The Global Sea Level Observing System (GLOSS)

Implementation Plan 2025

# 1. Executive Summary

Brief overview of the plan, including: purpose, strategic importance, main objectives, summary of approach and expected outcomes

# 2. Introduction

- Background, context and justification

- GLOSS history and status overview

- Environmental, scientific, and policy drivers

- Alignment with global/regional initiatives

- Purpose of the implementation plan

# 3. Mission and Vision

- Mission Statement

- Vision Statement

# 3. Objectives

- General Objective: overall purpose of the observing network.

- Specific Objectives linked to different sea level data applications:

- Objective 1 (e.g. Sea Level Rise)

- Objective 2 (e.g. Coastal Engineering Studies)

- Objective 3 (e.g. National and Local Datums)

- Objective 4 (e.g. Tide Tables and Port Operations)

- Objective 5 (e.g. Early Warning including tsunamis and storm surges)

- Objective 6 (e.g. Operational ocenography)

- Objective 6 (e.g. Satellite altimetry)

# 4. Scope of the GLOSS Network

- Geographic Coverage (e.g., coastal zone, EEZ, basin-wide)

- Thematic Coverage (e.g., sea level)

- Temporal Scope (e.g., continuous, , real-time and historical records)

# 5. GLOSS Observing System Design

- Platforms and technologies (tide gauges, GNSS..)

- Variables to be measured

- Site selection and sampling frequency

- Sea level monitoring requirements for research and practical applications

- Composition of GLOSS: GLOSS Core Network, regional networks, types of stations (labelling component depending on the application?), scientific datasets

- Integration with existing systems

# 6. Data Management and Sharing

- Data flow, GLOSS data centers, unified data portal

- Data quality control and processing, including documentation and available tools

- Data standards and formats

- Unique IDs

- Metadata protocols

- Accessibility and licensing

- Connection with national and global data portals

# 7. Governance and Administration of the GLOSS programme

- Lead institution(s)

- Partner organizations and roles

- Coordination mechanisms (e.g. Technical Secretariat, GLOSS GE, GLOSS GE chair, Data Centers, Steering Committee, working groups…)

- National contacts for GLOSS

- Stakeholder engagement

- Obligations of Member States

# 8. Capacity Development and Training

- Technical training programs

- Institutional strengthening

- Collaboration with academic institutions

- Equity and inclusion considerations

# 9. Communication and Outreach

- Awareness raising strategies

- Communication tools and platforms (GLOSS website)

- Workshops, conferences, publications

# 10. Implementation Timeline

- Key milestones

- Gantt chart (see Appendix)

# 11. Risk Assessment and Mitigation

- Identification of key risks

- Mitigation strategies

# 12. Monitoring, Evaluation, and Review

- Performance indicators

- Evaluation plan and review schedule

# 13. Budget and Funding Strategy

- Capital and operational cost estimates

- Funding sources and partnerships

- Long-term sustainability

# 14. Conclusions and Recommendations

- Summary of key steps

- Recommendations for next phases

# 15. Appendices

- A. Technical specifications

- B. Site maps and station list GLOSS 2025 (e.g. GLOSS Core Network, others?)

- C. National contacts and stakeholders list

- D. Acronyms and definitions

- E. Gantt chart or implementation schedule

# References