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Fifth Meeting of the Contracting Parties (CoP) to the Protocol
Concerning Pollution from Land-Based Sources and Activities
(LBS) in the Wider Caribbean Region

Virtual, 19 July 2021

Updated Draft Strategy and Work Plan of RAC CIMAB

For public health and safety reasons associated with the COVID-19 pandemic, this meeting is being convened virtually. Delegates are kindly requested to access all meeting documents in electronic format for downloading as needed.

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STRATEGIC PLANNING

RAC LBS CIMAB

2021- 2030

(Second Draft)

May 2021

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ACRONYMS

RAC	Regional Activity Centre
CIMAB	The Centre for Research and Environmental Management of Transport
Cartagena Convention	Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region
CEP	Caribbean Environment Programme
COP	Conference of the Contracting Parties
LBS	Land-based Sources of Marine Pollution
IGM	Intergovernmental Meeting
IMA	Institute of Marine Affairs
SDG	Sustainable Development Goals
UNEP	United Nations Environment Programme
UNOIOS	United Nations Office of Internal Oversight Services
RAN	Regional Activity Network
UNEP- CAR/RCU	Caribbean Environment Programme Regional Coordination Unit
WCR	Wider Caribbean Region

INTRODUCTION

In 2015, the Office of Internal Oversight Services (OIOS) conducted an audit of the Caribbean Environment Programme (CEP) and recommended the updating of the Work Strategy to ensure that activities and programmes are aligned with the regional and global strategic objectives of the United Nations Environment Programme (UNEP).

As a result of this recommendation, it was agreed at the Eighteenth Intergovernmental Meeting of the Action Plan of the Caribbean Environment Programme and the Fifteenth Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region (WCR) held in Roatan, Honduras, from June 5 to 6, 2019 (Decision IV) to develop a CEP Strategy for the period 2020 - 2030.

Meanwhile, Decision 5 of the Fourth Conference of the Contracting Parties (COP) to the Protocol on Land-based Sources of Marine Pollution (LBS) of the Wider Caribbean Region held in Roatan, Honduras on June 4, 2019, supported expanding the role of the Regional Activity Centres (RACs) and the Regional Activity Networks (RAN) for the implementation of the LBS Protocol and requested the RACs to develop a 6-year Strategic Plan to assist the Secretariat in mobilizing resources and developing new projects and activities as part of the biennial work plans.

This decision was endorsed by the Contracting Parties to the Cartagena Convention at the 18th IGM AND 15th COP, cited above (Decision V).

As part of this process of updating the Strategy of the Caribbean Environment Programme and its Regional Activity Centres (RACs), this document presents the Strategy of the Centre of Research and Environmental Management of Transport as a Regional Activity Centre for the Cartagena Convention's Land-Based Sources of Marine Pollution Protocol (LBS RAC CIMAB Strategy for the period 2021- 2030).

Background

The Thirteenth Meeting of the Oversight Committee for the Action Plan for the Caribbean Environment Programme and the Special Meeting of the Bureau of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region held in San Jose, Costa Rica, July 9-13, 2001, agreed to recognize two institutions as Regional Activity Centres for the Land-Based Sources of Marine Pollution Protocol (LBS Protocol): the former Center for Environmental Engineering and Management of Bays and Coasts (CIMAB), Cuba, now the Centre of Research and Environmental Management of Transport, and the Institute of Marine Affairs (IMA) of Trinidad and Tobago. Both institutions were presented and endorsed as candidates by the respective governments of Cuba and Trinidad and Tobago (Recommendation No.10 of said meeting).

The aforementioned Recommendation was approved at the Tenth Intergovernmental Meeting on the Action Plan for the Caribbean Environment Programme (10th IGM) and the Seventh Meeting of the Contracting Parties to the Convention for the Protection and Development of the Marine Environment in the Wider Caribbean Region (7th COP) held from May 7 -11, 2002 in

Montego Bay, Jamaica, constituting Decision IX of said meeting.

Subsequently, at the 11th IGM and 8th COP held in Montego Bay, Jamaica from September 28 to October 2, 2004 the guidelines for the establishment and operation of the RACs were approved.

