# Fishing nets on the coastline of the North Atlantic region

What is causing the issue and how can it be solved?

Wouter-Jan Strietman - Wageningen Economic Research - Wouterjan.Strietman@wur.nl



Fishing nets, also called 'ghost nets', can often be found floating at sea



Under the influence of wind and currents, such nets, along with other floating marine litter, may be transported over long distances





# ...along the way, such nets pose a serious risk to wildlife Photos: Sysselmannen & Scottish Marine Animal Stranding Scheme

## ...and a safety of navigation hazard to ships and fishing vessels









# ...eventually, most floating fishing net litter will reach the shoreline On this Particular beach in Iceland, 30% of all items were pieces of net -> 13% of beach litter in the NE Atlantic is fishing gear, most of which are fishing nets and pieces of fishing net Photo: WJ Strietman

# What can be done to solve this issue?



To tackle the root cause, a deeper understanding of the underlying human induced practices and pathways is crucial



# Are these questions being answered as part of beach litter monitoring efforts currently being applied throughout Europe (e.g. OSPAR)?

	OSPAR ID	Unep ID	Items
	29		Oyster trays (round from oyster cultures)
	30		Plastic sheeting from mussel culture (Tahitians)
	31		Rope (diameter more than 1 cm)
	32		String and cord (diameter less than 1 cm)
	115		Nets and pieces of net < 50 cm
	116		Nets and pieces of net > 50 cm
10.00	33		Tangled nets/cord/rope and string
	34		Fish boxes
	35		Fishing line (angling)





What?

Who?

Where?

Why



# Our mission: to leverage stakeholder's knowledge to understand the root causes of marine litter, and empower them to address them





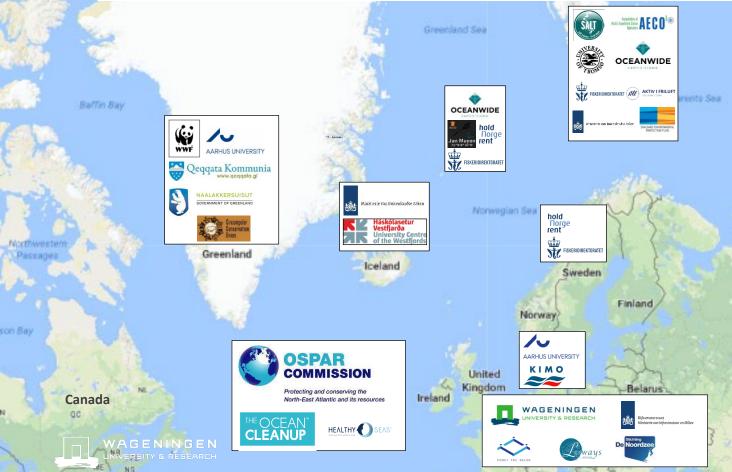
During interactive sessions we involve stakeholders and experts in the analysis to determine sources, causes and solutions to beach litter



Study areas and collaboration partners since 2017

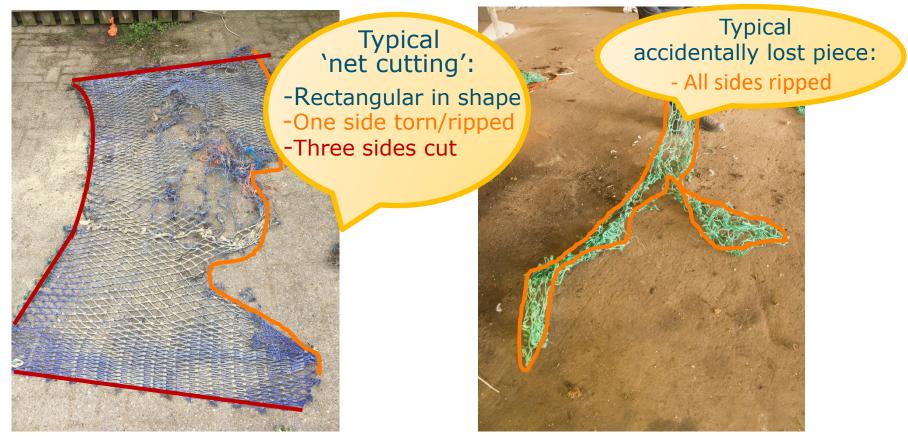
Kara See

Kazakhstan





### How do we determine whether a net was cut or torn?

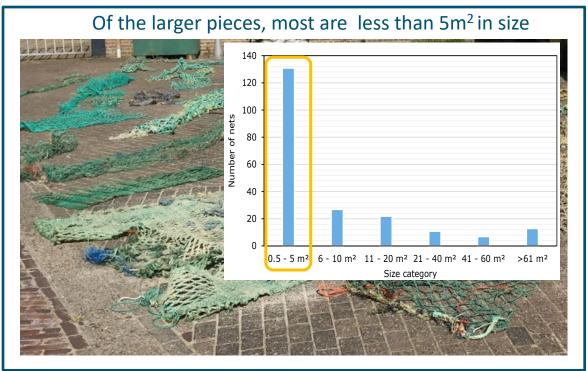


In a dialogue setting with stakeholders, the results are discussed, creating a shared understanding of the causes and solutions



