SYNOPSIS OF HURRICANE MARIA

Maria, the 13th named hurricane of the 2017 Atlantic Hurricane Season, became a category 5 hurricane near the Leeward Islands on Monday September 18th, 2017. Hurricane Maria impacted Dominica at approximately 9:35pm on September 18th as an extremely strong hurricane with wind speeds of 155 mph. Maria then impacted Antigua and Barbuda, Montserrat and St. Kitts and Nevis on September 19th, 2017 and the Virgin Islands September 19 – 20, 2017.

MAP OF IRMA AND MARIA OVER CARIBBEAN SEA

Source: UN OCHA, September 2017
The following maps were created by Map Action and depict the Humanitarian Access, Health Status and Telecoms Coverage post Hurricane Maria in Dominica

Humanitarian Access

Dominica: Hurricane Maria humanitarian access  Update 6: 25 Sep 12:00 local

- Main supply routes (open)
- Note: may require 4x4 depending on conditions
- 4x4 required
- Light vehicles only
- Unknown status
- Blockage of key route
- Bailey Bridge Collapse (passable in shallow water)

Canefield (DCF) airport open (light aircraft)

Roatseu (Woodbridge Bay) Port Open

Bath Estate bridge impassable blocking access to Roseau valley corridor

Data Sources: Dominica dm, EOC, others
Map created by MapAction
Health Status Map

Dominica: Health status map (as at 28 Sep 2017)

- Health Districts - Primary admin. town:
  - Roseau: covers St George, St Luke, St Mark, St Paul
  - Grand Bay: covers area of St Patrick
  - La Plaine: covers some of St Patrick and St David
  - Castle Bruce: covers some of St David
  - Marigot: covers St Andrew
  - Portsmouth: covers St John

- * The above coverage may not be correct

Map of Dominica showing Health facilities. There are:
- 7 Health Districts
- 2 Hospitals (locations known)
- 7 Type 3 facilities (locations known)

Produced by MapAction
www.mapaction.org
maria@mapaction.org

Data Sources: Dominica.dm, OSM, PAHO, Ministry of Health
Telecoms Coverage Status

Dominica: Telecoms Coverage Status (25 Sep 2017)

- Repeaters
- VHF Operators
- Settlements
- Seaports
- Airport
- Roads
- Flow, Operational
- Digicel, Limited Operations
- Epic, Not Operational
- Parish Boundaries

Data Sources: Dominode.dm, WFP, SRTM, OSM, EPIC, FLOW, Digicel

Produced by MapAction
www.mapaction.org
marla@mapaction.org
REGIONAL RESPONSE ACTIONS

CDEMA Coordinating Unit

- CDEMA in collaboration with Participating States, regional and international partners, has deployed over 90 response personnel to the Commonwealth of Dominica
- 2nd high level mission to Dominica including Dr. Hon. Keith Mitchell, current Chair of CARICOM and Prime Minister of Grenada; Dr. William Warren Smith, President of the Caribbean Development Bank (CDB); Mr. Ronald Jackson, Executive Director of CDEMA, Captain (N) Errington Ricardo Shurland, Executive Director of the Regional Security System (RSS); Col. Glyne Grannum, Chief of Staff of the Barbados Defence Force and Acting Commissioner of Police from Barbados, Mr. Tyrone Griffith.

- The Executive Director, CDEMA convened a press briefing on September 25 to provide an update on relief and response efforts for those countries impacted by Hurricane Maria
- Deployed 8 regional response units to Dominica: COST – 2 members; RNAT – 16 members;
  i. COST - 2 members (Sept 20 – present). Continues to provide support to the NEOC by providing surge capacity to the operations.
  ii. RNAT – 16 members, (Sept 21 – 24). Conducted a sectoral initial damage assessment. This assessment was completed on Saturday 23rd, 2017.
  iii. CDAC – 6 members, (Sept 21 – 24)
  iv. SAR - 4 teams of 6 members, 1 team from Barbados (Sept 20 – present), 1 team from St. Lucia (Sept 23 – present), 2 teams from Antigua (Sept. 24 – present)
  v. CDRU – (Sept 20 – present). CARICOM contingent through the CDRU facilitated the distribution of relief supplies to two (2) communities on the west coast: Salisbury – (50 CARICOM packs, 25 5 gallon bottles of water, 10 cases of small water, 2 packs of 6 1 liter bottles of water, 1 bag of rice, 3 cartons of noodles, 1 carton oil) and Colihaut – water (25 5 gallons bottles, 24 cartons - 6 liters/cartons, 15 cartons of small water).
  vi. Barbados Defence Force Security contingent and artisans (Sept 22 – present)
  vii. Trinidad and Tobago Defence Force