The objectives and functions approved at that time for the LBS RACs, which are still in place today, are as follows:

- i. Provide assistance and advice to the Coordinating Unit of the Caribbean Environment Programme (UNEP CAR/RCU) in the implementation of the LBS Protocol;
- ii. Oversee and coordinate the implementation of activities assigned to projects to avoid impacts by LBS on the marine environment, in consultation with the UNEP CAR/RCU;
- iii. Promote the standardization of methods and cooperation in research and monitoring needs of regional interest in aspects relevant to the LBS Protocol;
- iv. Promote scientific-technical cooperation with UN specialized agencies, intergovernmental, governmental and non-governmental organizations;
- v. Facilitate the provision of technical and scientific assistance (experts, consultancies), and training to the governments and scientific institutions of the WCR;
- vi. Compile information on innovative technologies required for the implementation of LBS programmes and activities and make the information available to governments and institutions;
- vii. Establish and update databases at the national, sub-regional and regional levels, in accordance with the measures adopted for the implementation of the LBS Protocol, including any other relevant information;
- viii. Develop training and information-sharing activities such as courses, seminars and workshops for RAN members; and public awareness about the need for management of marine pollution from land-based sources in the Wider Caribbean;
- ix. Ensure the harmonious and mutually reinforcing commitment of the institutions participating in the RAN;
- x. Mobilize human, financial and material resources, to the extent possible, to meet the environmental research needs of the Caribbean Environment Programme (CEP);
- xi. Organize meetings, symposia and field missions which are useful for the consolidation of the objectives of the LBS Protocol and fall within the functions of the RAC.
- xii. Provide services to projects that will be at commercially acceptable rates.

DESCRIPTION OF THE INSTITUTION

The institution known today as the Centre of Research and Environmental Management of Transport (CIMAB), evolved out of the Transport Research Institute (IIT)) which was founded in January 1981, as a budgeted Science and Technical Unit (UCT), reporting to the Ministry of Transport and later to the IT Group, a self-financed entity that brought together several institutions that carried out scientific and technological projects related to transport and the environment.

In its 40-year history, the IIT underwent several transformations which demonstrates the institution's capacity to face and manage changes, create and undertake organizational innovations, with the ultimate goal of continuing to apply science and technology for the benefit of the growing development of the transportation system and the conservation and protection of the environment, especially as it relates to the bays and marine coastal areas of the country.

The most recent of the organizational innovations implemented consisted of the dissolution of the IT Group and the merger of the other two science entities into CIMAB, which began to take shape from the end of 2011 and was implemented in February 2013, thus achieving consolidation into a single science entity, of human capital with experience and know-how in the creation and application of knowledge, carrying out scientific research activities and technological development, aimed at contributing to the objectives and scope of the different programs developed in the transport sector, with a sustainable focus on protecting the environment and solving environmental problems.

CIMAB is a centre for research and technological innovation, so scientific research and technological development are of fundamental importance to its work, in addition to the provision of scientific-technological services, postgraduate teaching, commercialization of its products or services and other activities related to science and technological innovation. Its organizational structure is that of a company and it is self-financed. It is attached to the Senior Organization for Economic Management called "Port Maritime Group" (GEMAR), belonging to the Ministry of Transport.

Organizational structure

The CIMAB organization chart is presented in Annex 1. The institution has 4 Functional Directorates and 10 Research Divisions. The Functional Directorates support the execution of the fundamental activity of the institution, which is carried out by the Research Divisions. On its part, the RAC CIMAB office reports directly to the General Directorate of CIMAB.

Human Resources

CIMAB has a total of 160 employees, out of an approved staff of 178; 122 are directly linked to research (76 %). Of the 48 employees with research status, 35 have science degrees (73 %); 22 have teaching status (46 %), 36 have a Master's degree and 2 have a doctorate, which speaks to an average experience of more than 20 years in the fields of transportation and the environment.

CIMAB upholds the professional values of scientific accuracy and high quality, innovation and entrepreneurship, a culture of effort and environmental aptitude. Also, the institution endorses the principles and ethical standards that govern scientific activity in Cuba.

Research work

In general, CIMAB executes scientific research and technological innovation projects in relation to cargo and passenger transport and environmental management in bays, ports and coastal areas.

Since its designation as the Regional Activity Center for the Protocol on Land-Based Sources of Marine Pollution of the Cartagena Convention in 2001, CIMAB (hereinafter referred to as RAC CIMAB) has signed 13 direct contracts with the CEP Secretariat which have ranged from participation in regional projects with various sources of financing to institutional strengthening actions. In turn, RAC CIMAB has participated in multiple regional activities organized and / or hosted by the CEP Secretariat.

CIMAB's Strategy and the entity's performance to fulfill its functions as the Regional Activity Center for the LBS Protocol (described in the *INTRODUCTION*) are described below.

