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**“Climate Change Impacts and
Adaptation for Coastal Transport
Infrastructure in the Caribbean”**

**Addressing the challenge of climate
change adaptation and resilience
building for key international
transportation assets: Perspectives**

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**ADDRESSING THE CHALLENGES OF
CLIMATE CHANGE ADAPTION
AND
RESILIENCE BUILDING FOR KEY
INTERNATIOL TRANSPORTATION ASSETS:
PERSPECTIVES**

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THE PRESENTATION

- THE CARIBBEAN COMMUNITY
- THE TRANSPORTATION SECTOR OF CARICOM
- DEFINING THE TRANSPORTATION SECTOR OF CARICOM
- THE TRANSPORTATION NETWORK PARAMETERS
- THE CHALLENGES & ADDRESSING THE CHALLENGES
- THE ROLE & RESPONSIBILITY OF CARICOM - THE COUNCIL OF TRADE & ECONOMIC INTEGRATION [COTED]
- MANDATE OF THE HEADS OF GOVERNMENT
-

THE CARIBBEAN COMMUNITY [CARICOM]

- Fifteen (15) Member States and five (5) Associate Member States
- Apart from Suriname and Guyana which share a common riverain border, Member States are separated by vast expanses of water
- Smaller States depend on a complementary network of small vessels or commuter aircraft operations to link them to their principal markets via regional hubs.
- Geographical spread and the operational limitations at ports present logistical challenges in establishing a comprehensive, seamless transport system in the Community.

THE CARIBBEAN COMMUNITY [CARICOM]

- No direct links with major trading partners because of their small sizes and low volumes.
- Transportation is vital for Community trade, access to tourism markets, movement of goods, social integration of peoples of Community

[NO TRANSPORTATION, NO TRADE, NO INTEGRATION]

THE TRANSPORTATION SECTOR OF CARICOM

- ▶ Over 95% of the transportation **infrastructure** is owned by the Government.
- ▶ The **Transportation Systems Sector** is segmented into **five (5) key subsectors**, or modes, which operate independently within a regulated environment.
- ▶ The sector is also highly interdependent.

THE TRANSPORTATION SECTOR OF CARICOM (Cont'd)

The five (5) key subsectors/modes :

- ▶ Aviation
- ▶ Maritime
- ▶ Mass Transit
- ▶ Highway
- ▶ Pipeline

DEFINING THE TRANSPORTATION SECTOR

- ▶ **Aviation** – Aircraft, air traffic control systems, and approximately 135 commercial airports and 80 additional public airfields. This mode includes heliports, short takeoff and landing ports, and seaplane bases.
- ▶ **Maritime** – water-faring vessels and consists of approximately 50,000 miles of coastline, 180 ports, more than 10,000 miles of navigable waterways, 60 marinas and intermodal landside connections, which allow the various modes of transportation to move people and goods.

DEFINING THE TRANSPORTATION SECTOR (Cont'd)

- ▶ **Mass Transit** – Multiple-occupancy vehicles, such as transit buses, ferryboats.
- ▶ **Highway** – More than 1 million miles of roadways and supporting infrastructure. Vehicles include automobiles, buses, motorcycles, and all types of trucks, trailers, and recreational vehicles.

DEFINING THE TRANSPORTATION SECTOR (Cont'd)

- ▶ **Pipeline** - networks of pipeline that traverse hundreds of thousands of miles carrying natural gas, hazardous liquids and various chemicals.

THE TRANSPORTATION NETWORK PARAMETERS

There are two (2) perspectives:

- ▶ **System perspective** - A collection of transportation assets, their relationships, and their emergent properties that collectively come together to perform a function, supported by institutional rules and regulations, and structured around processes.
- ▶ **Assets perspective** - include a node, link, or flow in a transportation system and can be physical, cyber, or human in nature.

THE CHALLENGES

1. **A harmonized systems approach** for addressing natural disaster and natural disasters preparedness within the Transportation Sector;
2. **Minimizing unnecessary duplication** of efforts, improving coordination;
3. **Aligning transportation sector resources** (financial and otherwise);
4. **Establishing a common baseline** –identify and developing common definitions and nomenclatures

ADDRESSING THE CHALLENGES

1. **A harmonized systems approach** for addressing natural disaster and natural disasters preparedness within the Transportation Sector;
 - ▶ Development of **separate modal implementation plans** for each of the five modes. The plans will detail:
 - (i) characteristics of the mode,
 - (ii) Approaches to hazard/threat, sustainability, industry effective practices, guidelines, assessments, and regulations. In parallel, the plans explain how each mode will incorporate sector goals into modal disaster programs.

ADDRESSING THE CHALLENGES

- ▶ A Research and Development (R&D) Working Group to begin coordinating Research, Development, Test, and Evaluation (RDT&E) efforts across the sector.

ADDRESSING THE CHALLENGES

- ▶ The establishment of a **dedicated Research and Development (R&D) Working Group** to begin coordinating research, development, test, and evaluation (RDT&E) efforts across the transportation sector.

ADDRESSING THE CHALLENGES – STRATEGIC WAY FORWARD

- ▶ Actively engage private sector; academia; and public in planning activities;
- ▶ Facilitate and coordinate R&D planning activities across all sector modes; and
- ▶ Identify key cross-modal activities to accelerate investments in transportation R&D with a focus on risk-based needs.

ROLE & RESONSIBILITY OF CARICOM

- The policy decisions that affect the transport sector are developed and implemented by the various **Organs**, **Bodies** and **Institutions** of the Community
- The Principal Organ of the Community is the Conference of Heads of Government
- The Community Council of Ministers is the second highest Organ

THE MINISTERIAL COUNCIL FOR TRANSPORTATION

- The Principal Organs are assisted by four ministerial Councils
- Council for Trade and Economic Development (COTED) - portfolio includes and addresses transportation matters.

THE MINISTERIAL COUNCIL FOR TRANSPORTATION

Promoting:

- coordination of the national transport policies of Member States
- implementation of uniform regulations and procedures consistent with standards and recommended practices,
- development of required institutional, legal, technical, financial and administrative support for the balanced, sustained development of the transport sector;

MANDATES OF THE ORGANS OF THE COMMUNITY

Thirty-Fourth Meeting of the Conference of Heads of Government, Trinidad and Tobago, (July 2013) & Twenty-Seventh Meeting of the Bureau of the Conference of Heads of Government of the Caribbean Community, Trinidad and Tobago (September 2013) :

- Recognized the need for focused attention to address the long outstanding and seemingly intractable problem of transport in the Region agreed that a Transportation Commission must be established urgently;
- Approved the establishment of a Regional Transportation Commission to address the Air and Maritime Transportation issues.

