. Yet Anguilla's capabilities for risk reduction and disaster response remain inappropriate to the risks faced and their likely consequences. Until a more coherent emphasis is placed on risk reduction and building a culture of safety to known hazards, Anguilla's continued progress and the well being of its population remains at risk. An issue harshly illuminated by the extensive damage and destruction recently caused by Hurricane Ivan to the Cayman Islands and Grenada.

If similar losses are to be avoided or minimised, Anguilla must adopt all hazard risk reduction, alternatively termed Comprehensive Disaster Management (CDM), as a cross cutting theme integrated into all national decision-making and development planning. Anguilla must be able to:

- 1.1 Identify and monitor all hazards and the corresponding societal and economic vulnerability to them (i.e. the extent of potential negative effects).
- 1.2 Be prepared for all likely hazard occurrences and able to manage an effective response to minimise losses and hasten recovery.
- 1.3 Reduce risks wherever possible and ensure development itself does not build future risks (i.e. development is not sustainable if it builds future risks).

In 1998 Anguilla was included in a study conducted by the Department for International Development (DFID) of Disaster Management Capabilities in the Caribbean Overseas

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

Territories (the findings were made public in 2000). Its conclusions for Anguilla were of particular concern:

“There has been no practical threat and risk assessment for Anguilla and there is little concern among officials about hazards other than hurricanes. Anguilla has not fully planned for emergencies arising from other potential hazards. There appears to be little appreciation for the importance of disaster preparedness to national planning and development.”¹

Although there have been considerable advances since the study was released, in 2004 DFID's Disaster Management Adviser to the Overseas Territories commented that in Anguilla *“disaster Management remains “at a low base”. Capacities are lower than many other Caribbean Countries. The disaster management system and its structures require consolidation both as an Overseas Territory and also as a member of CDERA (Caribbean Disaster and Emergency Response Agency).”²*

2 Purpose of the strategy

In recognition of this precarious situation, and after consultation with Anguilla's National Disaster Co-ordinator, DFID offered technical assistance to formulate a national strategy outlining possibilities and opportunities to attain more appropriate disaster management standards.

A strategy that will contribute to Anguilla's commitment, as a member of CDERA, to adopt Comprehensive Disaster Management (CDM): the management of all hazards through all phases of the disaster cycle – prevention, mitigation, preparedness, response and recovery – by all sectors of the population.

The purpose of the strategy is to provide, after review and consultation, a management framework of institutional structures, operational mechanisms and recommendations to strengthen Anguilla's capabilities for CDM and thus enable the Government and people of Anguilla to significantly reduce vulnerability to hazards of all kinds.

The strategic review commenced in January 2004.

3 Summary review findings

Information gathered from interviews, direct observation, discussion and literature reviews, led to the following summarised conclusions concerning the hazards faced in Anguilla, the vulnerability to them and disaster management capabilities:

- 3.1 The disaster management programme in Anguilla is still focused on preparedness and response for hurricanes.** This leaves the island and its people vulnerable to the effects of other hazard impacts – natural and human-induced.
- 3.2 There is no comprehensive long-term risk reduction strategy in place for Anguilla.** The

¹ DFID Study Of Disaster Management Capability In The United Kingdom Caribbean Overseas Territories, February 2000, Para. 65 – 69.

² Cited in Background to Terms of Reference for the CDMS Study.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

island's vulnerability may be increasing as development proceeds. Global climate change brings heightened risks of sea level rise and more frequent severe climatic events.

- 3.3 **Disaster management is not integrated into national planning.** Long-term public and private investment decisions are not currently benefiting from a risk reduction strategy, or considerations of risk. This means that expensive and important social and economic infrastructure remains vulnerable to hazards.
- 3.4 **Limited critical facilities and redundancies exacerbate the island's vulnerability to hazard impacts.** There is only one (1) hospital, one (1) airport, One (1) electricity generation plant and few publicly owned buildings that could be used as shelters.
- 3.5 **There is no comprehensive national disaster plan to direct preparedness or emergency response.** There are also very few hazard and sector-specific plans. Response agencies therefore have very few approved, standardised procedures that they can follow in an emergency.
- 3.6 **There is uncertainty about Anguilla's capacity to deal with the demands of hazards other than hurricanes.** Hazard plans are incomplete, are not adequately tested or updated.
- 3.7 **Emergency response equipment and supplies are limited.** It is unlikely that emergency response agencies could provide a timely and efficient response to a major incident resulting in mass casualties such as an air crash, a major fire or a ferryboat accident. There is no national stockpile of emergency supplies under the control of the National Disaster Office (NDO).
- 3.8 **The Emergency Operations Centre (EOC) is inadequate.** The current EOC would probably not function effectively as the co-ordinating hub of emergency and disaster responses.
- 3.9 **The terms and conditions under which Anguilla could receive assistance from neighbouring countries or regional agencies in emergencies or disasters are not clear.**
- 3.10 **The predominant reason these deficiencies exist rests with how disaster management is organised in Anguilla.** Institutional structures, such as the National Disaster Preparedness Committee (NDPC) and its standing committees, seem to be functioning in an environment in which roles, responsibilities and authorities are not absolutely clear. This limits the introduction of many beneficial disaster management practices that have been long established in other Caribbean countries.
- 3.11 **In its present form, the National Disaster Office (NDO) cannot effectively champion and lead the implementation of a successful CDM strategy and programme in Anguilla.** The NDO is constrained by a shortage of staff and by a shortage of funds.
- 3.12 **The NDO does not play a significant role in risk reduction activities.** Nor does it have the authority to ensure that risk reduction strategies are incorporated into the work programmes of other agencies or departments.
- 3.13 **No comprehensive disaster management legislation has been enacted.** The limits of

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

authority of disaster officials, their control over national resources and their capacity to enforce long-term risk reduction and life saving decisions, is at best unclear and uncertain and at worst, inadequate.

- 3.14 **Private sector and community-based organisations are not playing as full a role as they could in a CDM programme.**
- 3.15 **A lack of public awareness of hazards and vulnerability has built complacency and little demand for higher disaster management standards.**
- 3.16 **Government policies and priorities in disaster management have not been articulated and made public.** External agencies that could provide technical and financial assistance have suggested that the absence of such clear guidelines limits their capacity to source and provide such assistance.

Recognising these deficiencies, this strategy articulates and recommends the direction and emphasis required for CDM in Anguilla and a variety of options to refine institutional structures and introduce operational mechanisms so appropriate levels of risk reduction and preparedness are reached. Strategy components are consistent with the principles and good practice identified and justified by CDERA.

Critically, the strategy has been formulated after broad consultation with the Government of Anguilla (GoA) and responsible agencies to ensure it is appropriate to Anguilla's capacities, is realistic and attainable.

4 Strategy overview

If Anguilla is to attain appropriate standards of all hazard risk reduction and preparedness, significant policy and strategic changes will have to be introduced. This CDM strategy requires Anguilla's government and society to adapt a broader approach to disaster management:

- 4.1 Vulnerability and risk reduction must be integrated into GoA Policies, national development objectives and development planning. All major public and private sector projects should include appropriate vulnerability assessments and subsequent risk reduction components. The strategy proposes a range of specific recommendations to assist the process over the next five years.
- 4.2 Existing institutional disaster management structures require refinement to meet the requirements of CDM. The strategy recommends revision to the purpose, structure, composition, priorities and modus of the NDPC and its sub-committees. These include further involvement of non-governmental organisations (NGOs), the private sector and representatives of civil society in the disaster management system and structures for all phases of the disaster cycle – mitigation, preparedness, response and recovery.
- 4.3 Changes to the way that disaster management is structured and organised should be underpinned by specific disaster legislation to provide authority to disaster management requirements and to ensure commitments and attention are maintained.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

- 4.4 Preparedness and response capabilities require strengthening for hurricanes and all other hazard scenarios. A national over-arching contingency plan is required that is supported by hazard specific (e.g. for air-crash, oil spill, etc) and functional (e.g. evacuation, shelter, relief, recovery) sub-plans. The strategy outlines a full range of contingency plans that should be developed.
- 4.5 Enhancing multi hazard preparedness capabilities also requires additional or improved emergency facilities and equipment for all functions of emergency management (e.g. for warnings, shelter, evacuation, command and control, relief distribution, etc). Critical infrastructure must be resilient enough to offer appropriate levels of protection and to function post anticipated hazard impacts.
- 4.6 Anguilla must consolidate its own technical capacities to execute disaster management activities to a suitable standard. This requires the training of Anguillan nationals and their participation in relevant technical assistance programmes available through entities such as CDERA, Pan American Health Organisation (PAHO), United Nations Development Programme (UNDP) and the Network of Emergency Managers of the Overseas Territories (NEMOT).

Most critically, the mandate, staffing and resource levels of the NDO should be revised so it is able to champion, co-ordinate and advance the objectives of CDM and the National Strategy.

5 Implementing the strategy

There are limits to the extent and pace of change that can be introduced over the five-year strategy period. All CDM objectives and the strategy's recommendations cannot feasibly take be introduced at once. Instead implementation should take place through a phased series of discrete but related activities over the five-year period depending on time requirements and the availability of financial and human resources.

Attaining all CDM objectives will be expensive in the context of Anguilla. Although investments in disaster mitigation and preparedness are cost effective in the long term (research has shown the expense of post disaster recovery programmes are significantly reduced, investments protected and standards of living maintained), it is doubtful funds will be immediately available for all investments required. These include long-term structural mitigation projects, the construction of critical infrastructure, the acquisition of emergency equipment and supplies as well as investments for additional staff, training and public awareness programmes.

In recognition of these realities, this strategy document presents a series of practical recommendations and activities that may be realistically implemented in a five-year time span. The annexes present indicative cost estimates and descriptions of NDO functions.

Precisely which recommendations are to be conducted when, and which are prioritised, will depend on commitments, resource availability and technical capacities. As such the strategy should be considered as guidance to a desired state of affairs (i.e. appropriate comprehensive disaster management).

Ultimately, it will be up to the GoA to determine which recommendations are prioritised, whether further strategy refinement is needed and the extent of additional resource

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

allocations (e.g. numbers of NDO staff, building a new EOC or strengthening an existing building to act as the EOC)).

6 Key recommendations and activity options for the next five years

The synopsis of recommendations provided below is intended as a guide to facilitate deliberations and decisions on the **major policy and strategic changes** required to achieve CDM strategy objectives. Recommendations are given on prioritised activities along with how their implementation should be organised. More details on the administrative, operational and expenditure requirements for each recommendation are not reproduced in this summary but are presented in the main body of the report.

The four main or overarching recommendations are for:

6.1 The purpose, structure, composition, priorities and *modus operandi* of the National Disaster Preparedness Committee (NDPC) to be reviewed and adapted in light of the additional requirements of CDM. Recommendations include:

- Changing the mandate of the committee so it is responsible for directing all facets of CDM; risk reduction, preparedness, disaster response and recovery. The committee could be renamed the National Disaster Management Committee (NDMC).
- Creating sub-committees to oversee components of the CDM strategy: the mitigation strategy, for emergency welfare and supplies and for the CDM implementation plan (outlined below).
- For the co-ordination of national disaster responses consideration should be given to creating an emergency policy group and an emergency operations group within the NDPC/NDMC (as is the practice in the British Virgin Islands, Montserrat and the Turks and Caicos Islands).
- Clearly defining the role of the Governor vis-à-vis the Chief Minister and other Ministers of Government for all aspects of disaster management.

A full review of the national disaster management structure to be prepared by the end of 2005 for implementation in 2006.

6.2 An annual CDM strategy implementation plan: A yearly CDM implementation plan to be formulated for each of the next five years by an implementation sub-committee to the NDPC/NDMC working in close collaboration with the National Disaster Co-ordinator (NDC). The yearly implementation plan will determine the prioritisation and scheduling of recommendations in support of the strategy.

The first implementation plan will be prepared in the first half of 2005 after GoA approval of the strategy.

To assist deliberations, recommendations given below and later in this document include indicative activity schedules.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMs**

- 6.3 A yearly work programme for the National Disaster Office (NDO) based on the recommendations of the strategy and determined by the above implementation plan.

The NDO work programme will be one of the first activities conducted within the new CDM strategy. It will be prepared by the end of June 2005.

- 6.4 Upgrading the capabilities of the NDO is critical to the success of the CDM strategy and the effectiveness of disaster management in Anguilla. An early decision should be taken with regard to NDO staffing levels and resource requirements. The mandate and mission statement of the NDO to be altered so it sets out its commitment to CDM.

An NDO strengthening proposal and plan will be submitted with the work programme in June 2005.

Key Recommendations to be considered in the implementation plans and NDO work programmes include the following specific activities:

7 Integrated risk reduction and development planning

- 7.1 A multi hazard and vulnerability assessment (HVA) should be carried out to direct national risk reduction and preparedness. Investigations into consultants available, the scope of the HVA study, costings and a schedule to be prepared by the end of 2005. The assessment to take place in 2006.

- 7.2 GoA to mandate the development of a Mitigation Strategy for inclusion in all future medium-term national development initiatives. To embrace recommendations for all aspects of development planning including land use and environmental monitoring.

The strategy should be determined and informed by the outputs of the HVA. It is recommended the strategy becomes the responsibility of a standing mitigation sub committee to the NDPC/NDMC.

It is envisaged that the strategy could be in place within a four-year time span.

- 7.3 The NDC/NDO should be represented on all statutory or ad hoc planning bodies to ensure considerations of associated risks. All major planning decisions or programmes should be automatically shared with the NDC.

