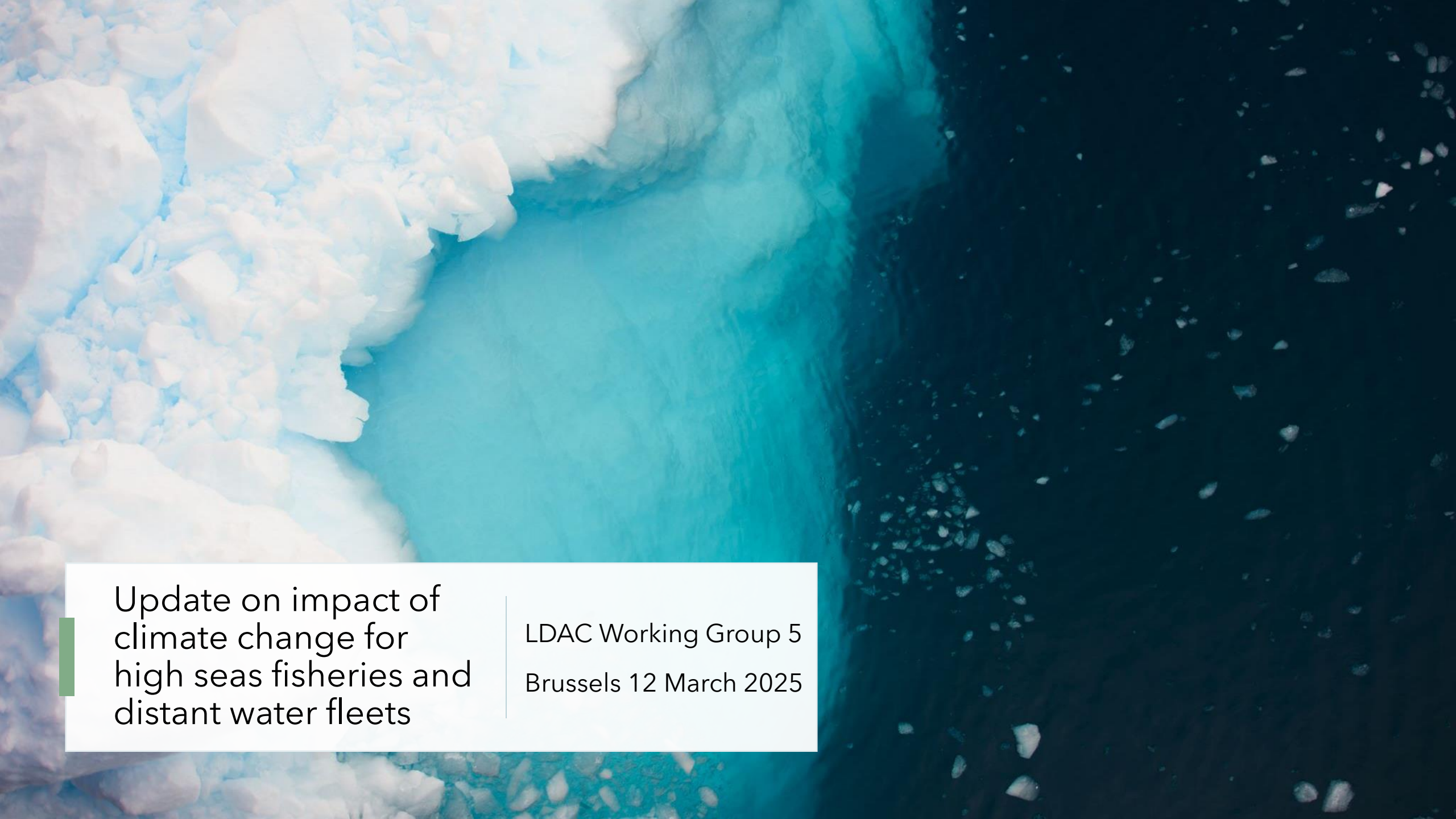


Update on impact of climate change for high seas fisheries and distant water fleets

LDAC Working Group 5

Brussels 12 March 2025

STATE OF PLAY: WHERE WE ARE?

- **Work priority**:

Identified as such on the LDAC AWP for 2024-2025

- **Landmark event**:

LDAC Seminar on CFP External Dimension and Climate Change (Stockholm, 25 May 2023) – agenda & presentations:

