

01-05 September 2025

International Mobile Telecommunication (IMT) Workshop Application to Marine Aids to Navigations WSV, Germany

WORKSHOP PROGRAMME

DAY 1 – Monday 01 September 2025

Time	Activity
	Registration and morning tea/coffee
Morning session	Session 1 – Welcome and introductions – Is there any challenge?
	Welcome and introduction to the waterway and Marine AtoN domains of the host country Germany
	Welcome from IALA (IALA as an IGO)
	Workshop aim and objectives
	Workshop introduction (incl. introduction to technical tours/cultural tour)
Afternoon session	Session 2 – The challenge: Introducing IMT technologies / Rising to the challenge and to the opportunities, too!?
	Application examples
	Using IMT as the sole means for all communications needs of a maritime island community
	Using IMT's features at public safety communications
	IMT technologies in other modes of transport – a survey
	IMT applications for remotely operated and/or autonomous vessels
	Session 2 Q&A
Afternoon session	Session 3 – Rising to the challenge of emerging demands of the Maritime Services and 'real-time' Data Products
	Vessel traffic services (MS1) and S-212 data product (VTS digital services)
	Sea Traffic Management, JITA, fleet management, and other applications of S-421 (IEC 63173-1)
	Under Keel clearance management and S-129 UKCM
	Aids-to Navigation Service (MS2) and Navigational Warnings (S-124)
	Session 3 Q&A
Evening session	Session 4 – Rising to the challenge of emerging demands of digitalisation of waterways
	at Smart AtoNs operations, remote monitoring of AtoNs, vessel crowd monitoring of waterway etc.
	for a whole inland waterway – example Danube river/waterway
	from the operation of the SDC stack's connectivity layers themselves: part 1 – Technical Services and their demands (introducing relevant IALA Guideline/s)
	from the operation of the SDC stack's connectivity layers themselves: Part 2 – Maritime Connectivity Platform's including the Maritime Service Registries' demands (introducing relevant IALA Guidelines)
	Session 4 Q&A
	Welcome reception
	One-way bus shuttle to 'Badisch Brauhaus' in KA city centre



DAY 2 – Tuesday 02 September 2025

Time	Activity
Morning session	Session 5 – Rising to the challenges and opportunities of understanding the IMT family in the context of its application to maritime shore infrastructure
	Reflecting on IMO's state of work on the 'guidance' for the 'unified global framework' and of the role of IMT family for IP based connectivity therein
	A guide to the IMT family as represented in ITU documents from within the maritime domain
	The relevance of common generic architecture(s) for shore infrastructure(s) (such as IALA's CSSA in the context of IALA Rec 0140) for IMO's aspirations
	The potential integration of 5G satellite network in the maritime domain by electronically steered antenna – demonstration and outlook
	Session 5 Q&A
Afternoon session	Session 6 – Rising to the challenges and opportunities of understanding IMT 'hands on' at self-governed IMT campus networks
	Real IMT-2020/5G applications at Industry 4.0 - Learning from digitalisation at industry regarding communications
	IMT-2020/5G introduction beyond the buzz words – how to make high-profile radio communications happen – potentially also for AtoN administrations
	IMT-2020/5G – a victim of its own hype? How to correctly interpret and apply the 'key performance triangle' – in general and when applied to the wet domain
	IMT-2030/6G – a practically informed outlook on proposed capabilities and standardization
	Session 6 Q&A
Afternoon session	Session 7 – Rising to the challenges and opportunities of an even more powerful future IMT family member, namely "IMT-2030 and beyond" (aka 6G)
	Introducing the and reflecting on ITU's performance indicators for IMT-2030/6G
	The dawn of a new era for Resilient PNT by using IMT!?
	(Signals-of-opportunity for R-Mode and by built-in Positioning capability)
	Mapping 'features' of IMT-2030/6G standardisation at 3GPP to maritime domain's use cases – that's all, is it not!?
	The work of 3GPP on IMT-2030/6G and the pros/cons of setting up of an initiative group for the maritime domain at 3GPP ('Market Representation Partner – MRP')
	Session 7 Q&A
Evening session	Session 8 – Rising to the challenges and opportunities, here is the plan for IALA! - Technical discussion forum and the expected outputs of the workshop
	Technical discussion forum
	Introducing the expected output: Draft IALA information document
	Establishing working groups
	Technical tour – Simulation of the Rhine River for waterway engineering planning

DAY 3 – Wednesday 03 September 2025

Time	Activity
Morning session	Session 9 – Rising to the challenges and opportunities together! - IMT application WGs session
	WG1 – Maritime services, use cases, features
	WG2 – Technologies
	WG3 – Procurement and implementation (Operations / Organization)
Afternoon session	Session 10 – Rising to the challenges and opportunities together! - IMT application WGs session
	WG1 – Maritime services, use cases, features
	WG2 – Technologies
	WG3 – Procurement and implementation (Operations / Organization)
	Technical tour - demonstration of a ship handling simulator for an inland waterway vessel
	On-site BAW Campus



DAY 4 – Thursday 04 September 2025

Time	Activity
Morning session	Session 11 – Rising to the challenges and opportunities together! - IMT application WGs session
	WG1 – Maritime services, use cases, features
	WG2 – Technologies
	WG3 – Procurement and implementation (Operations / Organization)
	Outcome – Discussion + finalise WG contribution to information paper
Starting in the afternoon	Cultural tour with Workshop Dinner (Speyer) As preselected by participants upon registration A) European History & Culture Tour (guided tour in city to several sites of interest; end of tour = restaurant) B) Technik Museum Speyer (self-guided tour in museum premises) + short foot walk to restaurant for Workshop Dinner – be at restaurant Rentschlers at 18:00 (sharp)!

DAY 5 – Friday 05 September 2025

Time	Activity
Morning session	Session 12 – Rising to the challenges and opportunities our joint achievements so far! - Presentation of the results from WGs – Workshop Conclusions
	WG1 – Maritime services, use cases, features – Results
	WG2 – Technologies – Results
	WG3 – Procurement and implementation (Operations / Organization) – Results
	Findings and observations regarding the capacity building for future IMT family implementation in a 'globally unified framework'
	Technical discussion forum
	The present state of the <i>draft IALA information document on IMT application</i> and other conclusions
	Rising to the challenge ... the way ahead
	Closing remarks - Farewell
	Finished during lunchtime