



# ASTD FRAMEWORK AGREEMENT

*ARCTIC COUNCIL FRAMEWORK FOR COOPERATIVE ACTION ON  
ARCTIC SHIP TRAFFIC DATA SHARING*

PAME SECRETARAT

*Updated on 1/12/2020*



# *ASTD FRAMEWORK AGREEMENT*

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ARCTIC COUNCIL FRAMEWORK FOR COOPERATIVE ACTION ON ARCTIC SHIP TRAFFIC DATA SHARING

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*As approved by SAOs in NYC on 6 April 2017*

AN ARCTIC COUNCIL FRAMEWORK FOR COOPERATIVE ACTION  
ON  
ARCTIC SHIP TRAFFIC DATA SHARING

1. PARTICIPANTS: Any Arctic State is eligible to be a Participant in this Arctic Council Framework for Cooperative Action on Arctic Ship Traffic Data Sharing (“ASTD Framework”).
2. REFERENCES: The Protection of the Arctic Marine Environment Working Group’s [Work Plan 2015-2017](#), the [Arctic Ocean Review Final Report \(2013\)](#), and the [Arctic Marine Strategic Plan 2015-2025](#).
3. PURPOSE: The purpose of this ASTD Framework is to describe and define the general conditions for the intended sharing of Arctic Shipping Data among the Participants.
  - 3.1. BACKGROUND: The Arctic Ship Traffic Data (ASTD) Project is an initiative of the Arctic Council’s Working Group on the Protection of the Arctic Marine Environment (PAME) and is based in part on the Arctic Marine Shipping Assessment Report (AMSA 2009) and its 2005 shipping database. The purpose of the ASTD Project is to collect information about shipping activity in the Arctic (“Data”) from the Participants to use for traffic trend analyses and related purposes under the realm of the Arctic Council. Project objectives are to develop a long-term, sustainable collection of Arctic shipping activity information consisting of a Data repository that includes ship traffic and related information provided by the Participants and a web application/tool to extract information from the repository, allowing for periodic trend analyses.
  - 3.2. DATA TO BE SHARED: Each Participant intends to provide the Data which it deems to be relevant to this ASTD Framework to the Data repository specified in section 3.1 and to make this Data available to all the other Participants using the technical data exchange network (“the Network”) that is created under this ASTD Framework. It is anticipated that the Data will typically include, but not be limited to, Automatic Identification System (“AIS”) vessel tracking information from SOLAS vessels and other vessels carrying AIS transponders, port arrival/departure information and other pertinent ship traffic data as decided by the Participants. The Data may be provided in real-time, from historical data registries, or from aggregated statistical data sources as decided by the Participants, but not presented in real-time. The Participants intend to share the Data on a regular basis.
  - 3.3. OWNERSHIP OF DATA: The Participants intend to share the data described in section 3.2 with each other without limitation so long as used within the scope of the ASTD Project. Nothing in this ASTD Framework is intended to affect any right, title or ownership interest in and to the Data that each Participant may have under its domestic law, nor is it intended to prevent a Participant from sharing the Data it provides under this ASTD Framework with any other entity under whatever

terms and conditions it may deem appropriate. Each Participant intends to ensure that any Data it provides under this ASTD Framework does not infringe upon any patent, trademark, copyright or other intellectual property ownership rights and interests.

- 3.4. USE OF SHARED DATA: Any Data that the Participants make available under this ASTD Framework is intended to be used for purposes of Arctic Council work and for the benefit of the Arctic States including: (i) protection of the marine environment; (ii) safety of navigation, maritime safety and security; (iii) vessel traffic services; (iv) port state control; (v) marine planning; (vi) search and rescue; (vii) accident investigation; (viii) pilotage; and (ix) customs surveillance. The Participants do not intend there to be any commercial use of the data under this ASTD Framework
- 3.5. ACCESS TO SHARED DATA: The Participants intend that Data is to be accessed and shared only as provided in Attachment One and pursuant to a signed Form for a Standard Arrangement on Access to and Use of ASTD Data (refer to Attachment One). To the extent that any Participant is required by law to make the Data available for any purpose not described in this ASTD Framework and Attachment One, that Participant intends to notify the PAME International Secretariat and all other Participants prior to any such disclosure and to provide reasonable opportunity for other Participants to indicate whether their Data should be withheld from disclosure. Whenever a notification occurs, the Participants intend for the PAME International Secretariat to arrange for the withholding of such Data. Any such disclosure is to take place only in accordance with a signed "data sharing arrangement," in form comparable to the one attached hereto as Attachment Two.

