



UNITED NATIONS

**United Nations Statistical Commission**

**Global Working Group on Big Data for Official Statistics**

**Annual meeting**

11 November 2020, 07:00 EST

Agenda item (5) – Task Teams: AIS data



## GWG AIS Task Team

### Overview

The Task Team in AIS data analyses the usage of data coming from the automated identification system (AIS) which is a signaling (sensor) system of vessels to share various information about ships' location, speed, and status and other relevant information. The team aims to develop algorithms and methodologies for measuring freight transportation, traffic within harbours, economic trade indicators, CO2 emission, the amount of fishery and other experimental indicators fit-for-purpose; and to conduct training for using AIS data in these domains. The team uses the UN Global Platform for global collaboration on projects involving AIS data (<http://location.officialstatistics.org/>)

### Achievements in 2020

- Consistency of the regular task team meetings (8 meetings – year-to-date)
- Increased task team size and number of users at UNGP AIS data platform
- Delivery of the Live AIS Handbook (February 2020):  
<https://unstats.un.org/wiki/display/AIS/AIS+Handbook+Outline>
- The AIS Data Week (March 2020):  
<https://unstats.un.org/unsd/trade/events/2020/AisDataWeek/default.asp>
- The AIS Hackathon (September 2020): <https://unstats.un.org/bigdata/events/2020/ais-hackathon/>
- Release of AIS port calls and trade volume dashboards (August 2020):  
<https://marketplace.officialstatistics.org/ttt-dashboards>
- Highlight of AIS data in UNCTAD Report on Maritime Transport (November 2020):  
<https://unctad.org/topic/transport-and-trade-logistics/review-of-maritime-transport>
- Participation at various events and for a such as ICAO webinar, GWG Big Data Conference, UN World Data Forum “Road to Bern” series
- Development on AIS e-learning courses (ongoing)

### Deliverable (2021)

#### **A. Methodology, standards, guidance, e-learning courses**

Taking advantage of AIS Hackathon results, we aim to integrate selected outputs from AIS Hackathon into AIS Handbook and/or AIS e-learning course by standardizing the contents

(methods, algorithms, codes, documentation, etc.). And due to the availability of other relevant datasets, it is planned to research the linkage between AIS data and other datasets such as customs, shipping manifest to increase its analytical values. Furthermore, we plan to acquire data on ships register containing information on their characteristics including owners and operators which are important for various purposes such as measuring transportation services.

## **B. Projects**

The AIS Hackathon results allow us to establish a project to operationalize selected outputs from AIS Hackathon into continuous monitoring activities by establishing partnerships with relevant stakeholders (i.e., the dashboard on global emission, traffics in Panama Canal). In addition to updating existing dashboards on Trade, Travel, and Transport, we plan to add a new AIS-related dashboard by engaging with partners.

## **C. Workshops and other capacity building events**

In 2021, we plan to conduct the following: AIS Data Week (March 2021), a side-event on AIS data at Global Conference on Big Data for Official Statistics, and a joint UNSD, UNCTAD, UN Global Pulse AIS Hackathon (September 2021). Also, we plan to release and run self-paced AIS e-learning courses. Continuous technical support on how to use AIS is done through Slack.

## **D. Outreach and awareness raising**

In 2021, we plan to regularly share activities in UNGP and UNCTAD newsletters; update the website of the Task Team. The organization of Hackathon and contribution to Big Data Conference and UN World Data Forum would be part of outreach activities, including participation in other relevant fora.

## **E. Data platform**

To better support simultaneous extraction and improve users' experience, it is planned to upgrade the architecture of the AIS platform by utilizing Data Bricks as a front-end analytical platform. Also, due to a change in the funding mechanism, the task team plans to engage with the GWG bureau and relevant stakeholders to ensure sustained funding for the platform.