The NDC to promote and investigate opportunities for all environmental impact assessments and land use planning decisions to automatically include hazard risk considerations. Though these aspects should be included in the national mitigation strategy, they can be initiated beforehand.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

8 Priorities to consolidate preparedness planning

The following recommendations are prioritised to enhance preparedness planning for all hazards:

8.1 A wide range of contingency plans is identified for development by this strategy document along with a possible schedule. For example, the schedule recommends introducing or revising the following in the first year:

- An overarching multi hazard national disaster plan
- EOC plan and operating procedures
- Health sector plan
- Flood plan
- Air accident
- Sea transport
- School evacuation

Exactly which plans are revised will depend on available resources but should be outlined in the first implementation plan and NDO work programme.

8.2 Testing of contingency plans through scenario exercises should be institutionalised. The NDO's work programme should include a range of simulation exercises each year and at least one (1) full field exercise focusing on a different hazard. Testing should coincide with and contribute to, the development or revision of differing hazard contingency plans.

The first exercise should be held before the end of 2005. It should be noted that DFID has funds available to provide external facilitation.

8.3 GoA should evaluate the long-term benefits and advantages of constructing a new EOC complex in support of the need to improve facilities and infrastructure for disaster management.

The NDO to submit a fully costed proposal for decision by the end of 2005.

8.4 The NDO to establish a clear strategy for the storage of emergency supplies until a national emergency warehouse is constructed or provided. To include Memoranda of Understanding (MOU) with private sector suppliers for first call on emergency supplies of goods not normally stocked or sold by government.

In respect to limited NDO capacity, one option is to create a welfare, relief and emergency supplies standing sub-committee to the NDPC/NDMC.

8.5 Emergency communications. A full review of emergency communications should be commissioned by the NDO in 2005.

8.6 Shelter capacity and management procedures require systematic revision. The NDO work programme to consider introducing new shelter management rules (manual) and further shelter supplies. The appropriateness of designated shelters should be

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMs**

reviewed (numbers of occupants and structural resilience). As shelter is essential for saving lives the review of shelter strategy should be an immediate priority in the first implementation plan and NDO work programme.

8.7 Training and capacity raising for disaster preparedness and CDM

The CDM strategy requires a broad range of additional skills for the NDO and other agencies and sectors. A training and capacity-raising programme should be included in the annual implementation plan and NDO work programme.

The Government of Anguilla, via the NDC, should seek technical assistance from CDERA and DFID's Disaster Management Adviser whilst ensuring Anguilla's involvement in regional training initiatives and programmes.

8.8 Institutional structures for comprehensive disaster management and preparedness

The purpose, structure, composition, priorities and *modus operandi* of the NDPC should be changed so it assumes responsibility for directing all facets of CDM; risk reduction, preparedness, disaster response and recovery.

In parallel to altering the mandate (and name) of the NDPC to oversee the National CDM and mitigation strategies, preparedness will be enhanced by the introduction of a welfare and supplies committee and by re-organising how disaster responses are co-ordinated. Consideration should be given to the creation of an emergency policy group and an emergency operations group within the national disaster management organisation (as is the practice in BVI, Montserrat and the TCI).

To ensure clarity and to avoid confusion during emergency/disaster events, the role of the Governor vis-à-vis the Chief Minister and other Ministers of Government must be established and understood for all aspects of disaster management.

A full review of the national disaster management structure will be carried out by the end of 2005 with recommendations to be implemented in 2006.

8.9 There should be further representation of NGOs, the private sector and representatives of civil society on the NDPC and all sub committees Representatives should be involved in all CDM activities, exercises and training initiatives.

Such representation could be incrementally introduced immediately.

8.10 Legislation based on the CDERA model, should be introduced as enabling legislation for the CDM strategy.

8.11 CDM should also involve and advance community-based approaches to disaster management. GoA should consider promulgating a broad-based package of incentives to encourage residents to embrace the practices of CDM at the home-owner-level. Promoting insurance is seen as a vital measure to reduce vulnerability and hasten recovery.

8.12 A public awareness strategy backed by a national emergency/disaster information and media plan is required but can be relatively easily introduced. Public awareness

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

already forms part of the NDO work programme but this can be expanded. A disaster information and media plan could be introduced by the end of March 2006 if guided by examples from other Caribbean countries.

8.13 GoA should seek to further consolidate external relations for all aspects of disaster management.

- Mutual aid agreements for potential emergency assistance are recommended with neighbouring countries that are not CDERA participating states.
- Further familiarity is required of the extent and nature of post disaster assistance from the United Kingdom.
- Increased interaction with regional and international agencies will enable Anguilla to benefit and participate in their technical assistance, experience sharing and training programmes.

Once again, external relations should figure within the CDM implementation plan and the work programme of the NDO

9 Requirements and next steps for effective implementation

Ultimately the success of the strategy depends on building local capacity over time. This can only happen if the people of Anguilla take full ownership and responsibility for its implementation. CDM requires the involvement of all sectors of society, including the public, private and non-government sectors. The CDM Strategy should be seen as a collaborative partnership of all sectors from the start.

- 9.1 GoA should publicly endorse the CDM Strategy and outline its vision and expectations. Without governmental approval and public sector leadership, the strategy will fail.
- 9.2 Strong leadership and commitment from the highest levels of decision making are required. In particular the NDC must be able to lead the process.
- 9.3 Strengthening the NDO is regarded as essential to advance CDM in Anguilla. A full institutional review of the NDO should be undertaken quickly and decisions taken to adequately equip and staff it.
- 9.4 Technical assistance will be required in the short and medium-term to fully implement the strategy. Existing capabilities for CDM, along with the comparatively (but understandably) limited human resource base of a small island state, indicate Anguilla should take all opportunities for support from regional and international agencies (CDERA, NEMOT, the OECS, the CDB, and ECLAC, etc).
- 9.5 DFID's disaster management adviser will re-locate to Anguilla in April 2005 for a period of at least one year. Working in collaboration with the NDC the DMA will assist with final strategy refinement and then formulation of the CDM implementation plan and work programme. A precise outline of the technical assistance to be offered by the DMA will be submitted within one month after arriving in Anguilla in May 2005.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM - TERM STRATEGY CDMS**

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

SECTION A

1 Goal of the comprehensive disaster management strategy (CDMS) for Anguilla

In keeping with the objectives of the Government of Anguilla to place the country on a firmer strategic footing, with regard to Comprehensive Disaster Management (CDM), the following is the agreed goal of this Comprehensive Disaster Management Strategy (CDMS):

To provide a management framework of institutional structures and operational mechanisms and package of recommendations that will enable the Government and people of Anguilla to significantly reduce vulnerability to hazards of all kinds by employing a well coordinated series of initiatives with the intention of supporting sustainable development by minimizing losses to hazard impacts through the concepts and principles of Comprehensive Disaster Management (CDM)³

2 Objective of the CDM strategy

The objectives of this CDM strategy for Anguilla derive from the goal:

- 2.1 Highlight the policy changes that will be necessary to give full effect to the decision to embrace CDM as a component of sustainable development
- 2.2 Propose recommendations to organise the National Disaster Preparedness Committee (NDPC) and other key committees; to competently plan and prepare for, respond to and recover from; hazards and threats of all kinds.
- 2.3 Propose changes to the National Disaster Office (NDO) in concert with a CDM mandate.
- 2.4 Review institutional and operational arrangements and provide guidelines to improve overall effectiveness in all phases of the disaster cycle.
- 2.5 Specify the disaster management programme priorities that will create a culture of risk and vulnerability reduction at all levels of society.
- 2.6 Identify long-term strategies to embed CDM in integrated national development planning.
- 2.7 Outline mechanisms that will encourage inter-agency and inter- sector networking in CDM."⁴
- 2.8 Identify the range of contingency plans required to support the CDM mandate.

³ Background to Terms of Reference For the CDMS Study

⁴ Ibid.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

3 Scope of the strategy

The CDM strategy is expected to present actions to further integrate risk reduction into the development planning process in Anguilla, during the medium term. The period identified is 2005-2009. Further, the CDMS should also:

- 3.1 Make recommendations for risk reduction mechanisms in relief and recovery phases
- 3.2 Consider whether Anguilla should have a specific mitigation Strategy
- 3.3 Contribute to the enhancement of preparedness and response capabilities
- 3.4 Identify areas for longer-term priority action.⁵

4 Methodology

The development of this strategy was guided by the following principles:

- 4.1 Extensive consultation with the people of Anguilla, in the public, private and community sectors
- 4.2 The provision of opportunities for Anguillans to review the findings as the study unfolded
- 4.3 A conceptual framework based on CDERA's CDM strategy framework
- 4.4 Acceptance of the NEMOT Strategy for Disaster Management in the Overseas Territories. A strategy that supports and is consistent with the CDERA strategy for CDM.

Extensive consultations were conducted in Anguilla during several visits between February and June 2004. Face to face consultations were held with key agency representatives. Questionnaires were used to elicit facts and opinions relative to the study. Relevant literature was reviewed to bolster the information gathering process. A dearth of documented information relevant to the current disaster management programme, proved to be a significant challenge.

5 Definitions

Full appreciation of this CDM (medium Term) Strategy (CDMS), requires a common understanding of particular terms and concepts related to the discipline of disaster management. Additionally, understanding the concept of sustainable development (i.e. progress that does not increase future risks) is fundamental to acceptance of the strategy. An understanding of Government structures and the administration in an Overseas Territory is also required. Brief definitions and explanations are provided in Appendix Five (5) along with a description of Anguilla's administrative context.

⁵ Background to Terms of Reference For the CDMS Study

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

6 Assumptions

There are several assumptions that are being made with regard to the implementation of the CDM Strategy.

- 6.1 The government of Anguilla will embrace the strategy and use the authority of its office to influence all key agents and agencies to do the same.
- 6.2 A systematic effort will be made to seek the financial resources necessary to implement the CDM strategy.
- 6.3 External technical and financial assistance will be available to support implementation of the core strategy.
- 6.4 CDERA and NEMOT will embrace the strategy and provide support for its implementation.
- 6.5 The position National Disaster Coordinator (or its institutional successor) will be continually occupied during the next five (5) years

7 Conceptual framework

7.1 Disasters and sustainable development

CDERA'S Regional Coordinator, succinctly expresses the interplay between disasters and development in a Caribbean context.¹⁰

The Caribbean region, however defined, has a long history of natural disaster experiences associated with hazards such as hurricanes, floods, earthquakes, volcanic eruptions, landslides and droughts. The impact on these small island economies has consistently been debilitating, often resulting in the retardation of planned development. This is compounded by the fact that the development aspirations of these islands have increased the potential for technological emergencies such as oil spills, chemical spills, and aircraft crashes.

Disasters must be of concern to small island developing states because these events are capable of interrupting the development process and wiping out major assets, in addition to causing loss of life, injury and human suffering.

Disaster events set back economic development by damaging or interrupting natural environmental processes, damaging infrastructure and forcing the diversion of scarce resources into repairs or replacement of assets rather than the creation of new wealth.

¹⁰ Paper prepared by Jeremy Collymore, Regional Coordinator, CDERA for the Special Meeting of the Committee on Hemispheric Security on the Special Security Concerns of Small Island States.1996

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

7.2 Impact of recent disasters on Anguilla

The negative effect disasters have on development progress is clearly indicated by recent hurricanes. Hurricane Luis in 1995 caused more than US\$ 100 million damage to the tourism sector alone.⁷ There was extensive damage to the agricultural sector as well as the utilities sector. In 1999, Hurricane Lenny caused extensive flooding. Damage to households and agriculture was greatest in the Valley and its environs. Hurricane Jose had passed in the previous month and had left the ground saturated. It did very little damage otherwise.

Although there was very little hard data provided, many persons interviewed provided anecdotal accounts of the severe negative impacts of hurricanes Luis and Lenny on the economic and social life of Anguilla. They also expressed anxiety over the possibility of future damage, given Anguilla's inherent vulnerability as a small island and the narrowness of its economic resource base.

7.3 Integrating risk and vulnerability reduction into sustainable development planning

Hazards exist both as natural phenomena such as hurricanes, earthquakes and tsunamis and as human-induced or technological hazards such as mass transport accidents, hazardous materials (HAZMATS) spills) and explosions.

As countries like Anguilla become more developed; the risks of disasters become greater. This occurs because:

- Expansive developments take place on the coast
- Movements of people and cargo by land, sea and air increase.
- More people are employed in Services instead of traditional agriculture.
- Economies become more dependent on one or two sectors, often driven by external markets and perceptions.
- New technologies are adapted, often in advance of the introduction of safety standards for these technologies.
- Building design becomes more modern and less rooted in the country's hazard experience.

Hurricane Lenny in particular, provided a graphic illustration of the interplay among risk, vulnerability, and development in the Anguillan economy. Because Anguilla is a small island state, the entire island was adversely affected.

- Major hotel properties had to be closed to effect costly repairs
- GDP and government revenues fell
- Personal incomes fell
- Unemployment rose
- Household expenditure increased
- The Capital Investment Programme was interrupted
- Social life was severely disrupted

⁷ Personal Communication with National Disaster Coordinator

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

Against this background of repeated hazard related losses, reducing risks and vulnerabilities must become an integral part of any viable strategy for sustainable development.

7.4 The concept of comprehensive disaster management

Recognising the linkages between disasters and development, the Caribbean Disaster Emergency Response Agency (CDERA) has promulgated the concept of CDM as the foundation of disaster management planning among its Participating States.

The goal of the CDERA CDM initiative is to contribute to sustainable development in the Caribbean region through the management of all hazards in all phases of the disaster cycle – mitigation, preparedness, response and recovery – by all sectors of the population. CDM involves risk reduction and integration of vulnerability reduction, into the development planning process. Critically CDM emphasises pre-emptive risk reduction and preparedness rather than focusing on post-facto emergency responses – where avoidable losses and suffering have already occurred.