INTERNAL ANALYSIS OF RAC CIMAB

Mission and vision

CIMAB's **mission** as a Regional Activity Centre of the Land-based Sources of Marine Pollution Protocol of the Caribbean Environment Program (LBS RAC CIMAB) is to apply science and technology in the sustainable management of marine and coastal ecosystems in the Wider Caribbean Region.

The **vision** of the RAC CIMAB is to be a leading institution in the Wider Caribbean Region in the control, reduction and prevention of marine pollution, with highly committed and prestigious specialists and with the appropriate technological support.

RAC CIMAB's core values, which decisively support its mission and define the way employees act in line with the organization's culture, are total quality and excellence; professional ethics and dedication; initiative, creativity and cooperation; capacity for technological innovation and environmental vocation. In addition, and given that the institution is based in Cuba, the institution adopts the principles and ethical norms that govern scientific activity in this country.

Principles governing the operation of the RAC CIMAB

The principles or fundamentals guiding the operation of RAC CIMAB for the period 2021 - 2030 are as follows:

1. Recognition of and compliance with the Cartagena Convention and in particular the Protocol Concerning Marine Pollution from Land-Based Sources (LBS), the only legally binding document of the Wider Caribbean Region for the protection of the marine and coastal environment.
2. Correspondence with the guidelines and strategic objectives of the Caribbean Environment Programme (CEP) for the period 2020 - 2030, which serves as the Secretariat of the Cartagena Convention. RAC CIMAB endorses the principles that govern the CEP Strategy, namely: an ecosystem-based management approach and “source to sea” analysis; the importance of sustainable consumption and production; the natural capital approach (recognition and ecosystem services, particularly those of the marine environment); strengthening the science - policy interface; building general resilience; the incorporation of the gender perspective; public participation in environmental activities and the need for a “health for all” approach, in keeping with the concept defined by the World Health Organization in the wake of the COVID-19 pandemic.
3. Consistency with CIMAB's Strategic Projections for the period 2021 - 2026. RAC CIMAB is fully integrated into the principles, mechanisms and strategic objectives of CIMAB as a Cuban institution for research, innovation and development.
4. Synchronization with the pillars, objectives, targets and indicators of the Regional Nutrients Pollution Reduction Strategy and the associated Action Plan adopted at the 5th Meeting of the Scientific and Technical Advisory Committee of the LBS Protocol (2021).
5. Scientific and technical support to CEP Member States and in particular to the Contracting Parties of the LBS Protocol for the fulfillment of the obligations stipulated in the Cartagena Convention as well as the 17 Sustainable Development Goals (SDGs) and the targets associated with the 2030 Agenda, specifically those related to pollution: Goals 6 (Clean water and sanitation), 9 (industry, innovation and infrastructure), 11 (sustainable cities and communities), 12 (responsible consumption and production) and 14 (life below water).

Guidelines, objectives and associated activities for the period 2021 - 2030.

The five strategic work guidelines and associated objectives for the 2021-2030 period are presented below. Also included is a summary of the areas of themes of interest to achieve these objectives.

The projects and activities will be presented in detail in the biennial Work Plans, as well as the corresponding budgets for said periods linked with this Strategy. The Work Plans, prepared in conjunction with the CEP Secretariat, will be approved at the biennial meetings of the Contracting Parties to the LBS Protocol.

Guideline: Prevention, reduction and control of marine pollution from land-based sources, to achieve healthy marine and coastal ecosystems in the WCR.

Strategic Objective 1: Increase the use of innovative tools and solutions for the **prevention, reduction and control of marine pollution** from land-based sources.

To achieve this objective, programmes, projects and activities will continue to be implemented in the countries of the Wider Caribbean Region, in conjunction with the National Focal Points of the LBS Protocol, to prevent, mitigate and reduce the impact produced by land-based sources of marine pollution. This will include projects related to the inventory, classification and management of LBS, as well as programmes for monitoring and evaluating the environmental quality of coastal marine waters and all types of wastewater. Other types of research will be carried out on aspects relevant to the LBS Protocol to promote the ratification process in countries that are not yet contracting parties to this instrument or to promote compliance with obligations in those countries that have already adhered to it.

The programmes, projects and activities to be implemented will include innovative approaches such as the application of the "source to sea" or "ridge to reef" management principle to mitigate pollution and maintain environmental water quality and ecosystem health from the point of origin to the discharge areas in the marine environment.

They will also include the "circular economy" approach as an attractive alternative that redefines economic growth and is based on the management of the 3Rs (reduce, recycle and reuse).