#### 4. ROLES OF THE PARTICIPANTS AND THE PAME INTERNATIONAL SECRETARIAT:

##### 4.1 Each Participant intends to:

- 4.1.1 Obtain whatever authorizations and approvals are necessary to participate in this ASTD Framework and in the Network.
- 4.1.2 Restrict its use and distribution of the Data it receives from the Network in accordance with any and all distribution and restriction policies that may be required by the Participant that provides the source data.
- 4.1.3 Pay its annual *pro rata* share, distributed evenly among the Participants, of the costs necessary to create, manage, administer, and operate the Network. In the event that entities other than Participants make contributions to the costs of constructing, managing, administering and operating the network, each Participant's annual *pro rata* share will be proportionately reduced by deducting the total amount contributed by these entities in a given calendar year from the total amount that the Participants collectively would otherwise have been asked to contribute that year, and calculating a

reduced *pro rata* share. The PAME International Secretariat will make this calculation. Each Participant's reduced annual *pro rata* share will be paid in the calendar year following the year in which the contributions from entities other than Participants were received.

- 4.1.4 Timely remit those funds necessary to construct, manage, administer, and operate the Network, as described in Attachment Three, hereto, to the PAME International Secretariat.
  - 4.1.5 Take all actions necessary to ensure the accuracy and integrity of the Data it submits under this ASTD Framework.
  - 4.1.6 Honor all guidelines and reasonable restrictions imposed by the Network Manager with respect to use of the Network. The Network Manager is the Norwegian Coastal Administration.
  - 4.1.7 Abide by all of the provisions of this ASTD Framework for as long as it is a Participant.
- 4.2 The Participants intend the PAME International Secretariat to:
- 4.2.1 Provide administrative support for and oversight of this ASTD Framework and the associated technical data exchange that occurs under this ASTD Framework;
  - 4.2.2 Administer access to the Network in collaboration with the Network Manager as described in Attachment One; and
  - 4.2.3 Receive financial contributions made under section 4.1.4 and transfer those contributions to the Network Manager to cover the costs of constructing, managing, administering, and operating the Network.
5. POINTS OF CONTACT:
- 5.1. Each Participant intends to designate one or more "Contact Persons" for purposes of this ASTD Framework and the Network. A list of Contact Persons is shown in Attachment Four, hereto.
  - 5.2. The Participants intend the PAME International Secretariat to maintain an accurate and up-to-date list of names and contact details for Contact Persons.
  - 5.3. Any change intended to be made by a Participant to its designated Contact Person(s) is to be submitted to the PAME International Secretariat at the following e-mail: [pame@pame.is](mailto:pame@pame.is). The Participants request that the PAME International Secretariat timely notify all Participants of any changes to the list of Contact Persons.
6. OTHER PROVISIONS:
- 6.1. PRIVACY: The Participants intend to treat any Data submitted to the Network that contains Personally Identifiable Information or otherwise raises any privacy concerns in accordance with their respective national privacy laws.
  - 6.2. REVIEW: The Participants intend to review this ASTD Framework at each PAME Working Group annual fall meeting (PAME-II), or at any other occasion as decided by consensus of the Participants.

- 6.3. ENTIRE ASTD FRAMEWORK: The Participants intend that this ASTD Framework embodies their entire understanding regarding the ASTD Framework's subject matter.
- 6.4. INTERNATIONAL LAW: This ASTD Framework represents political commitments of the Arctic States. The Participants do not intend this ASTD Framework to be binding under international law.
7. REVISION/UPDATING: The Participants intend that any modifications or revisions to this ASTD Framework are to be done only by mutual written understanding of the Participants.
8. Nothing in this ASTD Framework precludes the Participants from deciding at a later date to modify or revise it to allow Permanent Participants and Arctic Council Observers to participate in and contribute to this data sharing project at a more in-depth level than the access options described in Attachment Two.
9. PARTICIPATION: Any Arctic State may become a Participant by notifying the PAME International Secretariat in writing and providing a Point of Contact as described in paragraph 3.5.
10. DISCONTINUATION: Any Participant may discontinue its participation in the ASTD Framework by providing at least 30 days prior written notice to all of the other Participants. Discontinuation by a Participant does not affect the ongoing operation of the ASTD Framework. Participants intend for discontinuation of the ASTD Framework to occur only when the Participants mutually decide in writing to do so.

