



# Future IUU Fishing Trends in a Warming World

A Global Horizon Scan



# Royal United Services Institute for Defence and Security Studies

- Founded in 1831
- Think tank and UK charity



## Background and rationale

### **We are already seeing shifts in IUU activity due to climate change**

As fish stocks and distributions shift, and as livelihoods and food security are affected by climate change:

- existing IUU actors will adapt
- legitimate fishers may be pushed into IUU activity
- governance and enforcement models will be challenged

Yet little research has analysed the links – exclusive focus on the present-day threat





Methodology

# Scanning the Horizon



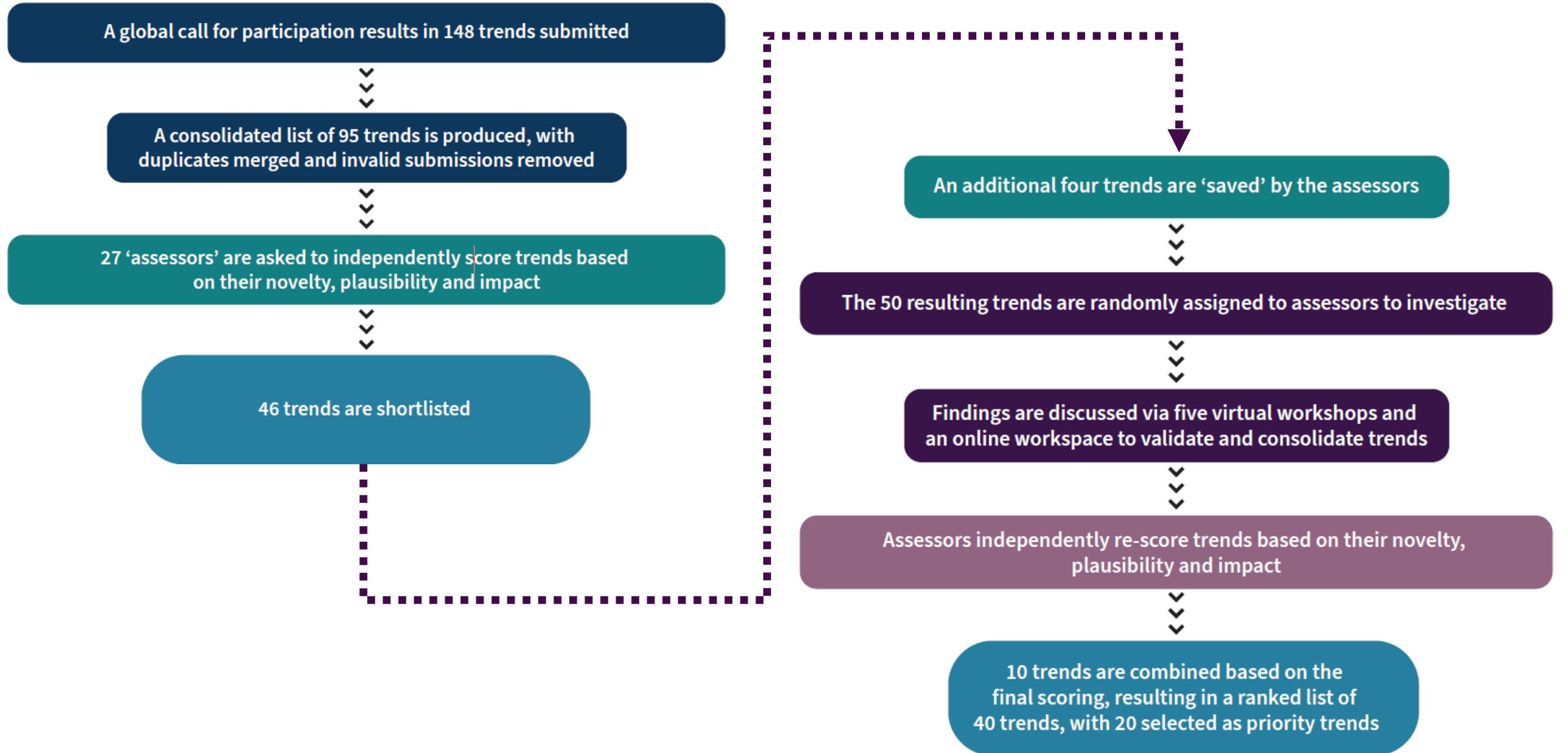
## What is Horizon Scanning?

A recognised technique for detecting future developments through a systematic evaluation of potential threats and opportunities.

It brings together experts across relevant subject areas:

- to critically analyse and synthesise available data,
- and explore viable solutions.

It has been applied to other environmental crimes, but not to IUU fishing.