Guideline: Emerging contaminants and nutrients as environmental and health problems of the WCR that affect living resources of coastal marine ecosystems including human health.

Strategic Objective 2: Build capacities at RAC CIMAB (technical, analytical and human resources) for the implementation of projects on **emerging pollutants** of highest priority for the WCR and strengthen the existing ones for the assessment of **nutrient pollution**.

The State of the Region Report completed in 2020 (SOCAR Report) identified that the main impacts on marine ecosystems in the WCR are primarily related to eutrophication, harmful algal blooms, mercury pollution, microplastics, and marine debris or litter.

On the other hand, the impact of nutrient pollution is recognized as significant in the WCR. In order to meet the goals proposed in the Regional Nutrients Pollution Reduction Strategy and to support the associated Action Plan (documents approved in 2021), it is necessary to strengthen regional institutions, including the RACs in the implementation of projects and activities related to the topic.

Therefore, actions will be implemented focused on capacity building (in terms of human and technological resources) in research on the presence and impact of microplastics and highly toxic substances (mainly mercury) on human health and coastal marine ecosystems.

The capacity of RAC CIMAB will also be strengthened to evaluate nutrient pollution, including the identification of input sources as well as their impact on the environment.

In addition, RAC CIMAB and especially its Testing Laboratory will continue to be strengthened to determine other parameters and indicators of pollution in wastewater and coastal marine

waters. Actions will continue to be carried out to preserve the status of Accredited Laboratory by the Cuban Standard NC ISO 17025:2017, and expand its scope.

Guideline: The constant **mobilization of financial resources** that are necessary for the sustainability of activities for the prevention, reduction and control of marine and coastal pollution.

Strategic Objective 3: Develop national and regional initiatives **to mobilize financial resources** for projects and activities that meet the interests of the LBS Protocol.

Support to the Secretariat of the Cartagena Convention will be strengthened in the search for new sources of financing. Cooperation will be promoted with the National Focal Points of the LBS Protocol to also seek alternative (national and international) financing for projects and activities to meet the obligations of the instrument.

Guideline: The essential **regional cooperation** to achieve compliance with national and regional commitments for the prevention, reduction and control of marine and coastal pollution from LBS.

Strategic Objective 4: Continue to expand **regional cooperation between the RACs and the RAN.**

The actions that will be carried out to achieve this objective include increasing scientific and technical cooperation among the institutions that are part of the RAN, with other specialized agencies of the United Nations System, as well as with other RACs in the region, with emphasis on improving collaboration and communication with the Institute of Marine Affairs of Trinidad and Tobago, which is the other Regional Activity Centre for the LBS Protocol. Different collaboration mechanisms and instruments will be used for this purpose.

Guideline 5: The right **knowledge management** as a fundamental tool for the identification, acquisition, exchange and dissemination of information.

Strategic Objective 5: Increase the number of actions for **knowledge management.**

The provision of technical and scientific assistance (experts, consultancies, training) to the governments and institutions of the WCR will be facilitated through courses, seminars and workshops. Meetings, symposiums and useful field missions will continue to be organized for the fulfillment of the objectives and obligations of the LBS Protocol in accordance with the functions of the RAC.

Similarly, the dissemination of successful experiences in the management of land-based sources of marine pollution will be increased, including the results of national and regional programmes and projects related to this topic. The implementation of public awareness actions on related topics for target audiences or interested parties will be strengthened.

We will continue to promote the LBS Protocol, emphasizing the advantages and benefits of its ratification, as well as compliance with the obligations it stipulates.

Expected accomplishments or results / Indicators of achievement

The strategic objectives set out above will be the platform or guide for the specific objectives of the projects and/or activities to be developed in the period 2021 - 2030.

Table 1 presents the expected results for each strategic objective and the associated progress indicators.

Progress indicators will be quantified in the biennial Work Plans.

Table 1. Expected results and progress indicators as per strategic objectives.

