

## PAME II-2018: agenda 9(c)

### Communication and Outreach

- ✓ Marine Litter workshop in Iceland 5-5 June 2018 – [workshop website](#)
- ✓ Plastic in a bottle
- ✓ Arctic marine litter competition
- ✓ Project video
- ✓ PAME website current work on Marine Litter graphics for outreach purposes [here](#)

### Plastic in a bottle

One aspect of PAME’s *Desktop Study on Marine Litter including Microplastics in the Arctic* is to set afloat up to five “plastics in a bottle” from across and around the Arctic. The specially designed capsules will be equipped with a GPS transmitter to illustrate how marine litter can travel, even between continents, contributing to the adverse effects of marine litter.

#### **Potential drift of Plastic in a bottle**

- Based on discussions with the Icelandic Meteorological Office and a leading expert in ocean currents.

Five areas have been identified as potential points to release the bottles, East Coast of USA (e.g. Maine), Netherlands, Iceland (east coast), Northern Norway and Alaska. These areas have been discussed with an expert on oceanography and meteorology (Dr. Halldór Björnsson) and a leading expert in Iceland on ocean currents (Dr. Steingrímur Jónsson).

According to them, one cannot expect an object like the plastic capsules to travel to certain areas with ocean currents. Weather and waves have big effects as well as currents. The map below illustrates broadly how these capsules could travel if released at these areas.



Figure 1: Potential capsule drift.

**PAME and Verkís**

The PAME Secretariat met with the Icelandic Engineering company *Verkís*. They have designed and manufactured bottles, equipped with a satellite transmitter that provides its location every four hours via a GPS receiver, enabling viewers to observe the journey of the bottle. Previous experiments by *Verkís* have seen their bottles travel thousands of miles across the Atlantic sea, lasting well over a year and reaching destinations as far as Scotland and Faroe Islands (having begun in Iceland).

The image below shows the design of the bottle, and how its travel is shown on a map.



**Costs**

- All costs in USD

Item	Costs	Total for 5 bottles
<i>Verkís</i>		
Bottle	500\$	2500
GPS transmitter	300\$	1500
Launch / transportation	300\$	1500
Other costs	2000\$	2000
		<u>7500</u>

## Outreach

The PAME Website will host the map. It can be further distributed (embedded) to other websites. Snapshots will be shown frequently on PAME's Social media accounts, and the Arctic Council website/social media.

Local media in Iceland will be sent press releases and assistance with similar efforts amongst the co-leads will be endorsed.

Finally, a video will be made when the plastic bottles have all washed ashore to show their journey.

## Project video

A simple video about the project will be produced.

## Art Competition

Litter competition: clean the beach, art (tbc)

## Graphics

A section on the PAME website has been created to host graphics related to marine litter in the Arctic. It currently holds numerous graphics and videos, produced by PAME and others.

In addition, GRID-Arendal is in the process of developing further graphics for this project.

*Graphics example:*