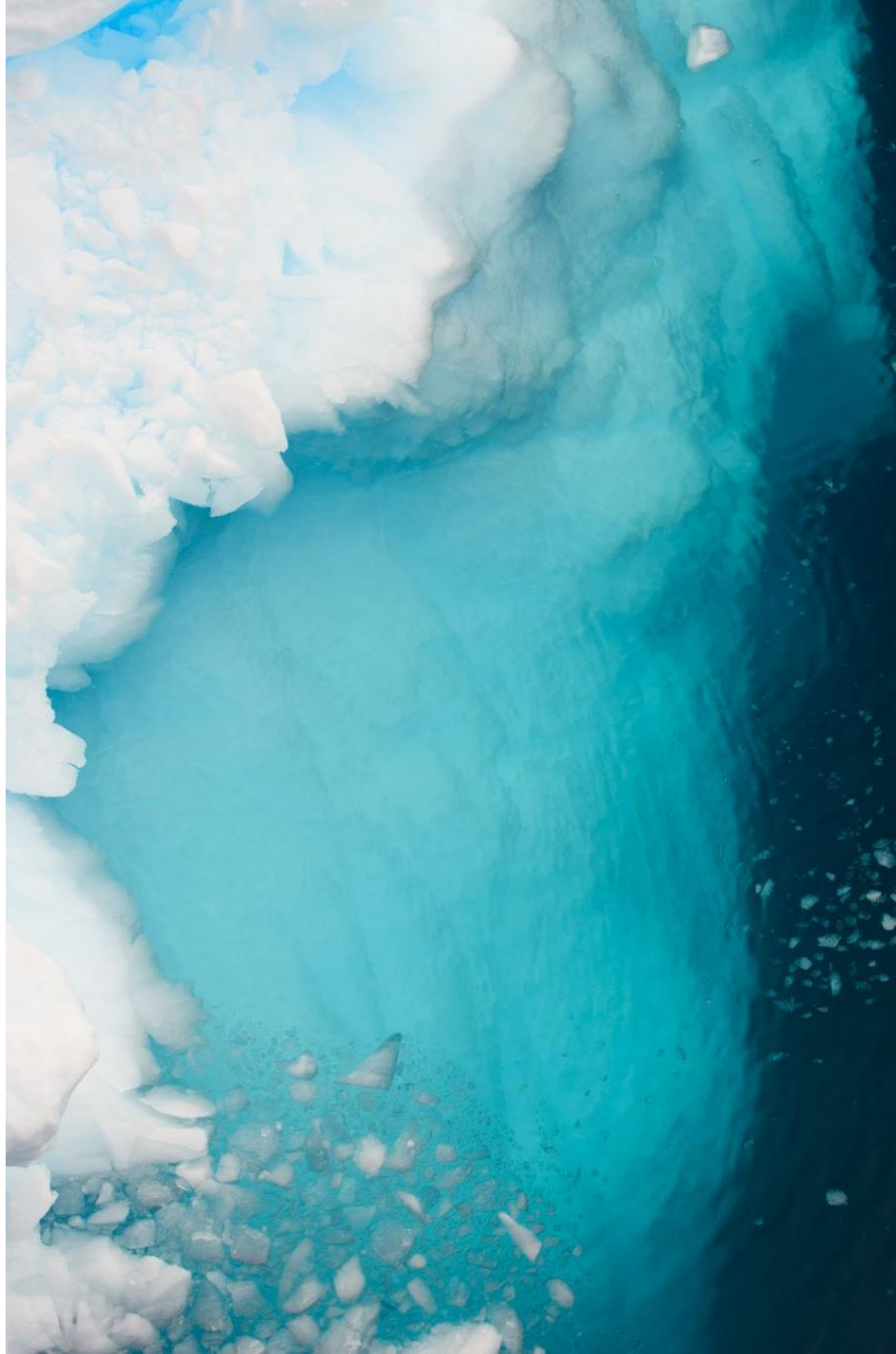
https://www.ldac.eu/en/meetings/archive/event-cfp-external-dimension-climate-change-25-05-2023

- **Aim of this advice**:

Assess environmental impacts of climate change (e.g. ocean acidification, eutrophication…) for DWF.

- **Work plan**:

Make a SWOT analysis and select 2-3 case studies on specific fisheries (e.g. métiers/fishing area/RFMOs).



STRENGHTS

1. **Adaptability of Technology**:

   Advances in fishing technology and data analytics enable fleets to adapt to changing fish migration patterns and environmental conditions, allowing them to target new regions and species.

2. **International Cooperation and Regulation**:

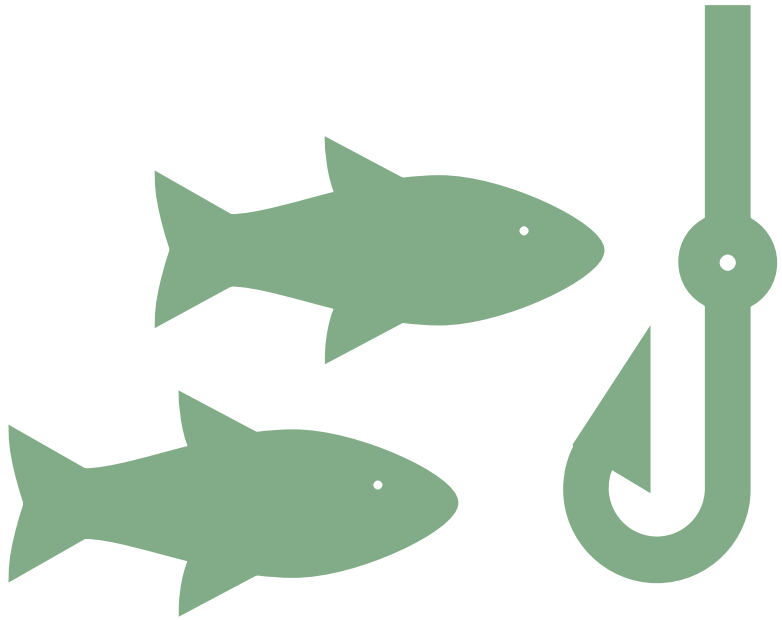
   Established international agreements (e.g., Regional Fisheries Management Organizations - RFMOs) may help in creating coordinated efforts to manage fish stocks sustainably despite climate-related changes.