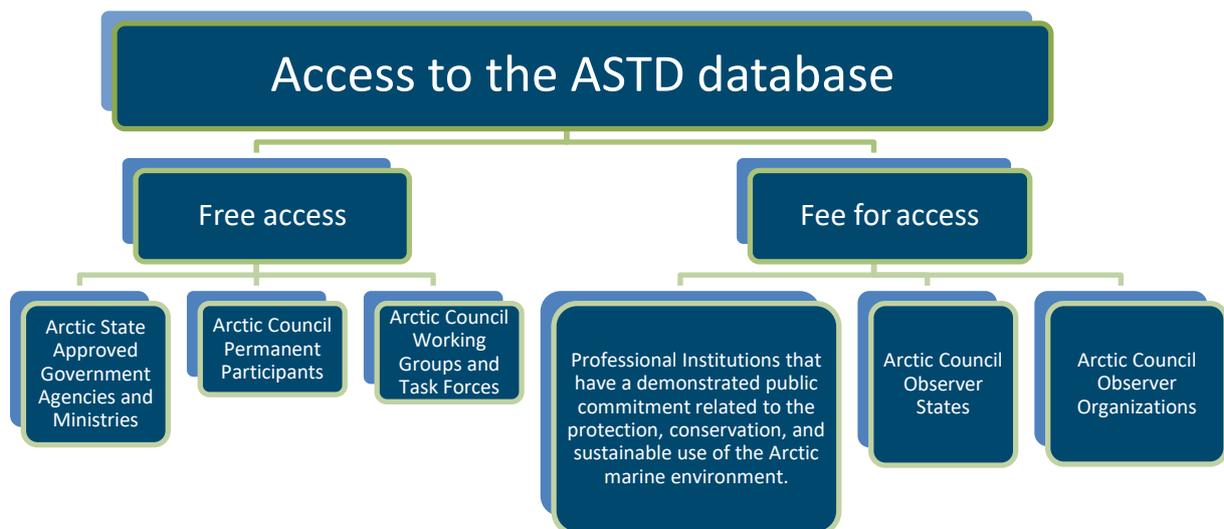
## Access to and use of the ASTD System

(Refer to paragraph 3.5 of the ASTD Framework)

### I. BACKGROUND:

ASTD Participants decide whether an applicant will gain access to the ASTD Systems as outlined in this document, and, if so, the level of access granted. The PAME International Secretariat will act as the administrator for granting the appropriate level of user access once ASTD Participants have made a decision on an application.

The ASTD Framework establishes who may access the ASTD System, how access is sought, what data may be accessed, whether a fee is charged, and how ASTD data may be used. The ASTD Framework defines three levels of access to the ASTD System – see below. The graphic and table below describe these three access levels. Through PAME, Participating Arctic States have paid for the development and ongoing maintenance of the ASTD System and have full access to the System, subject to the terms of the ASTD Framework.



The Data is accessible through the ASTD System. The Data is stored on secure and dedicated servers as part of the Network described in the ASTD Framework, for which the Norwegian Coastal Administration (NCA) is the Network Manager.

## II. USER ACCESS LEVELS:

There are three access levels to the ASTD System as defined in the table below.

### LEVEL I

Arctic States that are current on their annual *pro rata* share financial contributions.

LEVEL 1 access means access to all data in the database for analysis under the auspices of the Arctic Council. The data will include vessel identity information – both Maritime Mobility Service Identity (MMSI) number and International Maritime Organization (IMO) ship identification number, ship names, and detailed ship type for each ship sailing (over 200 ship types included).

A completed application to access the ASTD System must be submitted by email to the designated Arctic State ASTD contact who reviews it to confirm that the applicant is a government agency or ministry. If it is, the designated Arctic State ASTD contact forwards the application to the PAME Secretariat for processing. [See the list of designated Arctic State ASTD Contacts and their contact information here.](#)

If approved, the applicant will receive access to the data from the PAME Secretariat via a secure data transfer.

