<u>CONCEPTUAL NOTE</u> ACTO'S TECHNOLOGICAL PLATFORM TO SUPPORT INTEGRAL AND SUSTAINABLE FOREST MANAGEMENT

1. General objective

Constitute a Technological Platform (TP) of the ACTO Member Countries-MC to identify, give visibility, disseminate and accompany in the application of technological tools or processes that incorporate some type of technology and innovation in relation to sustainable forest management, which have been developed by the ACTO MC, as well as in other countries and/or specialized entities, and are available for regional dissemination, which may be applicable to the Amazon Region.

2. Specific objectives

This proposal is focused on the following specific objectives: 1) Carry out the **design**, **management and operation of the TP**; 2) **Organize a showcase of supply and demand of the TP** that contemplates: on the supply side, the systematization of management tools or processes with technological development and innovation of each of the MC of ACTO, which can be disseminated at the regional level; and, on the demand side, the interest and needs of ACTO's MC to integrate in public management some or all of the tools or processes offered; 3) Carry out the **articulation between supply and demand in pilot actions** implemented in the Amazon countries, within a scheme of education/training processes, technical assistance and capacity development for technology transfer; 4) Identify and promote the articulation of the technological and innovation offer of international entities in forest management (e.g. ITTO, UNFF, FAO, IICA, among others) with the access to technology of the Amazon countries; and 5) Promote the systematization and exchange of experiences on practices and technologies of indigenous peoples, local communities and other tribal communities on sustainable forest management.

3. Context and justification

The Amazon, which is the largest tropical forest in the world, contains an immense natural and cultural wealth, a significant amount of water, and is the largest repository of biodiversity in the world. The Amazon has a fundamental role in global water cycles and a critical role regarding climate change. Forests and rich Amazon biodiversity are under increasing pressure and face various risks and challenges. Likewise, the Amazon has been undergoing intense transformations in recent decades due to the increase in low-productivity and often illegal economic activities. Taking into account that sustainable development based on the enhancement, conservation and protection of Amazon forest is a priority for Amazonian countries, it is necessary to deepen a sustainable development approach in the Amazon region, oriented to reduce the potential environmental impact that these activities are causing in the forest. This can occur through the use and dissemination of knowledge, innovation and technology developed by different Amazonian countries for sustainable forest management.

The Amazon Cooperation Treaty Organization (ACTO) is based on the mandate of the Amazon Cooperation Treaty (1978) which is aimed at achieving the harmonious development of the Amazon Region, in the context of the rational use of its natural resources. In the Amazon Strategic Cooperation Agenda (ASCA, 2010-2018) of ACTO, the issue of forests has been prioritized, oriented to conservation, protection and sustainable use of renewable natural resources, and with the aim of strengthening integrated and comprehensive and sustainable forest management that results in real benefits for local populations. In this context, ACTO has developed several actions, including: forest monitoring of the Amazon forest (2011-2018) with the support of ITTO, GIZ, DGIS, BNDES Amazon Fund and INPE-Brazil; integrated sustainable and ecologically responsible forest management in the Amazon (2013-2019) with ITTO and

IUCN; promoting bio-commerce in the Amazon (2014) with UNCTAD, among other regional initiatives.

In this context, the ACTO will **coordinate efforts of MC to strengthen comprehensive and sustainable forest management of the forests of the Amazon Region**, and in particular specialized knowledge on forest management that includes technology transfer, technical assistance, education and training, as well as capacity development in innovative services for this purpose.

4. Intervention scope

In order to strengthen comprehensive and sustainable forest management of Amazon forests, the **constitution of a Technological Platform-TP** has been planned. It will work with a **regional cooperation approach for the ACTO's MC**, articulating the regional level and the national and sub-national levels of governance of the Amazon Region. The purpose of the TP is to respond to the need to **incorporate technical and scientific knowledge and technical innovation to improve sustainable forest management**, including: forest monitoring, control of deforestation and illegal activities, wood traceability, strengthening of the production chain, major knowledge in the potential of non-conventional species, incentive and improvements to the development of value chains, and improvement of timber and non-timber forest use, among other aspects. The TP will also make efforts to identify and promote, within the framework of public management in the Amazon countries, **practices and technologies of indigenous peoples, local communities and other tribal communities on sustainable forest management**.

The management of the TP will be carried out through the support of virtual media and will be hosted on the ACTO website, which will initially allow the offer of technological knowledge existing in the region, developed by specialized PM entities, and then other international entities expert in forest management, with the demand and needs of said forest management technologies by the PM. It comprises a systematic process to facilitate the **articulation between technology supply and demand in the ACTO's MC**, working flexibly according to the needs and interests of each of the countries and based on the capabilities developed in the Amazon Region. The offering MC, as well as the international entities participating in the project, will be in charge of providing advice and technical assistance to the requesting MC. **The transfer and adoption of technologies will be carried out as a priority through pilot actions in the MC that have national financial resources** for the implementation of such actions in their countries. The PS/ACTO will act as the facilitator of the articulation process and will assist in the management and administration of the TP. The PS/ACTO will also manage financial resources for the operation of the MC.

