

First Expert meeting of the UN-GGIM & IHO Joint Working Group on Marine Geospatial Information
with the theme “Advancing Integrated Marine Geospatial Information Management”

Chiang Mai, Thailand
4 – 8 May 2026



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AI Uses in Marine Sector

MSDIWG AI Task Group

CDR Telmo Dias



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↳ Infrastructure perspective

- Large Language Models (LLM) – Data transformation and harmonization

↳ User perspective

- LLM – Data discovery and access



Infrastructure perspective – Data transformation and harmonization

→ Opportunities:

- Semantic mapping
- Schema alignment and transformation with code generation
- Metadata enrichment and normalization
- Vocabulary bridging

→ Concerns:

- Determinism and consistency
- Formal standards compliance
- Ontology precision



AI Uses in Marine Sector

User perspective – Data discovery and access

↳ Opportunities:

- Structured geospatial queries
- Intelligent semantic search
- Conversational data exploration

↳ Concerns:

- Spatial geometry and geometry handling
- Deterministic query generation
- Real-time performance
- Grounding in authoritative catalogs



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