Anguilla, as a CDERA participating state is committed to the objectives and principles of CDM. The purpose of this strategy is to assist Anguilla meets its commitment to CDM whilst also attaining the minimum disaster management standards outlined in the NEMOT Strategy for the further improvement of disaster management in the Overseas Territories. A strategy that fully embraces and is complimentary to CDERA objectives.

The mutually supportive CDERA CDM Framework and NEMOT Minimum Standards are the main concepts that underpin this Medium-Term CDM Strategy for Anguilla.

Without attempting to present the conclusions of the Strategy before presenting an analysis and overview of disaster management in Anguilla, it is clear that changes will have to be made to the approach to disaster management in Anguilla. The bullet points shown below are intended to set the stage at the outset, for the kinds of changes that will be needed.

- Planning for all phases of the disaster cycle.
- Creating and maintaining a supportive policy and institutional environment suited to a CDM strategy.
- Allocating resources in step with a CDM mandate.
- Maintaining a long-term planning horizon.
- Integrating risk and vulnerability reduction into national planning
- Ensuring that the private and other non- government sectors are deeply involved in all aspects of disaster management.
- Ensuring that the response capability in lead agencies remains at an acceptable level.
- Placing greater emphasis on mitigation strategies
- Placing emphasis on readiness at all times.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

- Developing and maintaining critical facilities such as Emergency Operations Centres.
- Building local capacity to effectively manage a disaster management programme.
- Developing a full range of multi-hazard and sector-specific plans in an overarching national plan.
- Building capacity within an expanded National Disaster Office (NDO).

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

SECTION B

Overview of disaster management in Anguilla

1 Public sector

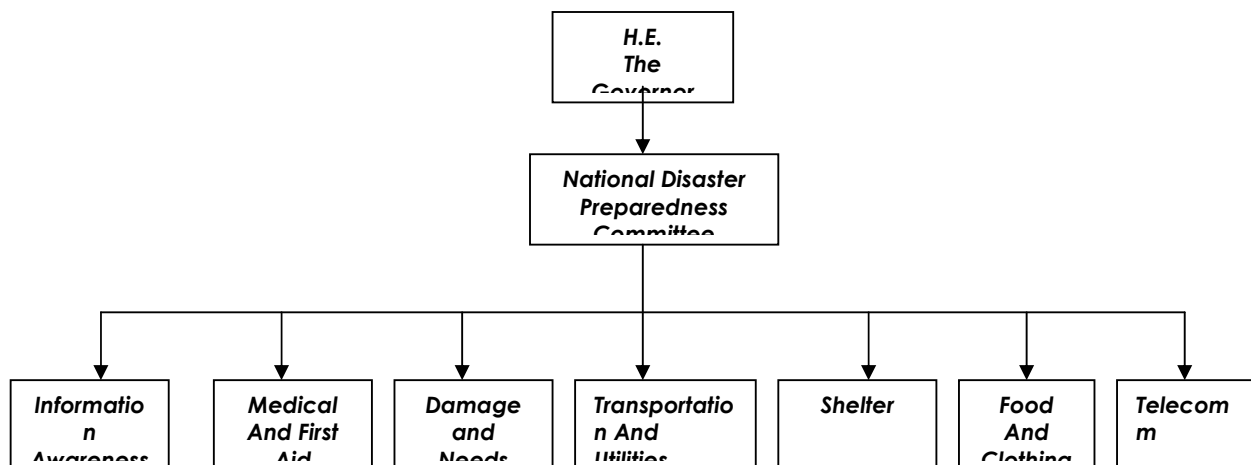
The public sector exercises leadership and authority in disaster management matters in Anguilla.

2 Structures

The disaster management structures in Anguilla are clearly established. The structures are represented graphically below.

The Governor occupies the highest level of authority. He chairs the National Emergency Relief Committee (NERC), now called the National Disaster Preparedness Committee (NDPC). This committee has seven (7) Standing Sub- committees:¹¹

- ❑ Information and Public Awareness
- ❑ Medical and First Aid
- ❑ Damage and Needs Assessment
- ❑ Transportation and Public Utilities
- ❑ Shelter
- ❑ Food and Clothing
- ❑ Telecommunications



¹¹ The National Disaster Preparedness Committee includes the Honourable Chief Minister, all Permanent Secretaries, the Commissioner of Police and the National Disaster Preparedness Coordinator.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

3 Roles

The roles of the NDPC and the standing sub- committees are outlined in the Anguilla Hurricane Plan. The role of the NDPC is stated as follows:

“The Committee shall ensure that the community is in a state of preparedness at all times.”
The roles of the standing committees are also articulated.

4 Functions

In addition to composition, the Hurricane Plan also outlines the functions and duties of the NDPC and the sub committees.

5 Policy

There is no consolidated, comprehensive statement of disaster management policy in the public domain. However, the government has articulated its responsibility for leadership in disaster management matters. The commitment is given in the Strategic Country Programme of Anguilla agreed with the British Government. It reaffirms its acceptance of the need for comprehensive and integrated planning to mitigate the effects of natural and man-made disasters. That general policy statement is supported by a programme objective that states:

“...Minimise the impact of natural and manmade disasters both immediately following the disaster and during the recovery phase.”

6 Legislation

Comprehensive disaster- related legislation has not yet been enacted. The CDERA 1996 model Disaster Management Act is in the final stages of review and drafting.

The Emergency Powers Ordinance that authorizes the Governor to execute extraordinary powers during an emergency or disaster is long established.

7 Facilities

The sole facility dedicated to disaster management is the Emergency Operations Centre (EOC). It is located within the Police Headquarters complex. Ancillary facilities such as cooking and bathroom areas are shared with the Police. The Emergency Operations Centre, Operations Room, the Communications Room and the Disaster Coordinator's office, are located within the same physical space. It is less than three hundred (300) square feet in total area. There is no emergency warehouse, storeroom, private office, media centre or dormitory.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

8 National Disaster Office (NDO)

The National Disaster Office is located within the Emergency Operations Centre. There is no independent public reception area or private office.

The National Disaster Coordinator's (NDC) function was upgraded to a full-time position about five (5) years ago. The incumbent has a strong information management background and extensive exposure to disaster management principles and practices. The NDC is the only full-time member of staff at the NDO. Recent efforts to assign an operational assistant on a part-time basis appear to have run into logistical difficulties.

The annual operating budget for the National Disaster office is currently EC\$ 40,000, exclusive of the contribution to CDERA.

The Permanent Secretary, Chief Minister's Office, functions as Head of Department for the NDO. Staff at the Chief Minister's office provides administrative support for expenditure controls, records and supplies management. The National Disaster Office' activities, focus on hurricane awareness and capacity building, through the annual field exercise for utility services and related departments of government.

9 Response agencies

9.1 Royal Anguilla Police

The Police Force is the lead operational response agency for disaster management. It also retains responsibility for incident command and until recently, municipal fire-fighting.

Additionally, the Police are expected to:

- Protect property and prevent vandalism
- Control traffic to and from emergency areas and the hospital
- Control crowds
- Supervise evacuation of buildings where necessary
- Protect food stores and other emergency centres
- Assist in rescue work

The Commissioner of Police is of the view that many disaster management operational tasks fall to the Police by default. He has also expressed concerns about deficiencies in facilities, plant and equipment.

9.2 Airport Fire Service

The Airport Fire Service is located at the Wall Blake Airport, under the administrative authority of the Airport Manager. He sits on several of the Standing Sub-committees. There are about twenty-five (25) fire officers. They provide coverage on a shift system. The Airport Fire Service reports that it currently meets the Civil Aviation Authority's (CAA) requirements for a category four (4) airport. The CAA has conducted annual inspections since 1993.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

9.3 Health Authority

The Health Authority officially came into being on January 1, 2004. It is a statutory organisation with appropriate legislation. The Authority has assumed most of the responsibility for the provision of health care and the management of health care workers. The legislation has ensured the direct involvement of the private sector in the management of the Authority. The Authority therefore has assumed the leadership role for the administration of emergency medical response activities.

9.4 Physical planning department

The Physical Planning Department was created in 1990 as a unit within the Lands and Survey Department. It was converted to a separate administrative unit in 1998.

Professional /technical staff of the department do not sit on any of the existing disaster management committees or sub-committees. The Permanent Secretary, Planning and Lands, represents the interests of the department as an ex-officio member of the NDPC.

The Department regards the Land Development Control Act of 1966, under which it currently operates, as inadequate for the CDM strategy. It is said that the new Bill that will be enacted would be more supportive of a risk reduction strategy.

The Principal Planning Officer expressed a strong commitment to a CDM strategy that would include a pivotal role for the department. The development of digital GIS maps for hazard –prone areas is one initiative that supports the stance enunciated. He also expressed concerns about the long-term negative effects on Anguilla's environment of current legislative and administrative weaknesses in the planning process and procedures.

10 Non Public sector (selected agencies)

10.1 Hotel and tourism association (AHTA)

The Hotel and Tourism Association is a mutual support advocacy and coordination group for interests in the tourism sector. Its membership is not restricted to hotel operators. It includes persons who provide ancillary services within the sector, such as utilities and insurance. The membership comprises more than one hundred (100) entities. That represents more than twenty (20%) of all businesses on Anguilla. The Association is twenty-three (23) years old.

The AHTA works largely through influence and advocacy. It has to date, mounted and maintained a successful lobby against widespread cruise tourism. All members have been provided with copies of the Caribbean Hotel Associations manual on hurricane preparedness. Some of the larger properties have well developed hurricane plans. There is little focus however, on preparedness for other hazards.

The AHTA is not currently a member of the National Disaster Preparedness Committee.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

10.2 Chamber of Commerce

The Chamber of Commerce comprises approximately fifty- (50) members. The Chamber is making a concerted effort to become a more vibrant organisation. Its newly appointed Executive Director is spearheading the development of a three (3) year strategic plan for the organisation. The Chamber was in the process of conducting a business survey when the CDMS study was being conducted.

The Chamber does not yet play a major role in matters related to Disaster Management. The Chamber regards private sector involvement in disaster management policy and programmes as low to moderate at this stage.

10.3 Cable and Wireless

Cable and Wireless is the pre-eminent provider of telecommunications services in Anguilla. The company has traditionally worked closely with the National Disaster Office to enhance emergency communications. Cable and Wireless is a member of the Telecommunications Standing Committee. The company's place within regional and international telecommunications networks makes it an indispensable component of an effective emergency communications system for Anguilla.

10.4 Anguilla Electric Company (ANGLEC)

ANGLEC is a public company that is the sole commercial supplier of electricity on Anguilla. ANGLEC does not chair the Utilities Sub-committee, but is a member of the Sub-committee. The organisation takes part in the annual utilities simulation exercise based on a hurricane scenario.

ANGLEC has a medium and long-term strategy of putting electricity distribution systems underground. Its Strategic Plan to the year 2012 calls for thirty to forty percent (30-40%) of such facilities to be placed underground. ANGLEC is now using class two (2) electricity poles. It reported that, as a result, there were no poles lost during Hurricane Lenny in 1999. The golf course, which will be constructed shortly, will have supply ducts located underground.

ANGLEC has a well-developed hurricane plan that:

"...Serves as readiness guide and manual incorporating all the activities that are involved in preparing for a hurricane, during a hurricane and in the restoration efforts after a hurricane." ¹²

¹² ANGLEC Hurricane Plan, August 11, 2003, p.2.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

10.5 Weblinks

Weblinks is a locally owned business based on communications technology. It focuses on providing communication services to other businesses. Weblinks is a member of the Telecommunications Standing Sub-committee. It has been active in improving emergency communications among response agencies.

The principals of Weblinks have expressed a strong interest in being a provider of choice for web-based emergency communications services during all phases of the Disaster Cycle.

10.6 Caribbean Communications

The company provides an all-island cable television service. It is a member of the Utilities and Media and Information Standing Sub-committee. There is an agreement in place for the company to air hazard awareness and warning information free of cost. The company is no longer a member of the NDPC. The company expressed strong support for the promotion of a multi-hazard approach to disaster management. They also expressed a desire for stronger private sector participation in disaster management.

10.7 Anguilla Red Cross

The Anguilla Red Cross is based on the principles that guide the International Red Cross Movement. It is considered a branch of the British Red Cross.

The branch is also integrated into regional (Caribbean) Red Cross activities. The international Red Cross movement has traditionally played a globally significant role in disaster preparedness and response. That pattern was mirrored in Anguilla.

The Red Cross is considered the lead non-government agency in disaster management. It is represented on the Shelter Standing Committee. The role of the Red Cross is likely to be reviewed and expanded in keeping with a CDM philosophy.

10.8 Anguilla Christian Council

The Anguilla Christian Council is an umbrella grouping of some Christian denominations on the island. Not all churches are members of the Council. The Council has traditionally played an active role in disaster relief. Within recent years, it has broadened its activities to include providing training in community hazard mitigation and the development of community hazard mitigation plans. There were two target communities - at Sandy Ground and East End. The Council is a member of the Shelter and Food and Clothing Standing Committees.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

10.9 Fuel suppliers

There are two (2) major suppliers of petroleum-based fuels on Anguilla – Shell Antilles and Guiana Ltd. and Delta Petroleum Ltd. Their bulk fuel facilities are located within close proximity to each other. Both companies confirm a close working relationship especially regarding safety procedures and emergency response.

The Shell Company has highly developed procedures for emergencies. The Regional Head Office mandates many of them. There is a requirement for emergency drills at least once per year. Local officials are invited to participate in major exercises such as the fire drill.