To allow each Participant to withhold data it has provided under this ASTD Framework as described in section 3.5, the PAME International Secretariat will notify those Participants who have submitted data of each LEVEL I request before distributing any data. If a Participant does not object to the inclusion of its Data in what has been requested after notification by the PAME International Secretariat, the PAME International Secretariat will download and transmit the requested data. This process usually takes no longer than seven (7) days. The data will be sent in a GIS format, such as .csv for download. Such data must typically be manipulated by a GIS Analyst due to its size and complexity.

If a Participant objects to the inclusion of data it has submitted to the ASTD System in what has been requested, that data will not be included in the transmitted data.

### LEVEL II

Arctic States that are current on their annual *pro rata* share financial contributions.

LEVEL 2 provides access to the same data as is available under LEVEL 1 *except* that vessel identity data (MMSI, IMO ship identification number, and ship name) is not included and ship types are aggregated to around 50 ship types.

A completed application to access the ASTD System must be submitted by email to the designated Arctic State ASTD Contact who reviews it to confirm that the applicant is a

government agency or ministry. If it is, the designated ASTD Contact forwards the application to the PAME Secretariat for processing. [See the list of designated Arctic State ASTD Contacts and their contact information here.](#)

The successful applicant ("user") will receive an e-mail from the PAME Secretariat with a username and a password to access the ASTD System.

To allow each Participant to withhold Data it has provided under this ASTD Framework as described in section 3.5, the PAME International Secretariat will notify those Participants of each LEVEL 2 request. If a Participant who provided the data does not object to its inclusion in a LEVEL 2 request the PAME International Secretariat will provide the requestor with a username and password to access the database once the requester signs a Data Sharing Arrangement ([Attachment Two](#)). This process usually takes no longer than seven (7) days.

If a Participant objects to the inclusion of data it has provided to the ASTD System in what has been requested, that Data will not be included in what the successful Level 2 applicant will be able to access after signing a Data Sharing Arrangement ([Attachment Two](#)) and receiving a username and password from the PAME International Secretariat.

### LEVEL III

Arctic States that are not current on their full annual *pro rata* share financial contributions; Permanent Participants; and Arctic Council Subsidiary Bodies. Additionally, upon payment of a financial contribution in an amount decided by PAME - member governments, Arctic Council Observers and other professional organizations (e.g., accredited academic institutions, recognized research institutes, registered non-governmental organizations) that have a demonstrated public commitment related to the protection, conservation, and sustainable use of the Arctic marine and coastal environment..

LEVEL 3 access means access to the same data as is available under LEVEL 2 except that ship type information is aggregated into 13 ship types instead of around 50 ship types.

To gain free access, applicants must fill out the form and send it to the PAME Secretariat ([pame@pame.is](mailto:pame@pame.is)).

For users eligible for access only upon payment of a fee, applicants must fill out the form and send it to the PAME Secretariat ([pame@pame.is](mailto:pame@pame.is)). The PAME Secretariat will contact the successful applicant for payment of the fee. Once the fee is paid, access will be granted.

The PAME International Secretariat will notify all Participants of each LEVEL 3 application. LEVEL 3 access may be granted only if there is consensus to do so among all Participants. If no Participants objects to the LEVEL 3 request within seven (7) calendar days after notification by the PAME International Secretariat, the requestor will receive a username and password after it has submitted a completed data sharing arrangement ([Attachment Two](#)).

## Access Applications and Data Sharing Agreements

PAME has approved four Access Applications and Data Sharing Agreements. These documents serve both as applications and Data Sharing Agreements that set forth the terms and conditions for access to the ASTD System according to which applicants apply for access. See Attachment Two regarding which access level to apply for.

**Links:**

1. [Access to Level I – ASTD System Access Application and Data Sharing Agreement document](#)
2. [Access to Level II – ASTD System Access Application and Data Sharing Agreement document](#)
3. [Free Access to Level III - ASTD System Access Application and Data Sharing Agreement document](#)
4. [Paid Access to Level III - ASTD System Access Application and Data Sharing Agreement document](#)

ASTD FRAMEWORK - ATTACHMENT THREE

## ASTD Network Costs

The table below provides an overview of ASTD network costs. Running costs include administration, data storage, maintenance, operation, change, and update of hardware and other related aspects. It also covers license fees and upgrades to key software components.

Expenditure represents ASTD System development, which includes system setup, data transfer, system maintenance, data storage, software updates, data connectivity, gap data pull, testing and administration costs. Current estimated total annual running costs are \$28.000 USD.

The PAME International Secretariat oversees the ASTD account.

