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**Input paper for the following Committee(s):** **Purpose of paper:**

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**Agenda item** [[2]](#footnote-2) 3.2

**Author(s)/Submitter(s)** Secretariat

IALAs involvement in Green Corridors

# Summary

This paper explores the concept of Maritime Green Corridors, an initiative aimed at reducing greenhouse gas emissions and promoting sustainable practices in maritime transport. It provides a background on the core elements, global and national initiatives and the role of these corridors in decarbonizing the shipping industry.

The discussion below examines the potential role of IALA with these corridors. It considers whether involvement represents a natural extension of IALA’s ongoing work in harmonization, digitalization and support for MASS or if it necessitates a distinct, focused initiative.

# Background

Green Corridors represent an initiative aimed at reducing greenhouse gas emissions and fostering sustainable practices in certain geographical areas. These corridors are shipping routes designed to integrate low or zero-emission technologies, promote the use of alternative fuels and facilitate collaborative efforts among stakeholders. As of December 2023, there were 44 active green shipping corridors worldwide, reflecting a doubling in number in the year preceding due to increasing governmental support, industry collaboration, and infrastructure investment.

## Core elements of Green Corridors

Maritime Green Corridors use several strategies to achieve decarbonization:

* Low or zero emission technologies include hydrogen, ammonia and biofuels, along with innovative technologies such as carbon capture systems and hybrid propulsion mechanisms.
* Ports along these corridors aim to handle alternative fuels and provide operational support for low-emission vessels.
* International bodies such as IMO play a critical role in establishing harmonized regulations and incentives.
* Implementation may require partnerships between governments, maritime organizations, ports, fuel suppliers, technology providers, and operators.

## Global and National Initiatives

Efforts to establish Green Corridors are supported by commitments at both international and national levels. For example:

During COP26, over 20 nations committed to developing a number of green corridors by 2025. Notable examples include the joint initiative by the ports of Los Angeles and Shanghai to establish a low-carbon container shipping route.

The UK government has allocated £1.5 million through the International Green Corridor Fund and launched initiatives such as the Clean Maritime Research Hub, led by Durham University, which received £7.4 million for net-zero technology development. Additionally, the Port of Dover was designated as the UK’s first high-volume Green Shipping Corridor, focusing on zero-emission shipping in it’s area of operation.

## The Role of Green Corridors in Decarbonization

The establishment of Green Corridors contributes to decarbonization through several initiatives, including routing operations, just-in-time arrivals, terminal efficiency, energy management and autonomous navigation systems. These measures have the potential to address 38% or more of the sector’s emissions, as highlighted by recent research (ATOS, The maritime shipping sector – facing the challenges of decarbonization and digitalization).

## Current Progress and Challenges

Green corridors are advancing through various phases of development. Of the 44 corridors identified in 2023, 23 were in the initiation stage, 17 were in the planning stage and a few had entered the execution phase at that time.

# Discussion

IALA’s current work in harmonization, digitalization of waterways and MASS provides a strong link in our current work that also relates to Green Corridors. However, the question remains whether this engagement represents an extension of our ongoing activities or a distinct area requiring dedicated focus.

## Collaboration Opportunities

IALA’s participation in Green Corridors could involve:

* Working alongside the IMO to align regulations and standards for AtoN in Green Corridors.
* Possible partnerships with port authorities, universities and industrial members to develop and promote ‘green’ AtoNs, such as research into sustainable materials and smarter monitoring capabilities could complement broader environmental goals.
* Continuing to refine standards for environmentally-friendly AtoNs, focusing on materials, energy consumption and emissions monitoring, to support the operational needs of Green Corridors.

## Technical Contributions

IALA could lead several technical initiatives, including:

* Taking this into consideration during the Sustainability Workshop.
* Advancing the creation of digital models and digital twins of waterways to optimize vessel navigation and traffic management within Green Corridors.
* Developing AtoNs equipped with sensors for emissions, air, and water quality monitoring, as well as capabilities for transmitting real-time data to facilitate eco-friendly route planning.
* Look into VTS operations to consider possible roles with optimizing fuel-efficient speeds and dynamically eco-friendly routes based on environmental and traffic data.

## Strategic Considerations

IALA’s participation in Green Corridors could enhance its reputation as a leader in sustainability and innovation. As an intergovernmental organization, IALA’s involvement may also affirm its commitment the UN sustainability goals.

However, many elements of Green Corridors align with IALA’s existing activities, therefore we may want to consider that this is part of normal business and there is no value in active participation.

There could possibly be an argument to consult members on this matter, for example, by hosting a seminar to formalize IALA’s outlook on the matter, position and contributions in a similar way to the work conducted on MASS.

Given the growing visibility of Green Corridors within the maritime industry, IALA’s involvement may be expected. Proactively contributing to this area could align with stakeholder demands and reinforce IALA’s role in advancing safety and sustainability.

# Action requested of the Committee

The PAP is requested to:

1. Note the contents of this input paper.
2. Discuss what possible involvement IALA may have with green corridors.

1. Input document number, to be assigned by the Committee Secretary [↑](#footnote-ref-1)
2. Leave open if uncertain [↑](#footnote-ref-2)