

J AUS Mobility Service Set

RATIONALE

This document, the JAUS Mobility Service Set (AS6009), defines a message-passing interface for services commonly found in mobile unmanned systems. These services represent the platform-independent capabilities common across all platform types. Additional capabilities are specified in the JAUS Core Service Set (AS5710) and are frequently referenced herein.

INTRODUCTION

The primary goal of the JAUS Mobility Service Set is logical interoperability between communicating elements in an unmanned system. To this end, each service defines the messages (vocabulary) and protocol (rules) for data exchange. This logical interoperability is independent of the physical transport, and it is expected that a Transport Standard, such as the JAUS Transport Specification [[AS5669](#)], is used in conjunction with this specification.

Each service in the JAUS Mobility Service Set is described using the JAUS Service Interface Definition Language [[JSIDL](#)]. JSIDL creates a formal schema based on Relax NG Compact [[rng](#)] that allows for validation of each service definition described herein. Although knowledge of JSIDL is not required to understand or implement this Specification, it is highly recommended for supporting context. For convenience, the JAUS Mobility Service Set contains both a text based and XML based representation for each service.

The services defined herein should replace the equivalent sets of messages defined in the latest JAUS Reference Architecture Version 3.3 [[RA33P1](#), [RA33P2](#), [RA33P3](#)] when used with AS5669, revision A. This Standard has been carefully designed to allow for the simplest possible migration of RA 3.3 implementations to a services-based framework. Even though the notion of services has come to define formal interfaces between components, the message sets in those services trace back to identical messages in the Reference Architecture.

This document uses a number of conventions to simplify the text. All names are given in Camel Case. Names start with upper case, while reference names start with a lower case.

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