Strategic Objective	Expected results	Progress indicators
<u>Strategic Objective 1:</u> Increase the use of innovative tools and solutions for the prevention, reduction and control of marine pollution from land-based sources.	<ul style="list-style-type: none"> Increased number of programmes, projects and activities aimed at the prevention, reduction and control of marine pollution. Expanded use of novel principles and approaches in such programmes, projects and activities. 	<ul style="list-style-type: none"> Number of programmes, projects and activities implemented based on novel principles and approaches (such as the "<i>circular economy</i>", "<i>ridge to reef</i>", "<i>source to sea</i>", among others) for the prevention, reduction and control of pollution from land-based sources. Number of countries RAC CIMAB has been involved with in the implementation of such programmes, projects and activities.
<u>Strategic Objective 2:</u> Build capacity at RAC CIMAB (technical, analytical and human resources) for the implementation of projects on emerging pollutants of highest priority for the	<ul style="list-style-type: none"> Creation of capacity at RAC CIMAB for the detection of emerging contaminants, mainly microplastics and highly toxic substances to human health. 	<ul style="list-style-type: none"> Equipment and supplies acquired for the detection and/or quantification of emerging contaminants, as well as other environmental quality indicators and parameters of marine

<p>WCR and strengthen the existing ones for the assessment of nutrient pollution.</p>	<ul style="list-style-type: none"> • Increased technical and analytical capacity at RAC CIMAB for the identification of nutrients y otros indicadores de calidad ambiental y de parámetros de contaminación de interés regional. • Improved capacity at RAC CIMAB (technical, analytical and human resources) for the evaluation and identification of environmental quality indicators and parameters of pollution from LBS. • Maintained status of Accredited Laboratory by NC ISO 17025:2017. 	<p>pollution from LBS.</p> <ul style="list-style-type: none"> • Theoretical and practical trainings received (number of training sessions and number of participants). • Number of specialists attaining research status (associate, auxiliary or tenured researchers) or higher scientific degrees (masters, doctorates). • Updated accreditation certificates.
<p><u>Strategic Objective 3:</u> Develop national and regional initiatives to mobilize financial resources for projects and activities that meet the interests of the LBS Protocol.</p>	<ul style="list-style-type: none"> • Strengthened cooperation with LBS Focal Points in mobilizing financial resources for the implementation of projects and activities. • Increased funding for projects and activities related to the LBS Protocol. 	<ul style="list-style-type: none"> • Number of projects signed and implemented through direct collaboration with LBS Focal Points. • Amount of funds mobilized for the implementation of projects and activities in direct collaboration with LBS Focal Points, as well as through other means and sources of financing.
<p><u>Strategic Objective 4:</u> Continue to expand regional cooperation between the RACs and the RAN.</p>	<ul style="list-style-type: none"> • Increased collaboration between the RACs and the institutions that constitute the RAN, through different collaboration 	<ul style="list-style-type: none"> • Number of collaboration instruments signed between RAC CIMAB and other institutions of the region that are part of the RAN, and other RACs.

	modalities and instruments.	<p>Number of institutions involved.</p> <ul style="list-style-type: none"> • Number of collaborative work projects among RAC CIMAB, institutions belonging to the RAN and among the other RACs.
<p><u>Strategic Objective 5:</u> Increase the number of actions related to knowledge management.</p>	<ul style="list-style-type: none"> • Stronger level of scientific and technical knowledge among the different stakeholders involved in the management and handling of LBS and in the prevention, reduction and control of marine pollution. • Increased public knowledge of the LBS Protocol (benefits, obligations, among others). • Increased knowledge of successful experiences of regional projects and activities associated with the LBS Protocol. 	<ul style="list-style-type: none"> • Theoretical and practical trainings developed by RAC CIMAB specialists (number of training sessions and courses as well as number of specialists trained). • Number of workshops and symposiums organized by RAC CIMAB as well as total number of participating specialists. • Number of actions to promote and disseminate information on the LBS Protocol including the results and successful experiences of regional projects and activities associated with it.

INTERNAL PERFORMANCE OF CIMAB AS A REGIONAL ACTIVITY CENTER FOR THE LBS PROTOCOL

Research areas and technical capacity at RAC CIMAB.

The projects and activities to be carried out in response to the *Strategic Objectives*, and to achieve the *Expected Results* will be in line with the research that RAC CIMAB currently has the capacity to undertake, namely:

