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Tracking ships using AIS data – A visualized example in the area of Kalamata

Abstract

We live in a data-rich world that is rapidly changing. This environment has an impact on all of us, as well as on the statistics used to policy-making and taking decisions. New data sources provide new opportunities to making statistics. One of them is the Automatic Identification System (AIS), which is a radio signal used by ships to broadcast information on their location and status on a frequent basis. Research on the use of AIS for official statistics was part of the ESSnet Big Data project, performed by The Netherlands (Work package leader), Greece, Poland, Norway and Denmark.

The results of this research are shortly presented. It is explained what AIS data is and how a journey of a ship can be determined using AIS data. The potential of the AIS data is presented through a visualized example in the local area of Kalamata; ideas are given for using AIS data to identify appropriate analysis patterns and gain insight in the developments in transport, in order to help users in making an informed choice. This work is going to be continued through a Work Package (WP) in the ESSnet Big Data II project aiming at completing the activities that would lead to the implementation and integration of AIS data in the statistical production process.

In the future, AIS data combined with other digital data sources of Internet of Things (IoT) would build up a complete real-time picture of the supply chain. This "bigger picture" based on existing connectivity nodes will be more detailed in the near future.