Currently estimated annual Network costs (denoted in U.S. dollars), including the annual pro rata share for each Participant's financial contribution, are set forth in the table below.

	Timeframe				
	Year 1	Year 2	Year 3	Year 4	Year X
<b>Development costs:</b>	134.000				
<b>Annual running costs:</b>		28.000	28.000	28.000	28.000
<b>Total estimated annual costs:</b>	134.000	28.000	28.000	28.000	28.000
<b>Estimated annual costs per Participant:</b>	19.000	4.000	4.000	4.000	4.000
<b>Total costs after 4 years of operation:</b>				246.000	
<p><i>*Norway's yearly contribution is deducted accordingly as requested by Norwegian Coastal Administration, to simplify the cost sharing of the system. Norway has operated and developed Havbase for several years and will continue to maintain and improve the system which will benefit this project with continual and additional costs for Norway. However, Norway will pay its equal share of the costs as a member State of the Arctic Council but as a measure to simplify the paying procedure.</i></p>					

## ASTD FRAMEWORK - ATTACHMENT FOUR

# Designated Contact Persons

April 2021

ASTD Participant	ASTD Designated Contact Persons	ASTD Designated Technical Experts
<b>USA</b>	<p><b>Peter Oppenheimer</b> Chief, International Section National Oceanic and Atmospheric Administration <a href="mailto:Peter.Oppenheimer@noaa.gov">Peter.Oppenheimer@noaa.gov</a></p>	<p><b>Brian Page</b> US Coast Guard – Office of Communication and Sensors Capabilities (CG-7611) <a href="mailto:Robert.B.Page@uscg.mil">Robert.B.Page@uscg.mil</a></p>
<b>Norway</b>	<p><b>Fredrik Juell Theisen</b> Specialist Director Ministry of Climate and Environment <a href="mailto:Fredrik-Juell.Theisen@kld.dep.no">Fredrik-Juell.Theisen@kld.dep.no</a></p>	<p><b>Jon Arve Royset</b> Senior Advisor Norwegian Coastal Administration <a href="mailto:jon.arve.royset@kystverket.no">jon.arve.royset@kystverket.no</a></p>
<b>Kingdom of Denmark</b>	<p><b>Julie Gjedsig Grauslund</b> Danish Maritime Authority <a href="mailto:jgg@dma.dk">jgg@dma.dk</a></p>	<p><b>Morten Bækmark</b> Consultant <a href="mailto:mba@dma.dk">mba@dma.dk</a></p>
<b>Canada</b>	<p><b>Drummond Fraser</b> Transport Canada <a href="mailto:drummond.fraser@tc.gc.ca">drummond.fraser@tc.gc.ca</a></p>	<p><b>Daniel Lussier</b> Canadian Coast Guard <a href="mailto:daniel.lussier@dfo-mpo.gc.ca">daniel.lussier@dfo-mpo.gc.ca</a></p>
<b>Finland</b>	<p><b>Anita Mäkinen</b> Finnish Transport Safety Agency <a href="mailto:anita.makinen@trafi.fi">anita.makinen@trafi.fi</a></p>	<p><b>Kaisu Heikonen</b> Finnish Transport Agency <a href="mailto:kaisu.heikonen@fta.fi">kaisu.heikonen@fta.fi</a></p>
<b>Iceland</b>	<p><b>Stefán Einarsson</b> Ministry for the Environment and Natural Resources <a href="mailto:stefan.einarsson@uar.is">stefan.einarsson@uar.is</a></p>	<p><b>Ólafur Ragnasson</b> Icelandic Transport Authority <a href="mailto:olafur.ragnarsson@samgongustofa.is">olafur.ragnarsson@samgongustofa.is</a></p> <p><b>Greipur Gísli Sigurðsson</b> Icelandic Road and Coastal Administration (IRCA) <a href="mailto:ggs@vegagerdin.is">ggs@vegagerdin.is</a></p>
<b>Sweden</b>	<p><b>Jessica Nilsson</b> <a href="mailto:jessica.nilsson@havochvatten.se">jessica.nilsson@havochvatten.se</a></p> <p><b>Anna Karlsson</b> <a href="mailto:anna.karlsson@havochvatten.se">anna.karlsson@havochvatten.se</a></p>	<p><b>Egil Wright</b> <a href="mailto:Egil.Wright@transportstyrelsen.se">Egil.Wright@transportstyrelsen.se</a></p>