The expected impact of the action is related to the improvement of sustainable forest management in the Amazon Region, including technology and applied innovation in the management tools and, a major and dynamic interaction between the competent forestry authorities in MC.

The project will be structured in four components: design, management and evaluation; structuring of supply and demand; implementation of pilot actions for technology transfer; and identification and promotion of practices and technologies of indigenous peoples, local communities and other tribal communities on sustainable forest management.

The project will result in the institutional strengthening and capacity building of the ACTO's MC to face the challenges related to sustainable forest management in the Amazon Region.

5. Examples of tools and processes with technology development from the Technology Platform

Below are some initiatives that could be incorporated into the offer package of the TP, which have been identified in an informal consult to the Brazilian Forest Service of the Federative Republic of Brazil, as follows:

• *Capacity development for the establishment of a regional germplasm bank.* Develop within the framework of the Arboretum Program of the Center for Sustainable Forest Development - CDFS (whose governance is in the Forest Products Laboratory-LPF) a Regional Active Germplasm Bank of *Dalbergia* for the conservation and restoration of forest diversity in the Amazon forest.

• *Traceability of the Chain of Custody*. The Chain of Custody System-SCC of Forest Concessions controls from the cutting of the tree in the forest concession, through the exit and transportation of forest logs, to the arrival and sale of processed wood in each processing unit (sawmill, rolling mill, etc.), as well as the control of the production of woody material.

• *Electronic key for the identification of wood species.* It is an important taxonomic identification tool for commercial tree species, which can be used in the field. The dissemination of the use of NIRS (near infrared spectroscopy) models serves as an auxiliary tool in the anatomical identification process of wood. The integration of LPF data with the SCC can provide information on the conservation status of exploited species, including CITES species, and the electronic key can be recommended as a tool to verify identifications in the SCC, and is an effective strategy to lessen pressure on CITES species and strengthen the use of alternative species.

• *Use of drones for forest monitoring.* Incorporation of new technologies for monitoring forest harvesting areas and the volumes of wood harvested through the use of drones in conjunction with satellite and aerial information.

• *Characterization of species for control purposes.* It includes facilitating access to scientific information from the SFB and/or IBAMA laboratory, for the characterization of species for control purposes in Amazonian countries.

• *Identification of uses and applications of species with low commercial value in the Amazon forest.* It includes the identification of alternatives for timber forest use aimed at diversifying the production of forest species, with the participation of ITTO, Brazil and other Amazon countries.

6. Expected outcomes

- A TP to support sustainable forest management in ACTO, designed and in operation.
- At least ten (10) offers of technologies integrated in the TP systematized, organized and available for application in other MC of ACTO.
- At least three (3) offers of technologies from international entities specialized in forest management.
- At least (8) pilot projects developed in the Amazon countries with the transfer of technological offers to the ACTO's MC.
- Capabilities for the management, implementation and evaluation of the TP installed in ACTO.

7. Principal activities

The main activities for each of the components defined in the proposal are the following:

a) Design, management and evaluation

- Conceptual and methodological design of the TP.
- Construction and implementation of the TO, to be integrated into the ACTO platform and website.
- Management and operation of the TP by the PS/ACTO.
- Evaluation and permanent adjustment of the operation of the TP.

b) Structuring the supply and demand

- Technical work with each ACTO Member Country to organize the offer side.
- Relationship with international entities for the organization of the offer side.
- Organization of the demand side in the MC of ACTO, based on the offer side.
- Planning of the start-up of the TP on the basis of the meetings (matching) between MC providers and MC applicants.
- Identification of financial aspects and national allocations of financial resources.

c) Implementation of pilot actions for technology transfer

- Design of the pilot actions based on the operational planning of the TP.
- Start-up of the pilot actions in the interested MC with education and training processes, short-term technical assistance and capacity building, linked to the pilot actions.
- Development of spaces for dialogue and interaction between relevant actors that apply the technologies in the MC offering and demanding.

d) Identification and promotion of practices and technologies of indigenous peoples, local communities and other tribal communities on sustainable forest management

- National and regional dialogues for the identification of practices and technologies of indigenous peoples, local communities and other tribal communities.
- Systematization of practices and technologies and dissemination among the MC.
- Technical assistance for the design of policies and public management on practices and technologies of indigenous peoples, local communities and other tribal communities.

8. Implementation structure

The project will be implemented through a Technical Working Group-TWG for the design and coordination of the Technological Platform made up of representatives of the MC of ACTO. The TWG, at the beginning of the work, will meet in a continuous way to discuss the project planning, approve progress reports and discuss institutional coordination measures with a view to guaranteeing the achievement of its results. All activities will be coordinated with the National Focal Points-NFP of the ACTO Ministries of Foreign Affairs and other competent ministries such as with the national forest governing entities of each Member Country. The PS/ACTO will provide technical support to the NFPs and TWG in the execution of this proposal.

9. Final beneficiaries

The direct beneficiaries of the TP are the relevant actors who carry out forest management in the respective countries, as well as the forest services of the ACTO's MC that are in charge of promoting sustainable forest management in the countries.

10. Timing of the project

The proposal will have a permanent duration, subject to the interests of the countries.