- Environmental Impact Assessments of new works and remodeling of existing works in deep waters, bays, ports and marine-coastal zones (EIAs).
 - Environmental baselines for marine ecosystems.
 - Diagnosis and monitoring of the environmental quality of a body of water in marine coastal ecosystems.
 - Physical, chemical and microbiological characterization of liquid waste, gauging measurement and calculation of pollutant load to facilities of all types.
 - Bacterial Growth Studies (T90), for underwater pipeline designs.
 - Physical and chemical characterization of solid wastes for their management and final disposal.
 - Water quality mathematical models to simulate system behavior and evaluate future projections.
 - Qualitative and quantitative evaluation of coastal flora and fauna, for Environmental Impact Studies or environmental baseline.
 - Underwater pipe designs for the discharge of liquid waste into the sea.
 - Analyses of physical, chemical, microbiological and ecotoxicological laboratory tests on water samples, sediments and marine organisms.
 - Design of Environmental Policies and Strategies for the business sector.
 - Provide quote and conduct Environmental Diagnosis and design of Environmental Management Systems for the business sector.
 - Studies for Environmental License Applications.
 - Management of marine waste and solid and liquid waste of domestic and industrial origin.
 - Studies on basic infrastructure for waste management in ports.
 - Elaboration of contingency plans against oil spills.
 - Engineering topo-bathymetric investigations in berthing boxes, maneuvering docks and access channels to certify depths in rivers, reservoirs, bays, estuaries and coastal areas.
 - Structural and underwater technical inspection services for the diagnosis of the technical condition of the superstructure and substructure of works and/or hydro-technical facilities (docks, jetties, piers, mooring piers, docking facilities, underwater pipelines, among others).
 - Port and coastal engineering (including dredging projects, coastal rehabilitation and management, coastal protection, beach rehabilitation and port planning activities).
 - Implementation of Geographic Information Systems (GIS) applied to the management of land-based sources of marine pollution and coastal zone management.
-

- Studies for the evaluation of greenhouse gas (GHG) emissions generated by transportation and land-based sources of marine pollution as well as their impact on atmospheric pollution.

Other lines of research may be included as the actions that respond to Strategic Objective No. 2 (Capacity building and strengthening) are implemented.

Technical capacity of RAC CIMAB

The technical capacity at RAC CIMAB for the execution of the projects and activities based on the previous lines of research is presented in Annex 2. Although the equipment depending on the projects and activities of RAC CIMAB is varied and is at full capacity of use, it requires improvement and expansion since, in general, it is obsolete.

Strategic objectives No. 3 (creation and strengthening of technical and human resources capacities) and No. 4 (mobilization of financial resources) described in this Strategy fully correspond to the need to renew the technical and analytical capacities of RAC CIMAB.

Internal Organization

For the execution and management of CIMAB's projects and RAC activities, there is an office that reports directly to CIMAB's General Directorate (see Annex 1). It is not a division or functional directorate of the entity. The permanent personnel associated with the work of RAC CIMAB (described in ***Human Resources associated with RAC CIMAB***) are in this area and it is where the documentation on implemented projects and activities are kept.

The divisions whose lines of research are clearly related to the marine and coastal environment and that work directly related to the functions of the entity as a Regional Activity Centre (RAC) of the LBS Protocol are ***Pollution, Industrial Ecology and Coastal Management***. However, any other research division of the institution is capable of eventually working on RAC CIMAB's projects as long as the tasks to be developed are within its functions.

The functional divisions (Financial Accounting, Human Capital, Scientific and Logistics-Administrative) support the work of RAC CIMAB with their respective functions.

Human Resources associated with RAC CIMAB

The LBS RAC CIMAB is headed by the Director General of CIMAB, who represents the Centre and has overall responsibility for the operation and general administration of the projects and activities executed by the entity in its role as a Regional Activity Centre.

The LBS RAC CIMAB has an administrator/project manager for the day-to-day execution and supervision of RAC functions. In the event that the magnitude of the projects and activities to be executed requires the support of other staff, the Director of RAC CIMAB would make that decision. The project manager(s) are considered permanent staff.

For the execution of the projects, CIMAB makes available to RAC CIMAB all the researchers/specialists/technicians from the Research Divisions that are required to execute the activities or tasks. They are considered as non-permanent project personnel.

The national human resources necessary for the operations of RAC CIMAB, and for the execution of its projects and activities, are financed by the institution and are recruited and directed by the Director of RAC CIMAB with the support and guidance of permanent staff and the Directors of the research divisions related to projects.

If international personnel are needed for RAC CIMAB, they will be financed and recruited directly by the UNEP CAR/RCU (or by United Nations agencies directly related to the activity to be undertaken) with the approval of the Government of the Republic of Cuba, in accordance with the rules and regulations of the United Nations Environment Programme and Cuban laws.

Advisors and other experts intending to work on projects directed by RAC CIMAB, whose positions are financed by funds provided by the Parties to the Cartagena Convention and its Protocols, or through another source of collaboration, would be selected by the RAC CIMAB Directorate after consultation with the UNEP CAR/RCU.

