Ad Hoc Expert Meeting on

Climate Change Adaptation for International Transport: Preparing for the Future

16 to 17 April 2019

Introduction to CaDD
(Capacity Diagnosis & Development)

Presentation by

Nick Pyatt
Director
TRIOSS

This expert paper is reproduced by the UNCTAD secretariat in the form and language in which it has been received. The views expressed are those of the author and do not necessarily reflect the views of the UNCTAD.
Introduction to CaDD
(Capacity Diagnosis & Development)

UNCTAD Ad Hoc Expert Meeting on Climate Change Adaptation for International Transport: Preparing for the Future: 17th April 2019

How Climate Change Affects Organisations

Impact on company / sector performance
Impact on credit risk

Adaptive Capacity (quality of management)

Supply Chain / External Environment
Operations
Markets / Customers

After “Advancing TCFD Guidance On Physical Climate Risks & Opportunities” (2018)
Capacity & Standards

ISO 14091 Adaptation to Climate Change — Vulnerability, impacts and risk assessment – Draft text
“…that adaptive capacity be taken into consideration when assessing risk. If this step is missed out, the resulting risk assessment would then cover only the (potential) climate impact”

ISO 14090 Adaptation to climate change — Principles, requirements and guidelines – Draft text
“The organization shall identify and document the gaps in its capacity to adapt to the impacts of climate change identified”
Gaps need to be addressed in a plan that is then implemented and monitored

Response Levels
The logic for action changes as “maturity” grows.
Adaptive Capacity & Investment Risk

<table>
<thead>
<tr>
<th>Losses with climate impact</th>
<th>20%</th>
<th>28%</th>
<th>36%</th>
<th>44%</th>
<th>52%</th>
<th>60%</th>
</tr>
</thead>
</table>

Nine Pathways of Change for Climate Resilience

### Operational Pathways
- A: Awareness
- B: Agency
- C: Leadership
- D: Agents of Change
- E: Working Together
- F: Learning
- G: Managing Operations
- H: Programme Scope and Coherence
- I: Using Evidence & Expertise

### Developmental Pathways
- A: Awareness
- B: Agency
- C: Leadership
- D: Agents of Change
- E: Working Together
- F: Learning
- G: Managing Operations
- H: Programme Scope and Coherence
- I: Using Evidence & Expertise
Every block contains a suite of activities
Directly comparable: 21 European Cities
Types of Organisation & Their Impact on Options

Framework Organisations

Both

Decision Taking Organisations

Systemic Analysis: Organisation Types & Response Levels

<table>
<thead>
<tr>
<th>Low Capacity Approach</th>
<th>Simple Decisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium Capacity Approach</td>
<td>Complicated Decisions</td>
</tr>
<tr>
<td>High Capacity Approach</td>
<td>Complex Decisions</td>
</tr>
</tbody>
</table>

Low Capacity Approach

Low

Low

Low

Medium

Low

High

Low

Medium

High

High
Policy / Strategy Suggestions

1. Assessment of the gap between current and required adaptive capacity shall be made in the assessment of climate risk (applicable at the level of both individual organisation and system/sector)

1. A clearly defined, prioritised action plan for moving between current and required adaptive capacity shall be made in adaptation planning

Further Information

Nick Pyatt
T: +44 (0)1749 674956
M: +44 (0)7808732020
E: nick.pyatt@trioss.global

www.trioss.global
www.cadd.global
Benchmark Effectively

Results Comparison Graph

Response Level

- Awareness
- Agency
- Leadership
- Champions
- Working Together
- Learning
- Managing Operations
- Scope & Coherence
- Expertise & Evidence

Pathway

Company 1
Company 2
Company 3
Company 4
Company 5

Infrastructure Operators - Aggregate Data

Response Level

- Awareness
- Agency
- Leadership
- Agents of change
- Working together
- Learning
- Operations
- Scope / coherence
- Expertise

Pathways

Highest
Average
Lowest

Trioss 2016
Online Data Gathering & Dialogue

Dialogue Inquiries

- Strengths:
  - Highly relational
  - Optimally appreciative
  - Responsive

- Challenges:
  - Resource intensive
  - Expert time
  - Organisational time

Online Inquiries

- Strengths:
  - Rapid
  - Highly scalable
  - Directly comparable
  - Targeted expert time
  - Appreciative
  - Efficient

- Challenges:
  - High level prioritisation
  - Accountability
  - Relationships
  - Reporting

---

Thames Estuary 2100 Climate Change Scenarios and Adaptation Pathway Options

Maximum water level rise:

- 0m
- 1m
- 2m
- 3m
- 4m

- Improve defences
- New barrier, retain Thames barrier, raise defences
- New barrier, retain Thames barrier, raise defences
- New barrier, retain Thames barrier, raise defences
- New barrier, retain Thames barrier, raise defences

Diagram notes:
- Each box represents one or more portfolios of responses
- 2008 Climate Change Scenarios and implications on options