The Company representative does not regard Anguilla as being in a high-risk zone for crude oil spillage.

Delta Petroleum did not provide the same evidence of well- developed emergency procedures. The Company's representative expressed a commitment to improving their contingency planning arrangements.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

11 Assessment and analysis

The Department For International Development (DFID) "Study of Disaster Management Capability in the United Kingdom Caribbean Overseas Territories" (1998-2000), made twenty (20) specific recommendations for Anguilla. A quick review and analysis of the status of the recommendations is relevant to the CDM Strategy, since the

STATUS OF DFID STUDY RECOMMENDATIONS	
Recommendations	CDM Strategy - Assessment
1. HMG gives clear policy direction and support to the Governor.	Action has been taken and support is ongoing
2. Officials are apprised of the need for wholehearted participation.	Some progress has been made but many officials have not yet embraced Disaster Management as part of their responsibilities.
3. Legislation such as the CDERA model is introduced.	Model CDERA Act reviewed but not enacted. Legislative programme for CDM will need to be expanded.
4. Fire prevention and hazardous materials regulations introduced.	Legislation not yet enacted.
5. Budgetary provision made for prevention, mitigation, preparedness and response, including a contingency fund.	Budget caters primarily to administrative costs. No mitigation programme or contingency fund allocations.
6. A hazard and risk assessment study is undertaken.	Hazard and Risk study not yet undertaken.
7. Lessons learned from disasters and exercises included in plans and programmes	Disaster experiences have increased awareness, but have not produced major changes in the Disaster management Programme.
8. National Disaster Committee is overhauled and reconstituted.	No major institutional changes have taken place.

DFID Study is used as a baseline.¹³

¹³ "Study of Disaster Management Capability in the United Kingdom Caribbean Overseas Territories" (1998 – 2000), pp13 paragraphs 70.1 – 70.20

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

11.1 STATUS OF DFID STUDY RECOMMENDATIONS	
Recommendations	CDM Strategy - Assessment
9. Disaster Management Training needs assessed and programmes developed.	No systematic broad-based Disaster Management Training Programme in place. Training remains largely opportunistic.
10. Full- time Coordinator in place with support staff.	Full- time Coordinator in place but no support staff.
11. Fully equipped EOC established.	EOC located within Police compound, but has proven to be inadequate.
12. Disaster Awareness campaign launched.	Public awareness activities undertaken, but not as a long-term programme.
13. Ferry safety regulations are introduced and enforced.	Greater attention now being paid to ferry boat safety concerns, but legal and operational framework remains weak. Ferry Boat Incident Plan, still to be finalised.
14. A new Fire and Rescue Service to be established.	New domestic/municipal Fire Service established.
15. Shelter Management is improved.	Shelter Management Programme is still weak.
16. Disaster Plans reviewed and rehearsed.	Many plans need to be written. Only hurricane procedures are exercised regularly.
17. Stockpile of emergency supplies established.	Collaboration with Red Cross to develop emergency stockpiles. No independent national stockpile exists.
18. An expert should review oil spill plans and resources.	Shell Oil Company has taken decisive action. Delta Petroleum procedures need improvement.
19. Comprehensive review of the emergency communications system undertaken.	Action has taken place at the agency level, e.g. the Police, but study still needed for a national emergency network.
20. Disaster Management policies, strategies and plans are developed for all phases – with a timetable and attainable targets.	This CDM strategy represents action on this recommendation.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

The review of the DFID Study recommendations reveals important realities.

11.2 Anguilla remains vulnerable to a wide range of natural and human-induced hazards and incident threats. This is so because:

- Disaster Management infrastructure is limited; the EOC is inadequate.
- Emergency response equipment and supplies are very limited.
- There are very few hazard specific plans.
- The Disaster Management office still has only one member of staff.
- Very few hazard- specific and incident- response plans exist.
- The legal framework is weak.
- Institutional capacity is weak.
- There is no long-term Risk Reduction or Mitigation Strategy.
- There are very few persons with specialized Disaster Management training in the public service.
- Disaster Management is not integrated strategically into National Planning.
- Disaster Planning is focused on hurricanes almost exclusively.
- The operational budget is very small.

11.3 The pace of improvements in Disaster Management has been slow. Less than half of the twenty (20) recommendations of the DFID study have been implemented in five (5) years.

11.4 The private sector agencies do not yet feel that they are closely integrated into Disaster Management Institutional structures.

11.5 The loss of vegetation on Anguilla from human and animal activity has become a greater landslide and marine pollution hazard that is generally recognized.

12 Progress and achievements

Although Comprehensive Disaster Management (CDM) was not the principal paradigm, Anguilla has recorded some significant achievements. It must be acknowledged that the experiences of hurricanes Jose and Lenny in 1999 would have had a catalytic effect. Mention can be made of the following:

12.1 Policy

A higher level of awareness regarding the importance of Disaster Management now exists at the Executive Council level. The Governor's role in Disaster Management has been made more proactive.

12.2 Public Awareness

There is a high level of awareness about the threat of hurricanes among the people of Anguilla. The National Disasters Coordinator is frequently credited with raising the level of awareness.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

12.3 Utility Exercise

The annual utilities simulation exercise has been sustained.

12.4 Work Programme

A Work Programme for the National Disaster Office was developed in 2000.

12.5 Inter Agency Networking

Agencies in the private and non-government sectors were willing to share opinions freely on the subject of Disaster Management. That suggests a functional relationship with the National Disaster Coordinator.

12.6 Emergency Operations Centre (EOC)

The EOC located within the Police compound, although deficient in some respects, represents an improvement over the facility that was used previously.

12.7 Training

Anguillans have benefited from a wide range of training opportunities offered and conducted or supported by CDERA and NEMOT.

12.8 Supplies And Equipment

Some emergency response equipment has been acquired by key agencies since 1998/2000. This includes communications equipment.

12.9 Advocacy

The National Disaster Coordinator has rigorously promoted Anguilla's Disaster Management interest at the regional level.

13 Challenges and limitations

The formal adoption and acceptance of a CDM paradigm and associated strategy, will present many challenges. A brief description of the challenges is presented here to assist in the development of subsequent actions plans. These challenges relate to the nature of CDM and the reality of Anguilla as a small island developing state.

13.1 Assimilation Into National Development Planning

Traditionally, Disaster Management officials do not play a major role in National Development Planning. CDM requires that they do. A challenge will arise therefore to

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

ensure that Disaster Management officials are fully accepted into the institutional frameworks that lead National Development Planning. Further, there will be the associated challenge of ensuring that CDM practices, such as Hazard Mitigation and Risk and Vulnerability Reduction, receive the requisite attention in the development of National Plans.

13.2 Involvement of Non – Government Sectors

CDM requires the active participation of the Private, Non-Government and Community-based sectors in all phases of Disaster Management Planning and Response. Historically, their involvement has been greatest in the Preparedness and Response Plans for hurricanes. The expansion of the role of these sectors into other phases of the Disaster cycle could prove a challenge. The public sector will be challenged to create the institutional mechanisms for consistent consultation and decision-making involving the other sectors. Even though Anguilla is a small country, the sheer logistics of ensuring that all appropriate sector representatives are embedded into the institutional fabric of Disaster Management will prove difficult.

13.3 Resource Allocation

CDM requires a substantial investment of human, physical, material and financial resources in Disaster Management Programmes. Anguilla, by virtue of its small size, limited production base and small population, will thus experience a considerable challenge in allocating an optimum level of resources to a CDM programme. It will be necessary to increase the number of full-time staff. It will also be necessary to construct new physical facilities and acquire a wide range of emergency equipment and supplies.

13.4 Networking And External Relations

CDM is part of a global strategy to reduce Risk and Vulnerability. The Caribbean Region through CDERA is part of the strategy. Anguilla, as a member of CDERA and NEMOT, will be expected to participate in a range of projects, programmes, workshops, consultations, exchanges of experience and documentation of activities. Such demands will undoubtedly place a significant challenge at the feet of Disaster Management officials.

14 Observations and conclusions

The information gathered from interviews, direct observation, discussion and literature reviews, have led to the observations and conclusions summarised below:

14.1 The Disaster Management Programme in Anguilla is still focused on Preparedness and Response for hurricanes. This leaves the island and its people vulnerable to the effects of other hazard impacts – natural and human-induced.

14.2 There is no comprehensive long-term Risk Reduction Strategy in place in Anguilla. The island's vulnerability may be increasing as development proceeds.

- Expensive developments are taking place on the coast.
- The movement of people and cargo by land, sea and air is increasing.
- More people are employed in services that could be disrupted by disasters.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

- Buildings have been designed and constructed for hurricane resistance, but could be vulnerable to major earthquakes.
- 14.3 In its present form, the National Disaster Office could not effectively champion and lead the implementation of a successful CDM strategy and programme in Anguilla.
- The National Disaster Coordinator is the only full time member of staff.
 - There is no one to provide full- time office support to the Coordinator.
 - There is no one whose professional time can be completely dedicated to public awareness and community preparedness programmes.
 - There is no dedicated vehicle, emergency storeroom, library or resource centre. There is no photocopier or dedicated training equipment.
 - The operational budget would not support a significantly higher level of activity.
- 14.4 The National Disaster Office does not play a significant role in risk reduction activities, nor does it have the authority to ensure that risk reduction strategies are incorporated into the work Programmes of other agencies or departments. It cannot enforce a requirement for agencies to develop and maintain contingency plans that are regularly assessed and updated.
- 14.5 The Emergency Operations Centre (EOC) is inadequate. There is not enough space to accommodate a full operational team during activation.
- The office support equipment such as computers, photocopiers and printers is very limited. There are few independent direct telephone lines.
 - Facilities for rest and personal care are shared with the Police.
 - The communications system does not effectively link all Response Agencies.
 - The EOC is situated in an area subject to localized flooding.
 - The Police Commissioner does not regard the current location as ideal.

The current Emergency Operations Centre would probably not function as effectively as hub of emergency and disaster response. Fatalities and casualties could become greater because of the deficiencies in the EOC.

- 14.6 There is no Comprehensive National Disaster Plan. There are also very few hazard and sector-specific plans. Response agencies therefore have very few approved, standardized procedures that they can follow in an emergency. It is likely that in any situation other than a hurricane, uncertainty, confusion and inefficiency could result in loss of life and greater property damage.

With the exception of the hurricane and airport plans, plans are not tested regularly. The agency plans that exist focus principally on hurricanes or other single hazards such as oil spills.

- 14.7 There is no national stockpile of emergency supplies under the control of the National Disaster Office. The people of Anguilla could be exposed to additional suffering and hardship in any disaster situation, until external relief supplies arrived.
- 14.8 No comprehensive disaster management legislation has been enacted. The limits of authority of disaster officials, their control over national resources and their capacity to enforce long-term risk reduction and life saving decisions, is at best unclear and uncertain and at worst, inadequate. This situation could open the door for litigation

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

regarding government's liability in disasters. It also makes it very difficult for emergency response personnel to know the limits of their authority in disaster situations. Such uncertainty could impede emergency response actions with potential life-threatening consequences.

- 14.9 Institutional structures, such as the National Disaster Preparedness Committee and its Standing committees, seem to be functioning in an environment in which roles, responsibilities and authorities may not be absolutely clear. This seems to be limiting the introduction of many disaster management practices that have been long established in other Caribbean countries.
- 14.10 Emergency Response Equipment and supplies is limited. It is unlikely that emergency response agencies could provide a timely and efficient response to a major incident resulting in mass casualties such as an air crash, a major fire or a ferryboat accident.
- 14.11 Disaster Management is not integrated strategically into National Planning. Long-term public and private investment decisions are not currently benefiting from a risk reduction strategy, or consideration of risk. This means that expensive and important social and economic infrastructure could be vulnerable to hazards. The repair, replacement and restoration costs in future, could make those investments uneconomic with severe negative consequences for Anguilla.
- 14.12 The current financial allocations for the Disaster Management programme are a major constraint to the expansion of the programme. The National Disaster Office is not only constrained by a shortage of staff but by a shortage of funds. This means that the Work Programme of the Office has to be limited to those activities that can be paid for, or obtained through volunteers. Such a situation has persisted and the Disaster Management Programme in Anguilla now lags a long way behind the regionally recommended levels. A comparison with the CDERA expectations or the NEMOT minimum standards reveals many areas in which Anguilla's Disaster Management programme is deficient.
- 14.13 Private sector and community-based organisations are not playing as full a role as they could in a Comprehensive Disaster Management Programme. Representatives of these agencies complain of being "left-out" of the decision-making process as it relates to disaster management.
- 14.14 The terms and conditions under which Anguilla could receive assistance from neighbouring countries in emergencies or disasters are not clear. This situation could lead to life-threatening delays in which urgent assistance could be required such as ferryboat or aircraft incidents.
- 14.15 Anguillans are very aware of the dangers posed by hurricanes but seem far less aware and concerned about other hazards especially those that arise from human activity, such as transport accidents and hazardous materials such as fuel. This results in an air of complacency that is potentially dangerous.
- 14.16 Simulations exercises have been confined to the annual utilities, hurricane exercises and the airport incident exercises. While this has contributed to advances in hurricane Preparedness and Response. Capacity to deal with other hazards has not been strengthened. There is great uncertainty about Anguilla's capacity to deal with the demands of hazards other than hurricanes.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

- 14.17 Government policies and priorities in disaster management have not been consolidated and made public. External agencies such as NEMOT that could provide technical and financial assistance have suggested that the absence of such clear guidelines limits their capacity to source and provide such assistance.
- 14.18 Limited critical facilities and redundancies make the island vulnerable to hazard impacts. There is only one (1) hospital, one (1) airport, One (1) electricity generation plant and few publicly owned buildings that could be used as shelters. This vulnerability is likely to remain unless a long-term Mitigation Strategy is put in place.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

SECTION C

1 Introducing the CDM strategy for Anguilla

This CDM strategy for Anguilla is based on several closely related concepts and themes:

- The goal of disaster management is to save lives, reduce human suffering, minimise physical and environmental damage and reduce future vulnerability.
- Disasters disrupt, delay and impede sustainable development in all its facets.
- The greater a community's vulnerability to hazards, the greater is its risk.
- Actions taken to mitigate hazards and prepare a community for hazard impacts, contribute to sustainable development

2 CDM – A change of approach to managing risk

The purpose of CDM is to contribute to sustainable development by facilitating the inclusion of risk reduction and risk awareness as integral parts of all societal functioning rather than as parallel or external activities. CDM has been defined as “incorporating management of all hazards, through all phases of the disaster management cycle – prevention and mitigation, preparedness, response, recovery – by public and private sectors, all segments of civil society and the general population.”