To carry out its functions, the RAC CIMAB is supported by personnel from the Financial Accounting, Human Capital, Scientific and Logistics-Administrative departments. These are considered support staff.

Facilities

For the execution of its projects and activities, RAC CIMAB has at its disposal all of CIMAB's facilities, including the Testing Laboratory, the Scientific and Technical Information Centre, meeting rooms, among others.

A main facility is established for the administration/management of the RAC's activities where the project manager(s) (permanent staff) are located. This facility has the appropriate technology (telephones, photocopiers, printers, internet access), although it needs to be strengthened to ensure proper project administration and timely communication between RAC CIMAB and UNEP CAR/RCU.

Financial resources

RAC CIMAB is a self-funded institution that has demonstrated its ability to obtain the necessary funds from various sources or avenues for the implementation of projects and activities.

It is anticipated that RAC CIMAB will expand its capabilities to attract external funding for the implementation of national and regional projects through strengthening working relationships with the LBS Protocol National Focal Points of the WCR countries and with other donor agencies within and outside the UN System.

The costs of communications, maintenance of facilities, depreciation of equipment, and salaries (of permanent, support and non-permanent project staff) are assumed by RAC CIMAB and are part of the Cuban Government's contribution to the RAC operations.

The project manager(s) (permanent staff) take the necessary measures to ensure the proper management of the financial resources allocated to each project with the collaboration of the support staff and with the guidance of the Cartagena Convention Secretariat.

Communications

RAC CIMAB will continue, and will strengthen, direct channels of communication on technical matters with the National Focal Points of the LBS Protocol and with other RAN member institutions, always updating the Secretariat on such communications.

The permanent staff of RAC CIMAB maintains fluid and constant communication with the Secretariat regarding the technical aspects of the projects/activities under execution, always updating RAC CIMAB's management. Official communications with the Secretariat and with the National Focal Points of the LBS Protocol are carried out through the RAC CIMAB management.

With regard to RAC CIMAB's internal communications, they are based on CIMAB's Communication Strategy.

Quality Assurance Policy

It is the commitment of CIMAB's top management, and therefore of RAC CIMAB, to ensure the Research and Development Management of its activities, aimed at meeting the needs and expectations of its customers and stakeholders, in addition to implementing and continuously improving the Quality Management System that meets the requirements established in the Cuban standard NC ISO 9001:2015 "Quality Management System-Requirements".

On the other hand, CIMAB's Testing Laboratory operates under a Quality Management System implemented by the Cuban Standard NC ISO 17025:2017 and is accredited by the National Accreditation Body of the Republic of Cuba (ONARC) (Registration No. 36/2017) which allows it to work under internationally recognized quality standards and thus establish a strict control over the results achieved.

Additionally, bathymetric topo investigations are internationally approved by the Cuban Ship Registry (RCB), a classification society, attached to the Lloyd Register.

MONITORING AND UPDATING THE RAC CIMAB STRATEGY

An adaptive approach will be applied to the process of monitoring and updating this Strategy.

A mid-term review is proposed in 2026 in line with the review of the CEP Strategy and the date of the update of the CIMAB Strategic Guidelines. However, periodic reviews of lesser scope (biennial) are also proposed in line with the elaboration of the Work Plans of the same period.