- Consolidation of a longer term assessment beyond the RNAT to include representatives of the CDEMA CU, Red Cross and UNOCHA
- Continue to monitor Amateur Radio communications to capture information from the Amateur Radio Association in Dominica.
- Continue to coordinate response with partners
- CDEMA launched an online donation facility (September 15, 2017). Persons can make online donations (using credit cards) to the Hurricane Irma Relief campaign (visit www.cdema.org). Instructions are also available for those seeking to make donations via wire transfer
- RRM remains activated to provide support to the impacted countries. However gradual extraction of deployed teams will be instituted as per the RRM Standard Operating Procedures (SOPs)

CARPHA

- Deploying two specialists from Environmental Health lab for water testing and purification to ensure safety for consumption

Government of Guyana

Donated over 85 tons of relief supplies to Dominica and Antigua (Sugar 25 tons, Rice 50 tons, Chow Mein and pasta 8 tons, Water 10 tons, Plantains 2 tons, Pumpkins 1 ton, Salted fish 300 lbs, Detergents 3040 lbs, BISCUITS 3 tons, Soap 660 lbs, Medical supplies 720 lbs, Tarpaulins 1 ton, Rope 100 lbs)
### Government of St. Vincent and the Grenadines
- Facilitating airlift out of Dominica
- Provided 15 police officers towards bolstering security in Dominica

### Regional Security System (RSS)
- Continue to facilitate the transportation of response teams into Dominica
- Dispatched 15 police officers from St. Vincent and Grenadines to Dominica

### DOMLEC/CARILEC
- Supplies coming in from Florida on October 4th
- First CARILEC team going in on October 4th via Portsmouth

### UWI
- Health and Education to receive the University’s attention
- Caribbean Emergency Management Association (hosted by the American Foundation) to channel funds from the Diaspora

### INTERNATIONAL INSTITUTIONS UPDATES

#### DFID/UK AID
- Pledged 5 million pounds in support (600,000 non food relief, 500,000 Red Cross, 500,000 WFP efforts)
- HMS Ocean arrived in Dominica today (26/09) and will be located there for 48 hours. This responds to a request from the Dominican Government/Caribbean Emergency Disaster Management Agency (CDEMA) to provide airlift to distribute aid and deliver relief work to support isolated communities across the island.
- Emergency medical supplies, food and water and 3200 tarpaulins delivered.
- Provided helicopter support to distribute supplies and transport key relief personnel (from Paragon base in Barbados and HMS Ocean).
- 3x30 teams from HMS Ocean tasked to do road clearance.
- To Arrive: 43.5T of NFI including water, 1280 Shelter Kits, Tents, Hygiene Kits, Solar Lights, Timber.
- £0.6m committed for non-food relief items for Dominica
- £0.5m to World Food Programme (WFP) UNHAS for essential air operations in Dominica
- Provided £0.5m to the Red Cross for Dominica appeal

#### Global Affairs Canada (GAC)
- Humanitarian specialist still offering support
- CDAT unit extracted from Dominica
- Helicopter supporting the distribution of relief supplies
- Facilitated the medical evacuation of 12 critically ill patients from the hospital to the Douglas Charles airport
- HMCS St John's arrived in Dominica yesterday
- Offered relief flights

<table>
<thead>
<tr>
<th>IFRC</th>
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<tbody>
<tr>
<td>- Preliminary appeal launched</td>
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<td>- Specialists on the ground (WASH, Health, Engineering etc)</td>
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<td>- Assessing health needs with the Ministry of Health</td>
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<td>- Cuban doctors at the hospitals</td>
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<td>- Mobilisation of a base camp moving from Haiti to Dominica</td>
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<tr>
<td>- Coordinating with Barbados Red Cross for shipments</td>
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<table>
<thead>
<tr>
<th>International Organization for Migration</th>
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<tbody>
<tr>
<td>- IOM has allocated USD 100,000 of its internal funding for rapid scale up of shelter response on Dominica and is in discussions with donors about further funding</td>
</tr>
<tr>
<td>- 6000 houses are covered</td>
</tr>
<tr>
<td>- Four (4) IOM surge team members are currently in Dominica: the emergency response manager, shelter specialist, senior regional emergency specialist and a logistician</td>
</tr>
<tr>
<td>- Coordination with CDEMA, Dominican authorities and shelter actors ongoing to ensure a harmonised approach</td>
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<thead>
<tr>
<th>Rescue Global and International Medical Cooperation</th>
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<tbody>
<tr>
<td>- Aircraft available for the next three weeks for moving staff around (all islands)</td>
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<td>- Two (2) large generators available</td>
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<td>- Assisting with clearing trees and road ways</td>
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<td>- Deployed a DART unit</td>
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<tr>
<td>- Establishing a database of maps of the area in partnership with Oxford University department of Machine Learning</td>
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</tbody>
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<table>
<thead>
<tr>
<th>USAID/OFDA</th>
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<tbody>
<tr>
<td>- Provided 400 plastic sheeting</td>
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<tr>
<td>- Provided a logistician at Melville Hall</td>
</tr>
<tr>
<td>- Deployed nine (9) specialists to Dominica</td>
</tr>
<tr>
<td>- DART staff arrive in Dominica to conduct assessments, support humanitarian response</td>
</tr>
<tr>
<td>- Hurricane Maria damages infrastructure on Saint Kitts and Nevis, causes flooding, limited impacts in the Dominican Republic and Haiti</td>
</tr>
<tr>
<td>- U.S. Government (USG) international humanitarian assistance to the Caribbean totals nearly $7 million</td>
</tr>
</tbody>
</table>
### ECHO
- Belgian water purification unit scheduled to arrive on Wednesday 27th September 2017 and can produce 80,000 litres a day
- 250,000 euros available currently awaiting a WFP proposal