In respect to how hazard risks have been previously managed in Anguilla, CDM requires a significant change of approach. One that addresses all stages of disaster management, where hazard and risk considerations are continually factored into “normal” development activities such as land use planning, environmental monitoring, physical planning, development control and building inspection. Continuous commitments are also required to maintain explicit disaster management capabilities: public awareness, training, emergency medical care, search and rescue, the maintenance of emergency equipment, etc.

3 Integrated development planning

CDM requires all hazard risk and vulnerability reduction to be integrated within all development planning. However, building requisite capacities to do so in Anguilla will attain greatest impact in a time frame longer than the five-year strategy period. Instead the strategy aims to create firm foundations for CDM to become fully integrated into National Development Planning, becoming part of the same process.

This commitment to integrated planning must extend beyond merely articulating CDM objectives in a national development strategy, becoming evident in all national planning documents. As time passes all long-term development and investment projects should be required to evaluate and then incorporate hazard risk and vulnerability reduction plans.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

Ultimately the recommended national mitigation strategy should be officially incorporated into Anguilla's long-term Integrated Development Strategy.

4 The strategic framework for comprehensive disaster management in Anguilla

In recognition of the holistic requirements of CDM, this strategy document proposes a wide range of key action and result areas. It considers differing sector priorities, reflecting multi-hazard, multi sector and multi-phase realities in its structure and recommendations.

The success of the strategy is dependent on major strategic changes to the way disaster management and all aspects of development planning are organised. Changes recommended and outlined in the next section of the strategy document include:

- GoA Policy; further incorporation of risk considerations within National development objectives
- Institutional Priorities; The emphasis and commitment given to disaster risk reduction by disaster managers and sectoral actors
- Administrative frameworks to enable effective policy implementation.
- Ensuring infrastructure offers appropriate levels of protection and is resilient enough to function post anticipated hazard impacts.
- Additional or improved emergency facilities and equipment for all functions of emergency management (warnings, shelter, evacuation, command and control, relief distribution, etc).
- Funding and resource allocations to attain acceptable disaster management standards.
- Multi sectoral training and capacity raising programmes
- Critically, disaster management priorities and an implementation programme for the National Disaster Office (NDO) are presented for the five (5) year time frame of the strategy.

5 Implementation framework

The strategy document, whilst mapping out broad requirements to attain appropriate standards in disaster management, contains a series of practical recommendations and activities that may be realistically implemented in a five-year time span.

The CDM Strategy will require many changes over a long period of time. Although the strategy must be perceived in a holistic manner, it will not be possible introduce all recommendations at once. Implementation should take place through a phased series of discrete but related activities over the five-year period.

The strategy is underpinned by two organisational mechanisms:

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMs**

- 5.1 An implementation plan is recommended to decide on the prioritisation and scheduling of recommendations to be implemented in support of the strategy.
- 5.2 The implementation plan will determine and be supported by the work programme of the NDO.

Precisely which recommendations are to be conducted when, and which are prioritised will depend on a variety of inputs: commitments, resource availability and technical capacities. As such the strategy should be considered as guidance to a desired state of affairs (i.e. adequate CDM).

6 Guidelines for effective implementation

6.1 Building local ownership and responsibility

The ultimate success of the strategy depends on building local capacity over time. This can only happen if the people of Anguilla take full ownership and responsibility for the implementation of the Strategy:

- 6.1.1 The Government of Anguilla should publicly endorse the CDM Strategy and outline its vision and expectations. Without governmental approval and public sector leadership, the Strategy will fail.
- 6.1.2 Strong leadership and commitment from the highest levels of decision making are required. In particular the National Disaster Co-ordinator (NDC) must be able to lead the process.
- 6.1.3 The NDC should ensure that there is widespread discussion among organizations and the general public about the strategy.
- 6.1.4 The government of Anguilla should consider assigning specific responsibility for the implementation of the strategy to a sub-committee of the NDPC. Representation from the Economic Planning Unit, the private sector, the Red Cross and community-based organisations is critical.
- 6.1.5 The sub-committee and individuals selected for it should be officially endorsed by Executive Council.
- 6.1.6 The Implementation sub-committee should work with the NDC to develop an annual CDM implementation plan for the next five (5) years. The Implementation plan should form the backbone of the work programme for the NDO.
- 6.1.7 An Implementation progress report should be submitted to the Executive Council through the NDPC at least twice per year.
- 6.1.8 Each succeeding year's Implementation Plan should take the activities, accomplishments and shortcomings of the previous year into account. Adjustments should be made to take unfolding circumstances into account.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

6.2 Deciding implementation priorities

There should always be a clear understanding of the priorities for implementation as action is being taken. The following factors should be considered with regard to the establishment of priorities in the annual Implementation Plan:

- Long- term benefit regarding risk reduction
- Availability of resources
- Local capacity for implementation
- Opportunities for involvement of all sectors
- Probability of technical assistance and synergy with regional and partner programmes (i.e. CDERA, NEMOT, UNDP, etc).

6.3 CDERA guidelines

This CDM Strategy accords with the good practice guidelines set out by CDERA and NEMOT minimum standards for disaster management.¹ It is a locally relevant articulation of the long-term goal and objectives of CDERA and the purpose for which the CDERA framework and Co-ordinating Unit were established.

Article 13 of the agreement establishing CDERA lists nineteen (19) specific action areas that Participating States agreed to implement. The CDERA CDM implementation framework, and Article 13 guidelines should continue to form the conceptual basis for Anguilla's CDM strategy and be incorporated into the contributing Implementation plans and the NDO's work programme.

CDERA's CDM framework is underpinned by the stipulations set out in CDERA's Model Disaster legislation. This model should guide and be incorporated into Anguilla's disaster legislation when it is passed into law.

6.4 Stakeholder involvement

CDM requires the involvement of all sectors of society. This includes the public, private and non-government sectors. Opportunities must be created to permit consistent and meaningful consultation and broad-based decision-making with representatives of all sectors. The process should be systematic, consistent and sustained. Thus:

6.4.1 Implementation of this CDM Strategy should be seen from the start as a collaborative partnership of all sectors.

6.4.2 The NDPC (a change of title and purpose is recommended to the National Disaster Management Committee) and its sub-committees should further include representatives of the private and non-government sectors.

6.4.3 The public sector should draw heavily on the expertise that exists in the private and non-government sectors for the implementation of CDM activities.

¹ An extract of the NEMOT strategy has been included in the Appendices.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

- 6.4.4 Whenever appropriate, public recognition should be given to non-government initiatives that are in harmony with this CDM strategy.
- 6.4.5 Government should consider contingency planning in the non-government sectors as an integral part of national contingency planning.
- 6.4.6 Memoranda of Understanding should be developed with key non-government agencies to promote a clear understanding of roles, responsibilities and expectations.

6.5 External support

Existing capabilities for CDM, along with the comparatively limited human resource base of a small island state, indicate technical assistance will be required in the short and medium-term to fully implement the strategy. Furthermore disasters, by definition, are situations in which an affected community requires external assistance. Anguilla should regard external assistance as a key planning resource, taking all opportunities to receive it:

- 6.5.1 When approved, the CDM strategy should be shared and discussed with representatives of CDERA, NEMOT, the OECS, the CDB, and ECLAC.
- 6.5.2 The implementation plan should be discussed with CDERA and NEMOT before being finalised. CDERA and NEMOT should be invited to indicate the specific resource, technical administrative or logistical support they can provide each year.
- 6.5.3 The implementation plan should be integrated into the Strategic Country Policy Programme and funding sought to support implementation.

6.6 Cost implications

CDM and the recommendations of this strategy have significant cost implications for Anguilla.

Financing disaster management initiatives is a challenge for any small state, placing an even greater burden on the public purse because of the extent and nature of the activities and the time horizon required. Funding for CDM extends beyond the NDO and emergency services. CDM must instead be seen as a national sustainable development priority and budgetary support provided accordingly.

Fortunately, research has clearly demonstrated that investments in Disaster Mitigation and Preparedness are cost effective; the expense of post disaster recovery programmes is significantly reduced, investments protected and standards of living maintained.

This strategy recommends investments in long-term structural mitigation projects, in the construction of critical infrastructure, and in supporting the acquisition of emergency

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

equipment and supplies. Investment is required in additional staff, training and public awareness programmes.

These recommendations, such as increasing the staff compliment of the NDO and the construction of a new Emergency Operations Centre/Warehouse, will be expensive in the context of Anguilla. It will be up to the Government of Anguilla to determine the extent of expenditure, the options available (e.g. numbers of NDO staff, building a new EOC or strengthening an existing building) and how funds will be allocated.

These expenses will be reduced if the Government takes advantage of regional disaster management assistance programmes:

- 6.6.1 CDERA's training programme and their newly introduced Technical Secondment Assistance programme (TSAP) is a valuable resource for training NDO and agency staff.
- 6.6.2 Financial and technical assistance for risk reduction and preparedness are available from a variety of regional agencies including, among others: the United Nations Development Programme (UNDP), Pan American Health Organisation (PAHO), International Federation of Red Cross Societies (IFRCS) and the Caribbean Development Bank (CDB). Wherever possible Anguilla should seek their assistance with applying the CDM strategy.
- 6.6.3 The DFID/NEMOT regional programme has limited funds available to assist NDO capacity raising. In addition the DFID regional disaster management adviser will relocate to Anguilla in 2005 to assist strategy refinement and implementation.

6.7 Scheduling

A schedule must be developed for the implementation of the strategy. This CDM strategy embraces many issues and provides a comprehensive list of recommendations for action in the short, medium and long-term. Recommendations include policy, institutional, Infrastructure and programme priorities.

It is not feasible for the government and people of Anguilla to implement such a range of recommendations at one time. Implementation must be phased, to coincide with the time required and the likely availability of financial and human resources.

The primary schedules for the implementation of this CDM strategy should be those developed in the annual implementation plan decided upon by the recommended implementation committee and in the work programme of the NDO. To assist the process recommendations given in this document include some indicative activity schedules (e.g. for contingency plan revision).

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

SECTION D

Key action and result areas - specific recommendations for the short and medium- term

1 A CDM implementation plan

After acceptance of the principles and objectives of the CDM strategy by the GoA, a CDM implementation plan should be designed to introduce and implement key recommendations of the strategy.

The yearly CDM implementation plan to be formulated for each of the next five years by an implementation sub-committee to the National Disaster Preparedness Committee (to be re-named the National Disaster Management Committee to reflect the CDM mandate) working in close collaboration with the National Disaster Co-ordinator (NDC). The yearly implementation plan will determine the prioritisation and scheduling of recommendations in support of the strategy.

Underpinning the success of the implementation strategy will be the early introduction of prioritised key changes and activities. These are:

- 1.1 Changing the mandate of the NDO to enable it to meet a CDM mandate.
- 1.2 Strengthening the capacities of the National Disaster Office (NDO) so it can effectively meet its CDM mandate and the recommendations of the strategy.
- 1.3 Changing the structure and responsibilities of the National Disaster Preparedness Committee to embrace CDM
- 1.4 Introducing legislation to give authority and ensure compliance with the CDM strategy.

These strategy components, and suggestions to introduce them, are presented in greater detail later in this section. They are accompanied by a broad variety of mechanisms and recommendations that will assist Anguilla to attain heightened standards of CDM over the next five-year period. Of these two are prioritised for early implementation:

- 1.5 Carrying out an island wide hazard and vulnerability assessment (HVA) to inform all hazard risk reduction and preparedness measures. The HVA will provide the basis for the introduction of a longer term National Disaster Mitigation strategy.
- 1.6 The review, refinement and introduction of contingency plans for the scope of hazards that may occur in Anguilla and for crosscutting, generic emergency functions such as communication, mass casualty management and shelter.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

2 The National Disaster Office (NDO)

CDM requires a broader mandate for NDOs. The mandate is required to reflect the following:

- Hurricanes are not the only hazards
- Risk reduction should be an integral part of national development
- A NDO is not an emergency response agency in the same sense as the Police or medical services. Instead it coordinates the national response of all agencies and sectors of society
- The building of a hazard resistant community takes many years
- Several hazards can impact a community simultaneously or in close sequence
- The NDO must function during all phases of the disaster management cycle – preparedness, response, recovery and mitigation.

The NDO should be regarded as the lead co-ordinating and implementing agency for a CDM strategy. Strengthening the capacity of Anguilla's NDO with appropriate staff, resources and skills is therefore pivotal to the adoption of CDM.

Even a cursory assessment of the NDO clearly indicates that, in its present form, it could not effectively champion and lead the implementation of a successful CDM strategy and programme in Anguilla. The National Disaster Co-ordinator (NDC) is the only person that functions at operational level in the NDO. Administrative support is provided by the Chief Minister's office.

