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Technical Domain / Task Number 2 Training

Author(s) / Submitter(s) GEOCUBA Estudios Marinos, Cuba

Training Courses for Light Keepers and AtoN Workers

# Summary

This document provides GEOCUBA Estudios Marinos’ point of view on the need of specific, certified training courses for two categories of personnel, light keepers and AtoN workers, stating the will of this AtoN Organization to work along with WWA and other IALA Members on the creation of such courses. After a brief historical overview and a general info about GEOCUBA Estudios Marinos and its endeavours in this pandemic times, the document refers to the impact of the lack of trained personnel on the provision of any AtoN Service and the need to address this topic in a structured and comprehensive way.

## Purpose of the document

The purpose of this document is to raise awareness among IALA Members on the need of having trained and certified Light Keepers and AtoN Workers by means of specific and approved WWA training courses and request the Committee to address this topic to the appropriate ENG WGs for their consideration.

## Related documents

* S1050 – Training and Certification;
* R0141 (E-141) Training and Certification of Marine Aids to Navigation Personnel;
* R0149 (O-149) –Accreditation of training organisations.

# Background

During ENG 14 a presentation on this topic was given under item 6 of the Agenda (Advertising online presentations).

# Discussion

The development of on board navigational equipment and the automation of the lighthouses operation, among other reasons, has led in many cases to the loss of specific knowledge on how to properly maintain these structures, sometimes of high historical and heritage value within the organizations responsible for its care.

## Introduction

As in many countries, Cuban lighthouses were built between the 18th and 20th centuries, on the most exposed points of the national geography. As a construction material, ashlar masonry was used first, then cast iron and later reinforced concrete. The vast majority were equipped with Fresnel optics between 1st and 4th Order, the largest based on mercury basins, and all supplied by the firm Bernard, Barbier and Turenne (BBT).



1. Punta Gobernadora Lighthouse, Cuba, cast iron

## Background on AtoN Training in Cuba

The need to keep the lighthouses working effective and efficiently led to the existence in our country of a Light Keepers Apprenticeship School. In 1857 the works for its construction initiated and that same year the School of Lighthouses of Havana began to operate. Its first director was Federico Antonio Menoud, a French machinist. The content of the courses was oriented to the technique they would operate and to the ways of using the abundant free time. Each course lasted one year, during which two examinations were carried out. Although the main objective was to train light keepers for Cuba, their competencies were later extended to the training of light keepers from Puerto Rico and Santo Domingo.

## Brief information about GEOCUBA Estudios Marinos

GEOCUBA Estudios Marinos (GEOEM) is a company of the GEOCUBA Entrepreneurial Group specialized in marine research for engineering projects, nautical cartography, Aids to Maritime Navigation and environmental studies of the marine domain, inheriting a vast experience of more than 40 years from the Cuban Institute of Hydrography. As a member of the Hydrographic and Geodetic Service of the Republic of Cuba, GEOCUBA participates in the ENG Committees of the International Association of Aids to Maritime Navigation and Lighthouse Authorities (IALA), an organization of which Cuba has been taking part since 1968, incorporating in the provision of the Cuban AtoN service its standards, recommendations, guidelines and manuals.



1. GEOCUBA Estudios Marinos main facilities

## AtoN Service during COVID-19

During the COVID-19 pandemic, the Cuban AtoN Service has continued to work on the following activities:

* Implementation of the BCP-1700 buoy, designed and produced by Cuba;
* Protection of AtoN against the effect of hurricanes;
* Implementation of new high intensity LED light sources for lighthouses;
* Conducting internal and external training courses;
* Implementation of new AtoN AIS stations.



1. AtoN AIS implementation in a Cuban Lighthouse

## The need for Light Keepers and AtoN Workers Courses

Many AtoN services have these categories of personnel. As there are no specific training courses for them, there is a lack of a set of knowledge that hinder them from satisfactorily fulfil their work, which has a negative impact on the provision of the service. Some Services do not have L1 or L2 certified personnel with experience and theoretical-practical knowledge or facilities to train these categories of personnel.

GEOEM's decision is to implement at a national level the specific professional training of our workers and light keepers in those topics useful for their daily work, while creating training capacities for other States with these needs, with the objective of safeguarding the knowledge and traditions of providing this important Service at the executive level.

GEOEM consider this could lead to the creation of a completely new level of training. Its documentation could be created considering the general elements contained in those documents already existing for levels L1 and L2. Other documents would be completely new.

# References

# Action requested of the Committee

The Committee is requested to:

1. Address this topic to the appropriate ENG WGs for raising awareness among IALA Members on the need of trained and certified Light Keepers and AtoN Workers.
2. Obtain information from IALA members regarding:
   1. Their opinion on the need of the creation of specific courses for Light Keepers and AtoN Workers;
   2. Their possibility to collaborate on the creation of the documentation for such courses;
   3. The availability of facilities suitable to be used to host these theoretical-practical courses.

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