### Vodafone
- Established a mobile charging and wifi station in Roseau

### MapAction
- Developed a range of maps including humanitarian access, health status and telecoms coverage

### UNITED NATIONS (UN) AGENCIES

#### UN REGIONAL
- Release of Central Emergency Response Fund to assist UN Agency efforts
- Secretary General Petraeus met with Prime Minister Skerrit on Saturday 23rd to discuss relief efforts
- UN agencies bringing in recovery experts
- UN flash appeal to raise funds to be implemented soon

#### UNICEF REGIONAL
23 staff members deployed to Antigua and Barbuda, Anguilla, BVI, Dominica and TCI to undertake assessments particularly focussing on child protection and education sector management, water and sanitation, shelter management, communication for development needs and planning for psychosocial support of children start-up. Rapid Needs Assessment Tool has also been developed and shared with deployed colleagues to facilitate data gathering and sharing. Psychosocial support programme for children "Return to Happiness" has started.

**Dominica**
- Two staff members deployed to Antigua are enroute to Dominica on 26 September. They will focus on WASH issues and supply and logistical arrangements to facilitate delivery of urgent support to hurricane affected children and families.
- An additional team of UNICEF staff from Regional Office and Haiti is expected to go to Dominica to boost UNICEF preparations for emergency response.
### WFP REGIONAL
- Dutch assisted with the transportation of two mobile storage units
- Helicopter in operation from Guadeloupe
- Logistical staff arriving today
- Able to provide 10 metric tons of High Energy Biscuits and 20 tons of water

### PAHO REGIONAL
- PAHO is working with its regional, subregional, and national partners to coordinate the delivery of expertise and supplies, with a focus on Anguilla, Antigua, British Virgin Islands, Dominica, and Turks and Caicos Island.
- PAHO has established a logistical hub in Antigua; it is assessing identified needs to continue procuring and distributing emergency medicines and supplies
- Dialysis machines repaired
- Nine (9) patients transported to the Dominican Republic to receive medical attention

### Dominica
- General Situation: Assessments of the full impact of the hurricane on Dominica's health sector is ongoing
- Saint George Parish / Roseau:
  - Princess Margaret Hospital: Efforts are ongoing by several partners (a French medical team, the Trinidad and Tobago coast guard, a contingent of Venezuelan doctors and paramedics, among others) to improve the hospital's functionality. Generators are being used for those areas still functional. Water and electricity have been restored.
  - Other health facilities & field hospitals: An assessment is being conducted to understand the status of the remaining health centers. Teams from Cuba and Venezuela are providing emergency services in Roseau's stadium.
- Marigot Health District: A MSF mission reports that 2 of 5 health centers in Marigot district are functional. Of the remaining 3, Marigot hospital has been closed for the last 2 years and is not usable, and the remaining 2 are too damaged. The district has 1 ambulance. Eight shelters are operating given that most of the district’s population has lost their homes. Most observed pathologies are chronic. The population is collecting drinking water from streams and waterfalls, although no waterborne pathologies were observed. Additional assistance is needed in this district.