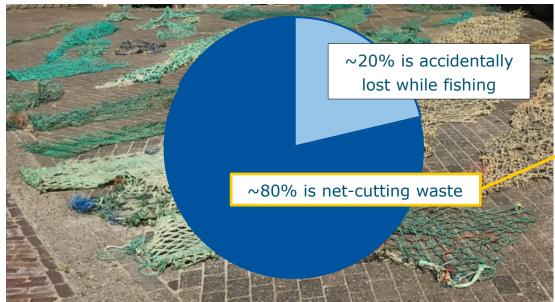
### Key finding 1: all nets are <u>pieces</u>, rather than complete nets







# Key finding 2: most pieces >50cm are mismanaged off-cuts from bottom trawling nets, the result of repair and maintenance

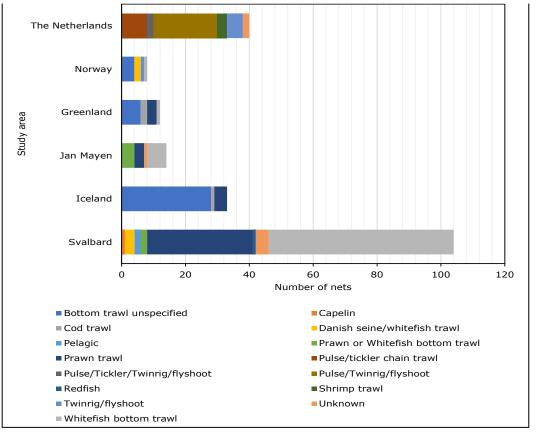




-> All study areas showed similar results



### Key finding 3: the sources are local bottom trawl fisheries





# Key finding 4: most smaller pieces are mismanaged offcuts from loose mesh ends and from repair cord







Net-cutting waste usually reaches the sea due to inadequate deckcleaning operations or being unintentionally washed or swept overboard

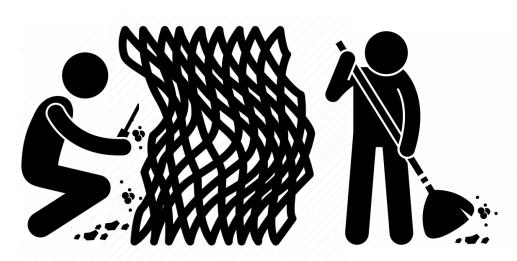




Other waste produced on deck reaches the sea in a similar way



Most fisheries related litter on beaches, can be prevented by improving waste management of operational waste on deck and on the quayside in ports

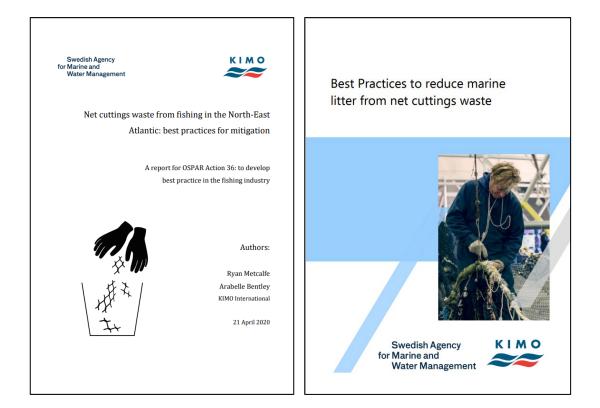








### Best practices for mitigation are presented in the following two KIMO reports:





On a positive note: such practices are progressively being applied by fishermen, but further steps should be taken by the fishing industry, port authorities and governments



### All findings are presented in the following report:

# Strietman, W.J., 2021. Fishing nets on the coastline of the Arctic and North-East Atlantic: a source analysis

-> The report can be downloaded for free at <a href="https://doi.org/10.18174/541335">https://doi.org/10.18174/541335</a> or at <a href="www.wur.eu/economic-research">www.wur.eu/economic-research</a> (under Wageningen Economic Research publications).



### Fishing nets on the coastline of the Arctic and North-East Atlantic: a source analysis

Findings and recommendations based on an in-depth analysis of the sources, origin, and pathways of fishing nets collected on beaches in Greenland, Iceland, Jan Mayen, Svalbard, the Netherlands, Norway, and Scotland

Strietman, W.J.





# This research is a team effort – a big thank you to my colleagues and our collaboration partners!



Wouter Jan Strietman wouterjan.strietman@wur.nl Tel. +31 6 2319 5127