In the context of CDM, the office has a variety of weaknesses that would greatly inhibit its effectiveness:

- There are no persons to provide dedicated full-time office support functions.
- There is no one whose professional time can be completely dedicated to public awareness and community preparedness programmes.
- There is no dedicated, full-time operational and logistical support for the NDC.
- The resources committed to the NDO, are inadequate for CDM. There is no dedicated vehicle, emergency storeroom, library or resource centre. There is no photocopier. There is no dedicated modern training equipment.
- The office location cannot house more than two (2) workstations on a day-to-day basis.
- The current location of the office, inside the Police headquarters complex, makes it an inconvenience for both entities.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

- The existing operational budget would not support a significant increase in programme activity.
- Institutional memory of disaster management activities resides almost exclusively with the NDC.

2.1 Recommendations

2.1.1 NDO Work programme

The NDO should develop a work programme based on this CDM strategy. The work programme should be developed for the first three (3) years of the strategy and then for the remaining two (2) years.

The NDO work programme should be compartmentalised into annual segments. The annual segments should be finalised in time to make timely budgetary submissions for the national budget cycle.

The NDO work programme should have clearly established priorities for implementation. The following are proposed:

- Work planning
- Contingency planning
- Training
- Exercises
- Emergency supplies
- Public awareness
- Strategic alliances
- Use of technology
- Advocacy
- Readiness assessments

The NDO developed a broad-based work programme in 2000 before there was a firm decision to make CDM the conceptual basis for disaster management in Anguilla. Now that CDM has been launched in Anguilla, the work programme needs to be re-examined.

This work programme should include a capacity development strategy to ensure that the NDO is able to discharge its CDM mandate and the heavy workload envisaged.

With the assistance of DFID's DMA who will re-locate to Anguilla in March 2005, a first CDM work programme and NDO strengthening proposal should be submitted in May 2005

2.2 Recommendations for the NDO strengthening proposal

2.2.1 The name of the NDO should be changed in accordance with the mandate

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

change to embrace CDM.

- 2.2.2 The terms and conditions of employment of the NDC should be reviewed with the intention of bringing them into line with common practice in other CDERA participating states.
- 2.2.3 The government should decide the number of full-time positions that should be filled by the year 2009. The following are recommended:
- Director
 - Programme officer
 - Office manager/executive officer
 - Logistics and operations technician/driver
 - Clerical officer/receptionist
 - Stores clerk/Warehouse manager

It is recommended that full time staff be phased –in over the five (5) year time frame of the strategy.

- 2.2.4 An expanded budget allocation should be provided for the NDO in the annual estimates. The allocation should cover both programme activity and recurrent expenditure. The total allocation should be in keeping with the CDM priorities, established in each year's work programme.
- 2.2.5 All newly recruited staff for the NDO should undergo practical training relevant to their job functions. Attachments to other NDOs in the Caribbean should be considered.
- 2.2.6 Technical assistance should be sought in the short-term for a "Caretaker National Disaster Coordinator" to allow the incumbent to take accumulated vacation leave.
- 2.2.7 The NDO should be relocated to a more convenient site until a National Emergency Operations Centre (NEOC)/Disaster Office complex is constructed.
- 2.2.8 Support for the presence of short-term Technical Advisers to the NDO for implementation of this CDM strategy, should be sought from DFID'S Disaster Management Adviser (DMA) and through CDERA's Technical Assistance Secondment Protocol (TASP). The technical advisers would act as resource persons to the NDC and the implementation committee in the following areas:
- Developing the annual work programme
 - Reviewing and updating contingency plans
 - Providing on-the-job training in leadership, teamwork, disaster response and recovery for personnel from key response agencies, the private sector and community-based organizations
 - Functioning as resources person to the private sector in CDM planning and training.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

3 Adapting the purpose, structure, composition, priorities and *modus operandi* of the National Disaster Preparedness Committee (NDPC) to meet the additional requirements of CDM.

3.1 Institutional change in disaster management arrangements in Anguilla will be required to support the implementation of this strategy. The new institutional framework will be required to:

- Plan, prepare for, respond to, recover from and mitigate the effects of human-induced, as well as natural hazards.
- Support the participation of private sector community-based and service organizations at all levels of programme planning and implementation.
- Ensure that the attribution of responsibility for disaster management policies, strategies, programmes, projects, tasks and activities remains clear.
- Maintain flexible and adaptable mechanisms that focus both on emergency response and risk reduction.
- Promote leadership, management, teamwork and coordination among all sectors.
- Exhibit a high level of long-term planning.

The implementation of this strategy will require systematic, coordinated action among many agencies and the various social sections at several levels. The focus of actions will change from preparedness and response to mitigation and planning.

In moving to implement CDM, changes to both the institutional structures and their *modus operandi* will be required.

3.2 Recommendations

3.2.1 Changing the mandate of the committee so it is responsible for directing all facets of CDM; risk reduction, preparedness, disaster response and recovery. The committee could be renamed the National Disaster Management Committee (NDMC).

3.2.2 Both Montserrat and the British Virgin Islands also have disaster management councils. They include representation from the private sector, non-government and voluntary organisations and statutory agencies. These councils meet at least once per year to provide broad-based guidance to the national disaster work programmes and to review progress and challenges. They also review the annual report and work programme of the national disaster offices. In effect these councils acts as a filter for executive council on disaster management matters. The British Virgin Islands council has also established a separate task force to lead the implementation of a national mitigation strategy. It includes representatives of private sector agencies.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

- 3.2.3 The structure, composition, function, duties, tasks and operational procedures of all NDPC standing committees should be reviewed as a critical part of the implementation of the strategy.
- 3.2.4 It is recommended that sub-committees be formed to oversee essential components of the CDM strategy; the mitigation plan, emergency welfare and supplies and the CDM implementation plan (as outlined later in this section).
- 3.2.5 The yearly NDO work programme of the NDO to be submitted to the NDPC/NDMC for approval.
- 3.2.6 The yearly CDM implementation plan to be formulated for each of the next five years by an implementation sub-committee of the NDPC/NDMC working in close collaboration with the NDC. The yearly implementation plan will determine the prioritisation and scheduling of recommendations in support of the strategy.
- 3.2.7 The CDM implementation plan to be presented to the NDPC/NDMC for final approval
- 3.2.8 The first implementation plan will be prepared in the first half of 2005 after GoA approval of the strategy.

3.3 Roles and responsibilities within the NDPC/NDMC

CDM requires that a wide range of individuals, officials, organisations and committees perform assigned roles. This strategy cannot discuss and describe all such roles. Several have been chosen because of their potential impact and influence. Those are described below.

3.3.1 The Governor

The Governor of Anguilla has responsibility for disaster management, a subject within his administrative responsibilities. Day-to-day administrative oversight falls to the Permanent Secretary in the Chief Minister's office. The Governor does not retain budgetary control over the disaster management programme. It is clear that any CDM programme for Anguilla must take due cognisance of the role of the Governor. In order to ensure that there is as little ambiguity as possible, the recommendations shown below should be implemented.

- The Governor should function as an Executive Chairman of the NDPC/NDMC.
- All proposals relating to strategic concerns in disaster management and the annual NDO work programme should receive authorisation from the Governor acting in council with the NDMC.
- The Governor's office should be represented on major committees.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

3.3.2 Chief Minister

The Chief Minister as the political head of government has an important role to play in CDM. The Chief Minister is the primary decision maker among the political directorate. The Chief Minister should have a role in CDM that reflects and befits his national responsibilities. Recognizing the nature of constitutional responsibilities in an Overseas Territory, the role of Chief Minister in establishing and monitoring disaster management policy should be second only to that of the Governor.

- The Chief Minister should be confirmed as deputy chairman of the NDMC
- Clear guidelines should be developed pertaining to the involvement of government ministers in any institutional structures that currently exist or that may be created in future.

3.4 Co-ordinating disaster and emergency response

The NDMC, with its expanded mandate, membership and responsibilities (i.e. for all hazard CDM), will be too cumbersome to effect an efficient emergency response. Experience in both Montserrat and the British Virgin Islands suggests that the NDMC, when called to manage a disaster or emergency event is streamlined into an Emergency Policy Group (EPG) and an Emergency Operations Group (EOG) to create a level of co-ordination that is difficult to achieve in their absence.

In the British Virgin Islands (BVI) and Montserrat, the EPG is chaired by the Governor and includes the Chief Minister, the Commissioner of Police and the NDC. Ministers of Government attend meetings at the request of the Governor or Chief Minister.

The EOG comprises heads of those organizations required to man the National Emergency Operations Centre (NEOC) when activated and lead the operational response to any national emergency or disaster.

3.5 Recommendations

- 3.5.1 In light of the tested experiences of other Overseas Territories, Anguilla should consider the formulation of a clearly designated Emergency Policy Group and an Emergency Operations Group based on the existing structure of the NDPC.
- 3.5.2 The Governor should chair the EPG and the Chief Minister confirmed as deputy chairman if established. The NDC should be a member.
- 3.5.3 Coordination at the National Emergency Operational Centre (NEOC) level should be the responsibility of a clearly defined emergency operations group led by the Director of the NEOC. The Permanent Secretary to the Chief Minister's Office is suggested as Director of the NEOC.
- 3.5.4 On-scene coordination of multi-agency incidents should remain the responsibility of the Police.
- 3.5.5 The NDC should be the focal point for coordinating external assistance through the Caribbean Disaster Emergency Response (CDERA) regional mechanism.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

3.5.6 The Governor in consultation with Chief Minister should be responsible for coordinating all external assistance beyond the CDERA mechanism.

4 Legislation

CDM cannot be attained without an appropriate legislative framework. Legislation is required in many areas to give full effect to the goal of CDM. The list of areas shown below is an indicative list.

1. Comprehensive Legislation for all phases of the Disaster Cycle
 - Mitigation
 - Preparedness
 - Response and
 - Recovery

2. Specific legislation for:
 - Building Codes
 - Physical Planning and Land Use Planning
 - Environmental Management
 - Road Safety
 - Marine Safety
 - Emergency broadcasts and warning arrangements
 - Mutual Aid Agreements
 - The Emergency Operations Centre
 - Hazardous Materials Management
 - Storage Use and Distribution of Petroleum Products
 - Fire, Prevention, Suppression and Control
 - Aircraft incidents
 - Emergency Medical Care
 - Role of the Media in Emergencies
 - Procedures for Mass Fatalities
 - Emergency Shelter Management
 - Management of Emergency supplies, such as food, fuel and water
 - Declaration of a Disaster
 - Anti-price gouging regulations
 - Mass gathering facilities

4.1 Recommendations

- 4.1.1 The CDERA Model Legislation should be subjected to urgent review and consultation, to ensure that it will meet Anguilla's needs in the short and medium term. Enactment should be expedited.
- 4.1.2 The NDPC, or the recommended National Disaster Management Committee, should work with the Attorney General's Chambers and relevant key stakeholders, to decide on the priority listing for the enactment of legislation and regulations that will be required to support CDM.
- 4.1.3 Copies of relevant legislation that already exists in other Caribbean countries should be obtained to expedite the legal drafting process.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

A full review of the national disaster management structures to be prepared by the end of 2005 for implementation in 2006.

5 Risk Reduction

5.1 Integrated development planning

The “Model National Hazard Mitigation Policy for the Caribbean”, developed by CDERA and the Caribbean Development Bank (CDB), states inter alia:

“... Sustainable development cannot be achieved without mainstreaming hazard risk reduction, which must become part of normal everyday activity for institutions as well as communities. The strategy emerging from this belief is the incorporation of hazard risk reduction into development planning, project formulation and implementation of both government and private sector projects. It will also require that the ordinary citizen be made aware of and pursue hazard risk reduction in the community in which he/she lives.”¹⁴

Development planning is a multi-sector activity. It seeks to integrate expertise from a wide range of areas to develop strategies that promote sustainable development in all major spheres, economic, social and physical. Traditionally, disaster management was seen as an area outside of the portfolio of development planners, instead being focused on emergency response. As a result Anguilla does not yet have a policy, strategy or plan to ensure that development planning does not increase risks or reduces risks where possible. Although there is some long term risk reduction, most notably building codes and works relating to drainage and flood control, these are tied more closely to an acceptance of the immediacy of some risks rather than a cohesive, integrated long-term risk-reduction or mitigation strategy.

Until Anguilla accepts that risk reduction should be integrated into development planning, there is a danger that development itself will increase disaster risks, opportunities to reduce risks will be missed and the prospects of sustainable development will be continually threatened.

Pre-emptive risk reduction, alternatively termed mitigation, whilst protecting development gains has further benefits:

- Mitigation saves lives and reduces damage to property, infrastructure and the physical and natural environments by promoting hazard resistance and protection for all sectors
- The disruption to essential services during hazard impacts are minimised
- The costs of post disaster repair, reconstruction and reconstruction are reduced for all sectors.

¹⁴ MODEL NATIONAL HAZARD MITIGATION POLICY FOR THE CARIBBEAN, (The Caribbean Disaster Emergency Response Agency (CDERA) and The Caribbean Development Bank (CDB), p. 9.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

- The time required for “normalcy” to return to a community is reduced

To advance the systematic integration of risk reduction into development planning and everyday practice a variety of individual options are given along with the recommendation to formulate a mitigation strategy to organise and direct risk reduction measures.