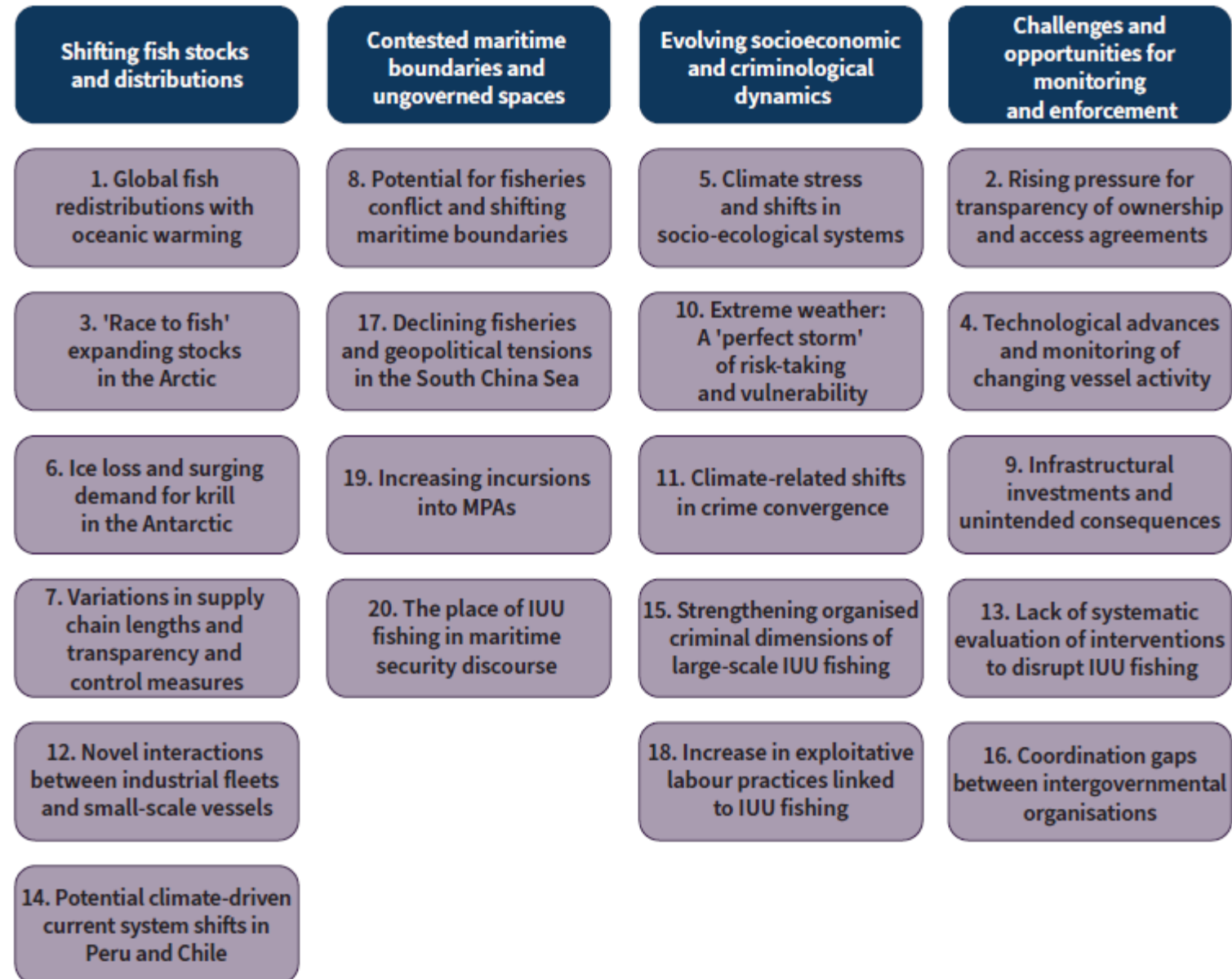


# Overview of the Findings



# Top 20 Trends:

- Ranked by novelty, plausibility and impact





# 1. Shifting fish stocks and distributions

- **Global fish redistributions with oceanic warming** (Rank 1)
- **‘Race to fish’ expanding stocks in the Arctic** (Rank 3)
- **Ice loss and surging demand for krill in the Antarctic** (Rank 6)
- **Potential climate-driven current system shifts in Peru and Chile** (Rank 14)
- **Novel interactions between industrial fleets and small-scale vessels** (Rank 12)
- **Variations in supply chain lengths and transparency and control measures** (Rank 7)



## 2. Contested maritime boundaries and ungoverned spaces

- **Potential for fisheries conflict and shifting maritime boundaries** (Rank 8)
- **Declining fisheries and geopolitical tensions in the South China Sea** (Rank 17)
- **The place of IUU fishing in maritime security discourse** (Rank 20)
- **Increasing incursions into MPAs** (Rank 19)





### 3. Evolving socioeconomic and criminological dynamics

- **Climate stress and shifts in socio-ecological systems** (Rank 5)
- **Extreme weather: A ‘perfect storm’ of risk-taking and vulnerability** (Rank 10)
- **Increase in exploitative labour practices linked to IUU fishing** (Rank 18)
- **Strengthening organised criminal dimensions of large-scale IUU fishing** (Rank 15)
- **Climate-related shifts in crime convergence** (Rank 11)



## 4. Challenges and opportunities for monitoring and enforcement

- **Technological advances and monitoring of changing vessel activity** (Rank 4)
- **Lack of systematic evaluation of interventions to disrupt IUU fishing** (Rank 13)
- **Coordination gaps between intergovernmental organisations** (Rank 16)
- **Infrastructural investments and unintended consequences** (Rank 9)
- **Rising pressure for transparency of ownership and access agreements** (Rank 2)





# Key Considerations



## Key Considerations (1):

- Advance planning is essential.
- Vessel-monitoring capabilities must be bolstered to detect climate-driven changes in activity.
- Enforcement must be strengthened and adapted to a climate-changed future.
- Enhanced transparency and traceability must be pursued.

## Key Considerations (2):

- Geopolitical stakes woven into fishing activity must be accounted for.
- Resilience among artisanal fishing communities must be strengthened.
- High-volume IUU fishing must be treated with the severity it deserves.



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Thanks for  
listening...

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