### Dominica – PAHO’s Response
- Deployed personnel: 5 PAHO experts are on the ground, deployed to support health coordination, logistics, vector control, public health & disaster response, and surveillance; 3 additional experts arrive tomorrow Wednesday for public health, humanitarian supply management, and logistics.
- Princess Margaret Hospital: Support has been provided to repair Princess Margaret Hospital's cold chain, electricity, and water supply, and delivered emergency medicines, supplies, Aquatabs, and water quality testing kit for patients. Coordination ongoing with hospital authorities and partners on the ground to medevac additional trauma patients from Dominica to neighboring islands for emergency treatment and specialized care.
- Support for Surrounding Areas: PAHO, with support from the Dutch navy, is delivering emergency medicines and supplies to six villages in the areas surrounding Roseau.
- Humanitarian Supply Management: PAHO is dispatching equipment to set up a humanitarian supply management system in Dominica.
### Dominica’s Immediate Needs: As of September 22, 2017

- Food
- Water
- Roofing materials
- Lumber
- Plywood
- Windows
- Doors
- Nails
- Roofing screws
- Generators (5kva to 10kva)
- Chainsaws with cans, oil, fuel
- Communications equipment
- Tarps/Plastic sheeting

### St. Kitts and Nevis Hurricane Irma/Maria Needs List

<table>
<thead>
<tr>
<th>No.</th>
<th>Category</th>
<th>Items</th>
<th>Quantity St. Kitts</th>
<th>Quantity Nevis</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Medical</td>
<td>First Aid Kits</td>
<td>1000</td>
<td>200</td>
</tr>
<tr>
<td>2.</td>
<td>Equipment/Tools</td>
<td>Shovels</td>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td>Cutlasses</td>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>4.</td>
<td></td>
<td>Hammers</td>
<td>80</td>
<td>50</td>
</tr>
<tr>
<td>5.</td>
<td></td>
<td>Wheel barrows</td>
<td>50</td>
<td>40</td>
</tr>
<tr>
<td>6.</td>
<td></td>
<td>Chain saws</td>
<td>50</td>
<td>30</td>
</tr>
<tr>
<td>7.</td>
<td>Storage</td>
<td>Water Storage Containers (commercial 1000 gall.)</td>
<td>35</td>
<td>25</td>
</tr>
<tr>
<td>8.</td>
<td></td>
<td>Water Bottles (portables 5 gall.)</td>
<td>800</td>
<td>300</td>
</tr>
<tr>
<td>9.</td>
<td>Comfort</td>
<td>Blankets</td>
<td>1000</td>
<td>500</td>
</tr>
<tr>
<td>10.</td>
<td></td>
<td>Sleeping bags</td>
<td>1000</td>
<td>300</td>
</tr>
<tr>
<td>11.</td>
<td></td>
<td>Cots</td>
<td>1500</td>
<td>600</td>
</tr>
<tr>
<td>12.</td>
<td></td>
<td>Lanterns (oil and battery)</td>
<td>600</td>
<td>200</td>
</tr>
<tr>
<td>13.</td>
<td>Safety</td>
<td>Flashlights (Crank)</td>
<td>600</td>
<td>300</td>
</tr>
<tr>
<td>14.</td>
<td></td>
<td>Rain Coats</td>
<td>1000</td>
<td>500</td>
</tr>
<tr>
<td>15.</td>
<td></td>
<td>Rubber Boots</td>
<td>600</td>
<td>300</td>
</tr>
<tr>
<td>16.</td>
<td>Shelter/Shelter Management</td>
<td>Tarpaulin (40x40)</td>
<td>2000</td>
<td>1500</td>
</tr>
<tr>
<td>17.</td>
<td></td>
<td>Tarpaulin (20x20)</td>
<td>1000</td>
<td>500</td>
</tr>
<tr>
<td>18.</td>
<td>Public Announcement</td>
<td>Loud Hailers (Bull Horns)</td>
<td>20</td>
<td>20</td>
</tr>
<tr>
<td></td>
<td>Building Materials</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>19.</td>
<td>Shingles</td>
<td>8,000 bundles</td>
<td>1000</td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>Galvalume Sheeting</td>
<td>12,000 sheets</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>T1-11</td>
<td>6,000 sheets</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>Nails</td>
<td>18,000 lbs</td>
<td>300</td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>Screws</td>
<td>560 boxes</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Tar Paper</td>
<td>2500 Rolls</td>
<td>150</td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>Galvanize</td>
<td>8,000 sheets</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>Closure Strips</td>
<td>5000 length</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>Transistor Radios</td>
<td>500</td>
<td>250</td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>Personal Hygiene Kits</td>
<td>1000</td>
<td>500</td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>Portable Generator (5000 watts – 110)</td>
<td>50</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31.</td>
<td>Goggles</td>
<td>100</td>
<td>50</td>
<td></td>
</tr>
<tr>
<td>32.</td>
<td>Helmets</td>
<td>500</td>
<td>200</td>
<td></td>
</tr>
<tr>
<td>33.</td>
<td>Ration Packs (breakfast, lunch and dinner)</td>
<td>500 each</td>
<td>200 each</td>
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