5.2 Recommendations:

- 5.2.1 Hazard and risk assessments (HVA) should be mandated for inclusion into the design criteria of all development programmes and projects to prompt their adoption of risk reduction measures.
- 5.2.2 A clear statement of the developmental significance of risk and vulnerability reduction should be included in all new national development strategy documents.
- 5.2.3 The NDC should be made a member of standing and *ad hoc* committees dealing with national development issues.
- 5.2.4 The Government of Anguilla should arrange for an island wide multi hazard and vulnerability assessment (HVA). This would build a better understanding of hazards characteristics, areas and sectors most likely to be impacted and the potential consequences on societal functioning. The HVA would inform the levels of disaster reduction and preparedness required as well as further defining risk reduction and preparedness priorities.
- 5.2.5 Private sector organizations such as the Hotel and Tourism Association and the Chamber of Commerce should be encouraged to include risk and vulnerability reduction strategies as matters for discussion, decision and action.
- 5.2.6 GoA to consider a package of incentives to encourage residents to embrace CDM. The package might include but not be limited to following:
 - Duty reductions on entry of items such as hurricane shutters
 - Tax incentives for hazard-resistant designs and retro-fitting homes
 - Insurance including incentives for insurance companies to reduce premiums for hazard resistant design and practice
- 5.2.7 Land use planning: Land use strategies define how a community should develop spatially. They have the potential to greatly reduce Anguilla's vulnerability to hazards of all kinds. Various options should be considered to reduce hazard associated risks:
 - Land zoning for prescribed uses according to vulnerability and importance to the national development effort
 - Boundary restrictions to limit urbanisation
 - Relocation of existing developments to safer areas, particularly essential or critical infrastructure and services
 - Enforcement of existing or updated legislation and regulations

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

5.2.8 Environmental monitoring. Modernisation of small-island developing states and their conversion from primary production to tourism and services has brought negative as well as positive effects. The destruction of sand dunes, deforestation, the pollution of coral reefs, alterations to drainage patterns and land reclamation inland can have negative implications, increasing the threat or severity of hazards such as flooding, storm surge and wind speeds.

Uncontrolled development patterns and the use of hazardous materials can create their own ill afforded environmental disasters. Examples include:

- Marine pollution
- Oil spills
- Destruction of coral reefs
- Build up of debris and garbage
- Destruction of vegetation and habitats.

In the case of Anguilla, any major negative impact on its ecological or physical features would rapidly undermine tourism, are ill afforded and may increase hazard intensities. Ecological protection should be a major component of any sustainable development and CDM strategy. Close attention should be given to environmental monitoring and management.

Mitigation planning and the strategy adopted (see below) should incorporate and be informed by environmental monitoring. Similarly environmental impact assessments and monitoring activities should include hazard considerations.

6 A National mitigation strategy

Many of the above recommendations to incorporate CDM into development planning can be introduced independently. However, a cohesive mitigation strategy organising all facets of risk reduction is recommended:

- The GoA should mandate the development of a mitigation strategy for inclusion in all future medium-term national development strategy documents.
- Developing the strategy should be the responsibility of a mitigation sub-committee chaired by the NDC that reports to the NDMC.

6.1 Timing and phasing

Many of the recommendations presented above can be introduced relatively quickly (e.g. the NDC to be on planning boards, a GoA policy statement, etc) and need not wait for a formal mitigation strategy to be devised. However,

6.2 The Hazard and Vulnerability Assessment (HVA) should be considered a priority. The scope of the HVA study, consultants, costings and schedule to be determined by the end of 2005. The assessment to take place in 2006.

6.3 Following the completion the HVA, a mitigation strategy and plan should be

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

developed within the first four (4) years of the life of the CDM strategy.

7 Preparedness

The following aspects should be considered as long-term objectives to bolster all hazard preparedness.

7.1 Contingency Planning

All hazard, up-to-date contingency plans are a requirement of CDM. Plans should emanate from an over-arching framework such as a National Disaster Plan, but have content, which is relevant to the specific phase, hazard, sector or Agency being planned for. It is clear, that even in a small country such as Anguilla, a wide range of contingency plans is required.

Government can mandate that all public sector entities develop contingency plans. That approach cannot be taken with the non-government sectors. It is important though, that the development and maintenance of up-to-date contingency plans becomes an integral part of the way all agencies and sectors operate including the private sector.

7.2 Recommendations

- 7.2.1 A full suite of Contingency Plans should be written during the next five (5) years. Where plans already exist, they should be revised and upgraded. The list shown below, is intended to offer guidance on the range of plans that should be developed and the general level of urgency required for development or updating.
- 7.2.2 7.3.1.2 Technical assistance and associated funding should be sought over the next five (5) years to develop or review the recommended list of contingency plans.
- 7.2.3 All contingency plans of national significance should be updated in accordance with the stipulations of the Disaster Act when it becomes law.
- 7.2.4 The Government of Anguilla should include assistance to private sector and community- based disaster management organizations for programmes, aimed at improving contingency planning capacity in Anguilla.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM - TERM STRATEGY CDMS**

CONTINGENCY PLANS	Year 1	Year 2	Year 3	Year 4	Year 5
NATIONAL LEVEL					
Multi Hazard National Plan	✓				
Emergency Operations Centre	✓				
Continuity of Government		✓			
Red Cross		✓			
Disaster Recovery			✓		
District Disaster Committees			✓		
SECTORAL LEVEL					
Tourism Sector		✓			
Shelter Management			✓		
Welfare Services				✓	
Public Utilities		✓			
Emergency telecommunications				✓	
Agricultural Sector				✓	
Health Sector	✓				
Financial Services Sector			✓		
National disaster information and media plan		✓			
HAZARD SPECIFIC					
Flood	✓				
Air Transport Events	✓				
Sea Transport Events (Ferries)	✓				
Mass Gathering Events			✓		
Oil Spills (Land and Sea)			✓		
GENERAL PLANS					
Mass Casualty		✓			
Search and Rescue				✓	
Debris Management				✓	
School Evacuation	✓				
		✓			
AGENCY PLANS (To be determined consultatively)					

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMs

7.3 Exercises

The value of regular simulation exercises to promote competence in disaster management activities is widely recognized. As plans are developed they should be regularly tested and updated. There are several kinds of exercises from simple orientation discussions through “table-top” activities, case study reviews, to full field exercises. Each type of exercise has a different cost/benefit relationship. Full-field exercises are the most beneficial, but are also the most costly, in terms of money, time, resources and disruption to the community. External expertise may be required to facilitate the staging and evaluation exercises. The annual utilities exercise contributes to improvements in preparedness and response capability but its focus is too narrow to support a CDM approach. Exercises should be regular and systematic and should test the whole range of response and coordination activities at all levels in the community.

7.4 Recommendations

- 7.4.1 The NDO's work programme should include a range of exercises each year. At least one (1) field exercise focusing on a different hazard should be executed each year.
- 7.4.2 The annual utilities hurricane exercise should be redesigned to focus systematically on other hazards.
- 7.4.3 Response agencies should be supported and to encouraged in staging regular, small-scale exercises for their own personnel.

7.5 Readiness assessments

All key agencies should maintain a high state of readiness to execute their assigned tasks. The NDO should work closely with all agencies to promote the requisite readiness. Emphasis should be placed on matters such as:

- Status of agency level plans
- State of emergency communication equipment
- Level of emergency supplies
- State of buildings vis-à-vis hazard resistance
- Status of office equipment
- Level of staff and volunteers available for deployment at any time
- Frequency of internal exercises and drills.

7.6 Recommendations

- 7.6.1 The NDO should develop and standardize a readiness checklist that key organizations should complete each year.
- 7.6.2 The level of national readiness should be assessed each year and a report provided to the NDPC or a successor body.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

7.7 Emergency Supplies

Timely and effective responses to emergencies and disasters require not only careful planning and training but also the provision of necessary financial and material resources. An effective system therefore requires the stockpiling of a wide range of emergency supplies for First Response. These include materials for:

- Search and Rescue
- Emergency Medical Care
- Welfare Assistance to displaced persons
- Emergency Shelter materials
- Emergency repair supplies
- Materials for essential services restoration
- Emergency food and water
- Fuel supplies

Although it is not necessary to maintain a huge volume of stock, the intention should be to ensure an adequate availability of essential supplies for the first forty-eight to seventy-two (48 – 72) hours after a disaster. It often takes at least forty-eight (48) hours for relief and material assistance to start arriving in an affected country. All agencies allocated responsibilities within the national disaster management framework should keep sufficient supplies on hand to enable them to discharge their duties effectively.

7.8 Recommendations

7.8.1 Responsibility for the monitoring of national emergency supplies should be assigned to a specific standing sub-Committee such as a Welfare, Relief and Emergency Supplies Sub-Committee.

7.8.2 A clear strategy should be established for the storage of emergency supplies until a national emergency warehouse is constructed.

7.8.3 The Government of Anguilla should establish and maintain appropriate Memoranda of Understanding (MOU) with private sector suppliers for first call on emergency supplies of goods not normally stocked or sold by government.

- Bottled Water
- Food (selected Items)
- Fuel
- Building Materials (selected items)

7.9 Infrastructure, facilities and equipment

CDM, like any management system, requires resources for implementation of plans and the delivery of services. A wide range of infrastructure facilities and equipment is needed if the disaster management system is to be effective, efficient and sustainable.

This sub section of the CDM Strategy, serves to highlight the importance of such resources.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

7.10 National Emergency Operations Centre (NEOC) and NDO

Reference has already been made to the limitations of the current EOC and NDO. These two entities are pivotal to a strategy of risk reduction through a CDM approach. Adequate facilities are required not only for incident specific responses, but for planning, training, public awareness, education and agency networking activities. The current Disaster Office in Anguilla would prove a major handicap to a holistic, integrated CDM work programme.

Worldwide experience has clearly demonstrated the value of a hazard-resistant facility that can be activated quickly into the “nerve centre” for coordinating responses to an emergency or disaster situation. It operates on a twenty-four (24) hour basis for as long as is necessary. Specifically, the National Emergency Operations Centre (NEOC) does the following:

- Eliminates or significantly reduces confusion and duplication of agency actions in the Response phase in particular.
- Promotes coordination of public, private and other non-governmental resources during an emergency alert or disaster response.
- Promotes efficiency and effectiveness in disaster management in general and response in particular.
- Co-ordinates external technical assistance and aid if required during an emergency.
- Mitigates the negative effects of disasters.
- Manages public information during emergencies and disasters.

An Emergency Operations Centre, functioning at the national level, should be considered a National Emergency Operations Centre (NEOC). This is so because Emergency Operation Centres can be established at the District or agency level.

A National Emergency Operation Centre (NEOC) should be structurally and functionally resistant to hazard impacts- natural and human-induced. It must be self-contained with the capacity to operate completely independent of external supplies of electricity, fuel, food, water and medicines for an extended period. It must have its own electrical generator, emergency water supply, sewage disposal, adequate ventilation, emergency food and tools, a robust communication system, showers, eating, cooking and sleeping areas.

It must have the following functional areas.

- Operations room
- Communications room
- Executive meeting area
- A media briefing area
- Secure equipment and supply storage areas
- Secure document storage areas
- Security and sign-in area
- Showers and toilets

Anguilla will need an NEOC that is designed constructed, equipped and furnished to the desirable standard to achieve CDM standards. This represents the single most costly

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

investment recommenced in this CDM Strategy. However, the benefits of an NEOC are incalculable in life-saving and money terms.

Anguilla can maximize investment in an NEOC, by doing the following:

- Combining the NEOC with the administrative offices for the NDO.
- Designing the NEOC operations room as a multi-purpose training and meeting room.
- Making provision for an emergency warehouse on the same compound.
- Developing the NEOC library into a national resource centre on disaster management.

Savings can thus be realised, not only in the capital cost of an NEOC and related facilities, but in the recurrent cost of upkeep and maintenance through savings on support and ancillary staff and the cost of utilities.

7.11 Recommendations

7.11.1 The Government of Anguilla should regard the construction of an appropriately designed facility that can be used as an NEOC, a NDO and a warehouse complex as one of the goals of long-term risk reduction.

7.11.2 Alternatives should be considered with regard to improving the working, meeting, storage and communications areas of the current NEOC and NDO, until a dedicated purpose-built facility can be constructed. This could include, but not be limited to, relocation of NDO, pending longer-term decisions.

7.12 Emergency communications

Life saving emergency and disaster management activities cannot be carried out effectively in the absence of reliable communications. This applies in the Recovery as well as the Preparedness and Response phases of the Disaster Cycle. Although it is important that each key response agency has its own communication network for day-to-day activities, there must be a national network for emergency communication. If there is none, coordination during emergencies and disasters becomes impossible. There must be a system that allows key agencies to interface at the National Emergency Operations Centre level during all hazards and incidents. The system should allow for reliable communication with the external world through radio, telephone and the Internet. It should also interface with the CDERA Coordinating Unit's network.

7.13 Recommendations

7.13.1 The Government of Anguilla should commission a study to determine the most suitable emergency communications network for the EOC/Office complex when completed.

7.13.2 An interim communication system should be put in place to allow for effective coordination until the new EOC emergency communications system is set up. This should be undertaken as a collaborative project by all key agencies under the direction of the Telecommunications Standing Committee.

7.13.3 Systematic training in the use of emergency communications equipment should continue to be provided to personnel of key response agencies as needs arise.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

Such training should be coordinated among agencies.

7.13.4 Training in the use of portable emergency communications equipment should be provided for Executive Council, all Permanent Secretaries and Heads of agencies required to function during emergencies and disasters.

7.14 Response equipment

Disaster response requires a wide range of equipment, from basic carpentry and garden tools, to sophisticated hazardous materials response-suits and specialized Search and Rescue Equipment.

This study did not allow for an audit of emergency response equipment. The fact that a domestic fire service is only now being introduced, would suggest that there is a shortage of specialized equipment for emergency response, especially fire, hazardous materials and search and rescue.

