Multi-year Expert Meeting
on Transport, Trade Logistics and Trade Facilitation:

Trade Logistics and the 2030 Agenda for Sustainable Development

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by

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CLIMATE CHANGE AND DISASTER RISK MANAGEMENT: IN COASTAL TRANSPORT INFRASTRUCTURE IN THE OECS

UNCTAD Multi-year Expert Meeting on Transport, Trade Logistics and Trade Facilitation, fifth session
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E. Crispin d'Auvergne, Organisation of Eastern Caribbean States (OECS) Commission

THE ORGANISATION OF EASTERN CARIBBEAN STATES (OECS)
SEA PORTS IN THE OECS

• Caribbean sea ports segregated into three categories:
  o global hub ports,
  o sub-regional hub ports
  o service ports
• All OECS (main) ports fall into the latter category
• Also several smaller ports and marinas and terminals serving, among others:
  o yachts
  o small fishing vessels
  o ferries

AIRPORTS IN THE OECS

• Airports in the OECS fall into the following categories:
  o International/Regional
  o Regional/Domestic
  o Private
AIR & SEA PORTS IN THE OECS

<table>
<thead>
<tr>
<th>MEMBER STATE</th>
<th>AIRPORTS</th>
<th>SEAPORTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anguilla</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Antigua &amp; Barbuda</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>British Virgin Islands</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Commonwealth of Dominica</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Grenada</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Martinique*</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Montserrat</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>St. Kitts and Nevis</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Saint Lucia</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Saint Vincent and the Grenadines</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>25</strong></td>
<td><strong>23</strong></td>
</tr>
</tbody>
</table>

VALUE & CONTRIBUTION OF AIR & SEA PORTS

- Passenger arrivals/departures
- Goods import and export
- Goods storage
- Energy security
- Revenue collection ("35 vs <4")
- Direct employment
- Support for key economic sectors, including: tourism, commerce, agriculture
- Support FDI
- Support food security
- Provide a link to the outside world
ECONOMIC CONTRIBUTION OF AIR TRAVEL: FDI (2009)

Source: IATA, Oxford Economics in Oxford Economics 2011

ECONOMIC CONTRIBUTION OF AIR TRAVEL/TOURISM (2009)

Source: Oxford Economics, 2011
CLIMATE CHANGE THREATS

- Storms (wind, rain)
- Sea Level Rise
- Coastal Flooding
- Elevated Temperatures
- Drought

EXPOSURE

- All sea ports at risk by virtue of location
- Several airports at risk due to location near the sea and/or in flood-prone locations, e.g.:
  - Hewanorra and GFL Charles, Saint Lucia
  - Douglas-Charles, Dominica
THE “SEASON OF ’17”

Photo: NOAA

THE SEASON OF ‘17

Season of ‘17

- Signal that there is something up with “The Climate”
- Brings exposure and vulnerability of Caribbean Basin countries into sharp focus
- Tragic death, damage, loss and dislocation to societies/economies
- The Eastern Caribbean on the frontline and (as usual) bore the initial brunt
- Air and sea ports not left unscathed

Impact

<table>
<thead>
<tr>
<th>Member State</th>
<th>Event</th>
<th>Estimated Damage</th>
<th>Airports</th>
<th>Sea Ports</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anguilla</td>
<td>Irma</td>
<td>Extensive</td>
<td>Airport terminal severely damaged</td>
<td>Ferry terminal compromised</td>
</tr>
<tr>
<td>British Virgin Islands</td>
<td>Irma</td>
<td>US$3.3 Bn</td>
<td>Airport tower compromised</td>
<td></td>
</tr>
<tr>
<td>Dominica</td>
<td>Maria</td>
<td>90% of GDP</td>
<td>Main airport temporarily flooded and largely cut off from the capital due to damaged roads and bridges. Second covered with alluvium</td>
<td></td>
</tr>
</tbody>
</table>

Photo: The Guardian
IMPACTS

• Damage to tourism, commerce, agriculture..., with short and long-term implications
• Damage to, or closure of ports, hampered evacuation and inflow of assistance and relief supplies
• Hub-and-spoke connections disrupted
CONTEMPLATIONS: BUILDING RESILIENCE

• Learn lessons from what failed, what stood
• Recognise the “new normal” and apply the appropriate science in planning and design
• Adopt longer planning horizons for port development
• Enhance self-sustainability (water, power) of port facilities
• Design and build/rebuild resilience in support infrastructure (roads, etc.)
• Diversify transport options where possible (e.g. ferry services)
• Recognise the importance of inter-connection and redundancy
• Building awareness among key stakeholders critical

CONTEMPLATION

• The UNCTAD-led work in the Caribbean has been an “eye-opener” and addresses the vulnerability/resilience of air and seaports and associated transport from a non-traditional perspective
• Comes at a time when international transport is receiving heightened attention from the climate change aspect.
• Significant implications for the long-term development and prosperity of SIDS
CONTEMPLATION

• Pressing need for work to be continued and deepened: research, multi-hazard assessments
• Need for alignment and coordination
• Critical need for dissemination of lessons that will to enhanced decision-making
• Must be accompanied by capacity-building and sustainable financing

PARTING THOUGHTS

• Air and sea ports are critical to the survival and well-being of OECS and Caribbean societies and economies
• Should not be viewed as a series of individual and isolated ports but rather as an interdependent network.
• Resilience-building must be approached in an integrated manner
• Recent and painful experiences have shown that we are only as resilient as our weakest port.
THANK YOU

Photo: Phillip Cupid, OECS Commission