ABSTRACT SUBMISSION –– SOUMISSION DE RESUME

**Topic No.: / Sujet n° :** 3 – Maritime Domain Awareness and Single Window **or / ou**

**proposed topic / sujet proposé:** AMSA’s work in detecting drifting vessels

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ABSTRACT / RESUME:

**AMSA’s work in detecting drifting vessels**

The Australian Maritime Safety Authority has an area of interest covering 1/10 th of the earth’s surface, to ensure that it is capable of responding to a maritime event anywhere within the region AMSA has developed a layered response capability involving dedicated Challenger 604 search and rescue aircraft, emergency towage vessels (one dedicated) and an overarching terrestrial and satellite based automated identification ship (AIS) network to implement a near real time (5 minute) view of its response area.

In addition since 2015 AMSA has undertaken a number of research and development projects to be more proactive and exercise a risk based approach to vessel monitoring. A key outcome of the research and development is the ability to detect vessels drifting within the Australian area of interest.

Vessels can drift for good reason, but in some cases drifting vessels can be due to mechanical failures which can be a precursor to a maritime casualty. Ships’ masters can sometimes be reluctant to notify AMSA of mechanical failures which can result in vessels drifting, however, early detection of a drifting vessel enables a proactive response by AMSA which can, potentially, prevent a catastrophic marine accident.

This system uses algorithms which compares AIS positioning reports against reported ship speed and heading. Detected drifting vessels within the Australian Search and Rescue Region will be automatically assessed against ‘alerting’ triggers and where appropriate will generate automated drift alerts to AMSA’s Response Centre.

The drift detection capability when combined with defined areas of interest (i.e. areas to be avoided, separation schemes, particularly sensitive sea areas etc) allows the Response centre to actively monitor a vessel drifting and will respond to an automated drift alert using a ‘watch – alert – communicate - monitor – intervene’ response regime, commensurate with the location and circumstances of the drifting vessel. Drift events in designated ‘response’ zone will be actioned proactively to ensure drift events are responded to expeditiously to ensure the safety of a vessel.

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| **PLEASE RETURN TO** [**contact@iala-aism.org**](mailto:contact@iala-aism.org) **by 31st March 2017**  **VEUILLEZ RETOURNER A** [**contact@iala-aism.org**](mailto:contact@iala-aism.org) **avant le 31 mars 2017** |