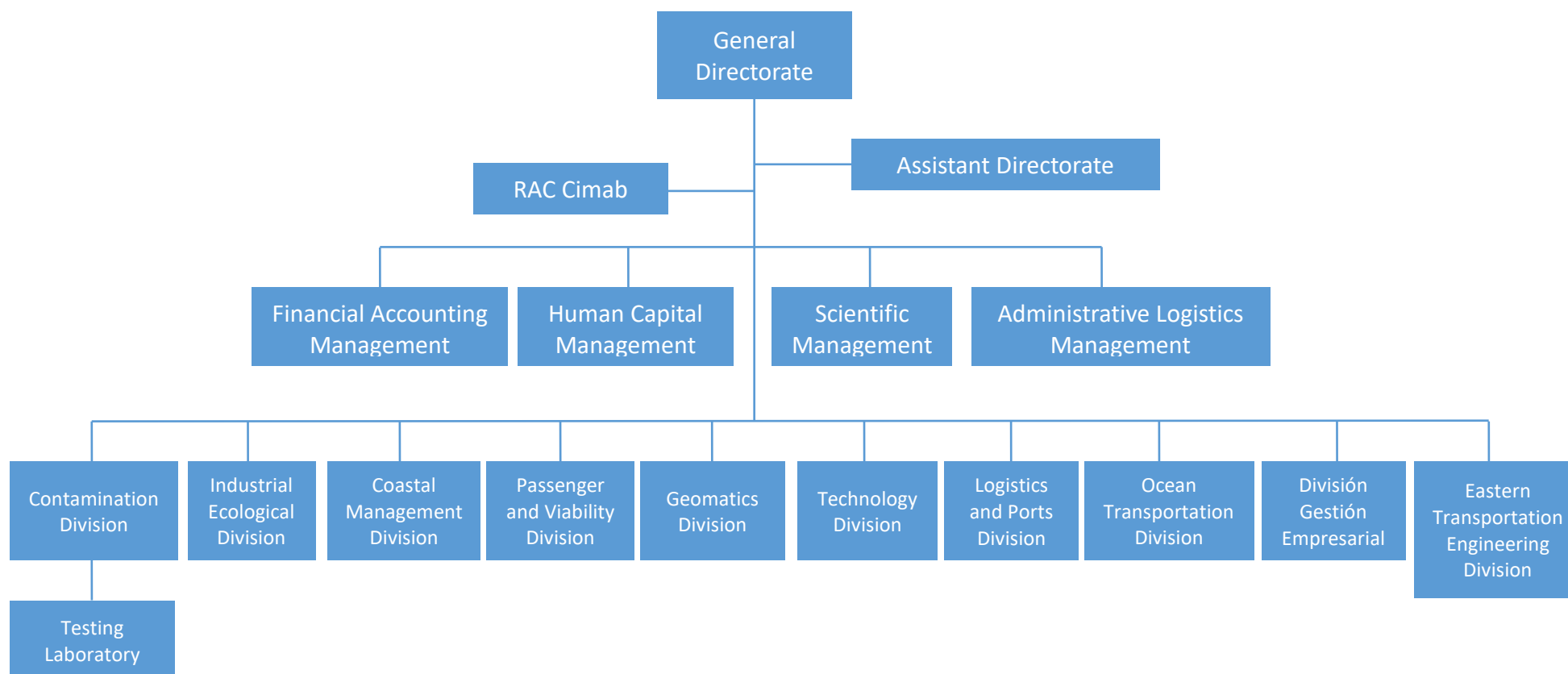
These reviews will consider achievements, lessons learned, challenges and the evolution of global dynamics in the marine and coastal environment. This will allow this Strategy to be adapted to the main environmental changes that occur at the regional level and, where appropriate, at the global level.

Through the biennial reports that RAC CIMAB submits to the Secretariat, compliance with the guidelines and strategic objectives will be monitored.

Changes / modifications / updates to this Strategy will be consulted and supported by the CEP Secretariat and by the CIMAB Management. In turn, they will be approved by the Contracting Parties of the LBS Protocol and the Cartagena Convention at the respective biennial meetings (COP and IGM).

ANNEXES

Annex 1. CIMAB's organizational chart



Annex 2. Main equipment supporting RAC CIMAB's projects and activities

No. Measuring equipment and/or means

1. Magnetic stirrer with temperature
 2. Autoclaves
 3. Analytical Balances
 4. Technical scales
 5. Thermostatic Bath
 6. Ultrasonic Bath
 7. Vacuum pump
 8. Digital burette
 9. Centrifuge
 10. Colony Counter
 11. COD digester
 12. Team Kjeldahl
 13. UV-VIS spectrophotometer
 14. Stoves
 15. Bench Multiparameter Photometer
 16. Digital Turner Fluorimeter
 17. Refrigerated incubator
 18. Warming blanket
 19. pH and electrical conductivity meter
 20. Muffles
 21. Heating plate
 22. Roto Evaporator
 23. Electric sieve
 24. Thermosalinometer
 25. Vortex
 26. Incubator 0 - 60 °C
 27. Digital Stopwatch
 28. Digital thermometer
 29. Thermohygrometer
 30. Digital burette
 31. Thermostated bath
 32. Portable Incubator for BOD5
 33. Visible spectrophotometer
 34. Portable turbidimeter
 35. Water sampler bottle
 36. Laminar Flow
 37. Select Stove
 38. Maria Raypa's Bath
 39. Respirometers for BOD measurement
 40. Portable pH-EC meter
 41. 4-seater heating coil
 42. Refrigerated display case
 43. Leica Flexline TS06 Total Station
 44. Multi-Frequency Echosounder BATHY 500 MF
 45. Thermosalinometer
 46. Current meter for measuring point currents
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