Vehicles suitable for all hazard response are an integral part of a disaster management system. Anguilla should adopt an incremental approach to the acquisition of such equipment. This would allow for the spreading of investment costs.

7.15 Recommendations

7.15.1 7.4.3.1 A study should be undertaken to identify critical emergency response equipment needs. Representatives of key response agencies on the NDPC/NDMC Operations Group to prioritise their emergency equipment requirements. An equipment needs list should be costed then submitted to Executive Council for funding through the NDO.

7.15.2 Guidelines should be prepared for the use, deployment, storage and maintenance of all emergency equipment. All agencies receiving emergency equipment should be directed to maintain appropriate inventories and logs of use and deployment.

7.16 Emergency broadcast system

Early warning is a pillar of Disaster Management. It is natural for people to go about their daily lives without assuming that a disaster looms at any moment. Some hazard impacts can give a relatively long period of notice, such as happens with hurricanes. Other hazards such as earthquakes, tsunamis or explosions may give little or no notice. The capacity to provide alerts and warnings to the largest number of people, especially if they will be threatened by secondary hazards, is a resource that can save lives.

An Emergency Broadcast System (EBS) is one of the most efficient means of providing warning and alert information to the community at any time. This is because an ES is capable of:

- Breaking into radio and television broadcasts instantaneously.
- The system is under the control of emergency/disaster officials.
- There is capacity to provide explanations of the unfolding situation without delay.
- An EBS can include sirens with varying sounds, to convey different warnings.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

- An EBS can include a public address system that allows emergency officials to speak directly to the community, in addition to speaking over radio and television.
- An EBS works with both AM and FM radio systems.

There is no EBS in operation in Anguilla. This means that there is no opportunity to take advantage of the capacities outlined above.

7.17 Recommendation

7.17.1 A study should be undertaken with a view to the establishment of a comprehensive EBS in Anguilla.

7.18 Emergency shelter

Hazard impacts can damage or destroy buildings that house or accommodate people. These include dwelling houses, apartments, hotels and guesthouses. Although Anguilla has a high standard of housing, a clear policy and strategy with regard to emergency shelter is required. This should include:

- An understanding of the numbers potentially requiring shelter for different hazard scenarios.
- Identification of additional facilities suitable for use as shelters.
- Systematic and regular assessment of buildings designate as shelters.
- Retrofitting of buildings to ensure they meet appropriate hazard resistant standards.
- Equipping and provisioning of shelters to an appropriate level.
- Developing Memoranda of Understanding with the owners of non-government buildings designated as shelters.
- Ensuring the development of an appropriate training programme for shelter management personnel.
- Developing and maintaining a cadre of shelter management personnel.
- Maintaining a comprehensive shelter management plan.

There are five designated shelters on the island; each is capable of housing 35 - 40 persons. These are:

- West End Clinic (Government)
- South Hill Methodist Church Hall
- Valley Methodist Church Hall
- Morris Vanterpool Primary School, East End (Government)
- Welches Polyclinic (Government)

The most recent use of shelters in Anguilla was for Hurricane Luis (1995) and Hurricane Lenny (1999).

Even though strict records have not been kept in the past, it has been reported by the Shelter Committee that between six (6) and twelve (12) persons sought shelter during Hurricane Luis in 1995. There is often little demand for shelter space during hurricane warnings because of confidence in the nature of house construction in Anguilla.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

The Shelter Committee reports that all shelters are in good repair, but some are in a better state than others. The roof of the West End Clinic has recently been replaced, and the Valley Methodist Church Hall is currently undergoing renovations.

The Ministry of Infrastructure has four gasoline portable generators that are assigned as standby sets for shelters. Most of the shelters have cisterns from which water can be obtained. First aid supplies are taken to the shelters by community nursing staff. They man the shelters prior to the arrival of a hurricane.

The Government is currently identifying shelter wardens for each district based on their knowledge of these matters and their interest. Training will be done with input from the Anguilla Red Cross, the NDC, and PAHO.

7.19 Recommendations

7.19.1 The findings of the 1990 Shelter Management Study, executed under the aegis of the Caribbean Disaster Mitigation project should be examined with a view to implementing the recommendations.

7.19.2 Shelter capacity and requirements to be reviewed in respect to hazard scenarios and by the findings of the national HVA.

7.19.3 A shelter manual should be written.

7.19.4 Shelter rules should be enacted into law.

7.19.5 A project should be developed to supply shelters with required equipment and supplies.

7.20 External assistance

Anguilla is a British Overseas Territory. Inter alia, that means that it does not execute an independent foreign policy. In times of disaster, it is possible to obtain assistance from many sources, including CDERA, International Donor Agencies and neighbouring states. It is also possible that such assistance could have significant implications for Anguilla's relationship with some countries in future.

It is vital that the government of Anguilla clearly articulates a policy on external assistance in matters relating to Disaster Management.

7.21 Recommendations

7.21.1 The NDO should initiate the formulation of a policy statement and mechanisms for the coordination of international assistance. Assistance should be sought from the DFID DMA. Once completed and approved by the Government of Anguilla, the final policy statement should be reviewed by the British Government.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMS**

7.21.2 The GoA with the assistance of the British Government should seek to develop Mutual Aid Agreements with identified neighbouring territories.

Independent countries or other political jurisdictions, often develop legally binding expressions of mutual support in planning for, responding to and recovering from Disasters. Anguilla is not an independent country, but its geographic location and pattern of development combine to generate close functional relations with territories such as St. Martin/St. Maarten, St. Thomas and Puerto Rico. Technological or human-induced incident threats, such as air or sea transport incidents, oil spills or biohazards clearly demonstrate the potential benefits for close collaboration with the territories identified.

8 Training

The National Disaster Management Programme must have training as one of its priorities. Training and capacity- building are interrelated. Local capacity must be improved if Anguilla's CDM programme is to become internally self-reliant and therefore sustainable. Extensive training will be required with all training activities prioritised and synchronized with the schedule of CDM strategy programme activities.

8.1 Recommendations

8.1.1 The NDO to develop a medium-term disaster management training strategy and programme. The strategy should first address training needs of key agencies in the public, private and non-government sectors. The training strategy should be completed early in the life of this CDM strategy.

8.1.2 The NDO should research and retain information on training opportunities in emergency and disaster management, relevant to Anguilla's long-term disaster management training needs.

8.1.3 Efforts should be made to identify local persons with desired disaster management skills and encourage them to deliver training as much as possible on a voluntary basis.

8.1.4 The training strategy should take advantage of all relevant disaster management training conducted or supported by regional or international agencies including NEMOT and CDERA.

8.1.5 All agencies should be encouraged to seek specialist training to meet their allocated CDM responsibilities, whether in risk reduction or emergency response.

9 Public awareness and information

The primary goal of CDM is to save lives in all emergency and disaster situations. The chance of saving lives is greatest where the population have an awareness of hazards, know what to do to reduce risks, abide by legislation designed to reduce risks and cooperate with emergency and disaster management officials in all phase of the disaster cycle from mitigation through to recovery.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

Public support, cooperation and action will only take place where the level of awareness of disaster management issues is high. Ensuring that the level of public awareness and commitment to disaster management issues remains at a high level, is a programme priority. Public awareness is vital to the creation of a culture of safety. A culture of safety is fundamental to risk reduction.

9.1 Recommendations

- 9.1.1 7.3.5.1 The NDO should regard public awareness as a short, medium and long-term activity and plan its work programme accordingly.
- 9.1.2 The NDO should design public awareness programmes to cater to various target groups and those with special needs- children, adults, the aged, those with disabilities, etc.
- 9.1.3 Public awareness programmes should include the special needs of persons who speak English as a second language.
- 9.1.4 The NDO should work with all relevant private sector entities to design and implement hazard awareness programmes for tourists and short-term residents.
- 9.1.5 Public awareness programmes should be executed as collaborative activities with other agencies as far as practicable.
- 9.1.6 There should be a National Emergency /Disaster Information and Media Plan to ensure that appropriate warnings and post disaster information is disseminated as required.

10 Strategic alliances

This CDM Strategy is designed to promote collaborative action among the public, private and other non-government sectors. In order for the goals and objectives to be achieved, there must be strategic alliances among these sectors. This means:

- Widespread and consistent consultation among representatives of these sectors
- A clear understanding of each other's priorities
- A willingness to share information, expertise and facilities
- Maintaining a mutually supportive stance for initiatives developed within one sector but providing benefits across all sectors
- Publicly acknowledging the success of each other's disaster management activities
- As far as possible, reducing schedule conflicts to encourage participation in each other's disaster management activities
- Embracing a common goal for disaster management in Anguilla
- Ensuring that external experts working with or for one of the sectors, consults with officials from other sectors
- Treating representatives of each sector with the professional courtesies expected in a modern society
- Ensuring that representatives of each sector are kept up to date with changes that could significantly impact on disaster management activities
- Clarifying collaborative programmes, projects and activities.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

It must be remembered that successful collaboration will only occur if there is a willingness to collaborate and there are high levels of trust and respect between leaders of organizations. The recommendations made in sub sections dealing with non-government sectors and inter agency linkages are also relevant to this sub section of the Strategy. The following specific recommendations are made with regard to strategic alliances:

10.1 Recommendations

10.1.1 The NDO should discuss all major strategic initiatives with representatives of other sectors before finalizing them.

10.1.2 The NDO should take the initiative to coordinate at least one (1) forum each year in which work programmes of all key agencies, as they pertain to disaster management, are discussed and harmonized as much as possible.

10.1.3 Opportunities should be provided at national fora for representatives of all sectors to report on their disaster management related activities.

10.1.4 The NDO should develop Memoranda of Understanding (MoU) that reflect the suggestions provided above.

10.1.5 The NDO should ensure participation of private and other non-government sector participants in all simulation exercises.

11 Use of technology and scientific data

The use of technology can greatly enhance the efficiency and effectiveness of a CDM strategy and programme. That is true for all phases of the disaster cycle. The following are examples:

- Telecommunications technology during the response and recovery phases
- Hi-tech training equipment during the preparedness phase
- Internet research during the preparedness phase
- Computer-aided programmes for building design during the mitigation Phase
- Computer based programmes such and PAHO's SUMA Systems, during response
- Geographic Information Systems (GIS) for mitigation planning
- Desk-top Publishing programmes for public awareness materials
- Computer-based modelling for risk and vulnerability assessments.
-

11.1 Recommendations

11.1.1 The NDO should identify specific technology-based programmes that could enhance programme and service delivery and submit the necessary proposals for funding for the acquisition of specified equipment and materials.

11.1.2 The NDO should research sources from which it may be possible to obtain donations of technological equipment for use in a CDM programme.

ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT MEDIUM – TERM STRATEGY CDMS

12 Advocacy

The change to CDM in Anguilla, will require advocacy if it is to succeed. Much of the responsibility for such advocacy on a day-to-day basis will fall to H.E. the Governor, the Permanent Secretary Chief Minister's Office and the NDC.

Advocacy will be required to bring about a change of attitude, behaviour and outlook among decision makers, public and private sector officials, community-based organizations and the community at large. Advocacy will be required because CDM is a major paradigm shift from the tradition of hurricane preparedness and response.

In considering the need for advocacy the following are relevant:

- Awareness of a concept is required before it can be accepted.
- The acceptance of a concept will not lead to a change of behaviour unless the benefits of such change are clear.
- Attitudes are changed if people see direct benefits
- Local opinion leaders are very effective in bringing about a change of attitude.
- Globally accepted concepts must be applied to local conditions to receive strong support.
- Change becomes institutionalised when it is introduced with the full backing of decision makers within organizations.
- Adults and children learn in different ways. Training approaches for both groups should be different.
- People embrace concrete and realistic proposals more readily than abstract concepts.

12.1 Recommendations

12.1.1 The Work Programme for the NDO should contain strategies for advocacy of CDM.

13 Community-based organisations

Community-based organisations should be included in any institutional framework for CDM. These organisations are especially valuable because of the detailed information they have about people at the community level.

In planning for the inclusion of community-based organizations, it must be remembered that they are independent organizations. In some cases, they have regional and international affiliations and codes of conduct.

It is very important that a framework for cooperation in Disaster Management is developed and maintained with all community-based organizations. This should reach the level of Memoranda of Understanding as far as possible.

Representation of church-based community groups must not be overlooked. There are cases in which an umbrella church organization may not represent all the churches operating in a country. It may be necessary to devise strategies to ensure consultation and representation from all church denominations.

**ANGUILLA COMPREHENSIVE DISASTER MANAGEMENT
MEDIUM – TERM STRATEGY CDMs**

13.1 Recommendations

- 13.1.1 Community-based organisations should be encouraged to develop Memoranda of Understanding (MOU) among themselves to facilitate sharing of information, use of resources and exchanges of personnel.
- 13.1.2 Community-based organizations should be encouraged to develop joint operational procedures for collaboration in all aspects of disaster management, especially the response and recovery phases.
- 13.1.3 The NDO should ensure that as far as practicable, disaster management training opportunities are extended to personnel from community-based organizations.

Postscript

The conclusions and recommendations presented in this CDM Strategy are solely the responsibility of the Consultant. They are based upon information and opinions gathered during the fieldwork stage of the assignment. Efforts were made subsequently to minimise any factual errors.

The conclusions and recommendations were informed by data available up to the time of writing the report. Limitations with regard to a dearth of written reports and a poor response to a "Fact-based" Questionnaire" may have created some information gaps. The response to an "Opinion-based Questionnaire" was much better.

No attribution has been made to any person in Anguilla with regard to the recommendations and no endorsement of any particular recommendation