ATON PRODUCT SPECIFICATIONS – S-201 DATA PRODUCTION

23RD TO 27TH FEBRURAY 2026, IALA HEADQUARTERS, FRANCE

COURSE DESCRIPTION

This course provides a structured introduction to the principles and processes required for the production of S-201 Aids to Navigation data within the S-100 Universal Hydrographic Data Model. It offers participants a comprehensive understanding of the S-201 Product Specification, relevant markup and modelling languages, and the transition from legacy AtoN data formats to S-100-compliant structures. Through guided instruction and practical exercises, participants will develop the competencies needed to create, manage, and validate S-201 datasets in accordance with international standards.

LEARNING OBJECTIVES

By the end of this training, participants will be able to:

- **Understand** the S-100 framework, UHDM, and the role of the GI Registry in developing S-200 data models.
- **Interpret** GML structures and create basic datasets using relevant markup and modelling languages.
- **Read & Apply** the S-201 Product Specification to interpret features, attributes, and encoding rules.
- **Produce & validate** S-201 datasets, including the use of S-101 inputs and standard validation tools.
- **Explain** the principles of Service Specifications and their relation to service products and service instances in the S-100 ecosystem..
- **Perform** practical data-production workflows through use cases, guided exercises and scenarios.

TARGET AUDIENCE

This training is designed for Aids to Navigation (AtoN) Managers and technical staff responsible for managing, updating, and migrating AtoN data. It is particularly relevant for professionals working in Lighthouse or Marine Aids to Navigation Authorities, Coast Guards, Port Authorities, and other organizations that maintain AtoN registries and databases.
Participants are expected to be familiar with existing AtoN data formats or tools (e.g., spreadsheets, legacy databases, older IALA exchange formats) and now need to transition to the S-201 standard within the broader S-100 framework. Knowledge and basic understanding of Markup and model languages (GML, XML,…) is recommended. The course will support them in understanding, preparing, and implementing this migration.

LECTURERS

The Seminar will be facilitated by global experts in S-100, S-200 and data product specification development.

COURSE DURATION & VENUE

The course will be held at IALA HQ between Monday 23rd February at 12h00 and Friday 27th February at 12h30.

COST

The cost of this four-day course is €1,000 and includes all lectures, Materials and lunches.

PRACTICAL INFORMATION

For practical information regarding accommodation and transportation to reach the IALA Headquarters, please refer to the following link:
https://events.iala.int/contact-us/
For any enquiries regarding the availability of this course, please contact the IALA World-Wide Academy at: academy@iala.int.

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International Organization of Marine Aids to Navigation

PROVIOSIONAL OUTLINE

Day	Time	Activity
Mon 23 Feb 2026	1200-1230	Opening the course
	1230-1300	Introduction to the Maritime Service and technical services
	1300-1430	Introduction to S-100 UHDM
	1430-1445	Break
	1445-1615	Introduction to S-100 UHDM (Continuation)
	1615-1700	Introduction to S-200
	1700-1730	Q & A and Summary discussion
Tue 24 Feb 2026	0900- 0945	Overview of Markup & Model Languages
	0945-1030	Technical Comparison of Formats
	1030-1045	Break
	1045-1130	ISO Standard on GML, ISO 19136-1:2020
	1200-1230	GML Grammar
	1230-1330	Lunch
	1330-1445	Reading and interpretation of S-201 features and attributes
	1445-1500	Break
	1500-1600	Description and anatomy of S-201 (Part I)
	1600-1700	Description and anatomy of S-201 (Part II)
	1700-1730	Q & A and Summary discussion
Wed 25 Feb 2026	0900- 1000	Description of S-101 data set (from the mariner/user perspective)
	1000-1100	Relationship of S-125 / S-201 / S-101 / S-124
	1100-1115	Break
	1115-1215	Exercise 01: Explain and interpret an S-201 data set
	1215-1230	Q & A and Summary discussion
	1230-1330	Lunch
	1330-1500	Exercise 02: Compare national data sample against S-201
	1500-1515	Break
	1515-1700	Exercise 03: Produce S-201 data set using a simple data sample (e.g., GeoJSON)
	1700-1730	Q & A and Summary discussion
Thur 26 Feb 2026	0900- 1030	Test and Validation tools
	1030-1045	Break
	1045-1200	Hands-on session: Produce full S-201 data set and apply validation tools
	1200-1230	Q & A and Summary discussion
	1230-1330	Lunch
	1330-1500	Use cases of S-201 implementation
	1500-1515	break
	1515-1530	Introduction to technical services
	1530-1610	Service Specification (SS)+Exercise
	1610-1040	Service Design (SD)
	1640-1710	Service Instance (SI)+Exercise
	1700-1730	Q & A and Summary discussion
Fri 27 Feb 2026	0900- 1030	Data Validation
	1030-1045	Break
	1045-1200	Participants' presentations (assessment)
	1200-1230	Closing remarks and certificates' handover