3. **Diversification of Target Species**:

   As climate change alters the availability of certain fish stocks, distant water fleets may diversify their catch to include species that are more resilient to climate shifts.

4. **Economic Resilience**:

   High seas fisheries, with their large-scale operations, may be more resilient in terms of capital and resources, enabling them to weather the initial impacts of climate change better than smaller operations.



WEAKNESSES

1. **Unpredictable Fish Migration Patterns**:

   Climate change is altering ocean currents and temperatures, causing changes in distribution of stocks and shifts in fish populations. Distant water fleets may struggle to predict where fish stocks will be located, leading to inefficient operations and higher costs.

2. **Overfishing Risks**:

   Climate change can exacerbate overfishing if new migration patterns lead to intense fishing efforts in particular areas, potentially depleting fish stocks faster than they can recover.

3. **Vulnerability to Extreme Weather Events**:

   High seas fisheries and distant water fleets face increased risks from extreme weather events (e.g., hurricanes, storms, and heatwaves), which could damage vessels and infrastructure, disrupt supply chains, and lead to operational downtimes.

4. **Regulatory Challenges (IOG framework - biodiversity & fisheries)**:

   New regulations may be introduced in response to the impacts of climate change, which could restrict fishing operations, impose stricter quotas, or alter fishing areas, leading to increased operational complexity and costs.

OPPORTUNITIES

1. **New Fisheries / Targeted Species, Fishing Areas**:

   As species migrate to new areas due to changing ocean conditions, distant water fleets may explore new fishing grounds and expand their reach to previously unexploited resources (e.g. mesopelagic fish).

2. **Sustainable Practices and Eco-friendly Solutions**:

   There is a growing demand for sustainable fishing practices, and fleets that adopt eco-friendly practices may benefit from increased market access and consumer preference for responsibly sourced seafood.

3. **Investment in Adaptation and Resilience**:

   There are opportunities for fleets to invest in technology, infrastructure, and training that enhances resilience to climate change (e.g., climate-resistant vessels, better weather forecasting, and more precise fishing gear).

4. **Government and Stakeholder Partnerships**:

   Increased collaboration with governments, stakeholders and CSO-NGOs may provide distant water fleets with funding, research support, and expertise to navigate the challenges posed by climate change and maintain sustainable fishing practices.

THREATS

1. **Decline in Fish Stocks (Yield Productivity)**:

   As ocean temperatures rise and acidification increases, the productivity of certain fish stocks may decline, leading to reduced catches and lower revenue for distant water fleets that depend on these species.

2. **Ecosystem Disruptions**:

   Climate change can cause shifts in marine ecosystems, such as coral bleaching or the destruction of critical habitats (e.g., upwelling zones), which can disrupt the abundance and distribution of marine species, further complicating fishing operations.

3. **Increased Operational Costs (including fuel)**:

   Changes in the availability of fish, the need for longer trips to find profitable fishing grounds, and the increased frequency of extreme weather events can all increase operational costs for distant water fleets as well as the fisheries footprint (in terms of CO2/GHG emissions).

4. **Geopolitical Tensions (e.g. high seas vs EEZs)**:

   As climate change reshapes fisheries in contested or boundary zones (such as West Africa, ASW or the Arctic), the potential for disputes over historical fishing rights may increase, leading to political tensions and risks to fleet operations.

CONCLUSION OF SWOT ANALYSIS

In summary, while distant water fleets and high sea fisheries may benefit from new fishing areas and opportunities for sustainable practices, the unpredictability of fish stock shifts, increased operational risks, and regulatory challenges present significant vulnerabilities in light of climate change.

Next steps: proposed timeline

March 2025: Secretariat will circulate presentation and produce a summary report of the Stockholm Seminar including the recommendations presented by the rapporteurs.

Early April 2025: Presentation made at WG5 and Stockholm Report will be circulated amongst WG5 members will be invited to provide feedback.

Mid April 2025: A focus group will be set up to scope elements for inclusion in a potential advice based on feedback received from members / SWOT analysis.

May 2025: A draft LDAC advice will be circulated and presented at the ExCom in Vigo for adoption before the end of the month.

This is the end! Any questions?