



COSIPLAN Presidencia Pro Témpore Venezuela 2016 – 2017

MEETING OF THE EXECUTIVE TECHNICAL GROUP ON

DISASTER RISK MANAGEMENT

NOVOTEL Hotel

Lima, Peru

June 2 and 3, 2016

FINAL REPORT

On June 2 and 3, 2016, the city of Lima, Peru, hosted the Meeting of the Executive Technical Group on Disaster Risk Management, which was attended by delegations from Argentina, Chile, Colombia, Ecuador, Peru, Uruguay, and Venezuela, as well as by representatives from the UNASUR General Secretariat and IIRSA Technical Coordination Committee, and consultants. The meeting agenda and the list of participants are attached as Annexes 1 and 2, respectively.

The objectives of the meeting were the following: (i) share the results and lessons learned from the joint application by Chile and Peru of the "Methodology for the Incorporation of Disaster Risk Management to Integration Infrastructure" (DRM Methodology) to Project Group 5 of the Central Interoceanic Hub; (ii) exchange experiences by the countries of the region in Disaster Risk Management (DRM); and (iii) hold a dialogue on regional policies concerned with DRM within the framework of COSIPLAN.

The meeting took place over two days, each devoted to specific topics. On the first day, the work on DRM carried out by COSIPLAN was contextualized, and its background and inclusion in the COSIPLAN agenda were presented, as well as the DRM Methodology (Annexes 3, 4 and 5).

Next, the pilot application of the DRM Methodology implemented by Chile and Peru in projects within Group 5 located in their respective national territories was explained. As part of the results of this application, a comparative analysis was presented concerning the following infrastructure: Arica Port and Airport (Chile), and Matarani Port and Tacna Airport (Peru) (Annexes 6, 7 y 8); the study regarding risk analysis and identification of potential risk reduction measures for this infrastructure was also presented (Annex 11). Subsequently, a presentation on the progress made in the Regional Deterministic Methodology for Risk Prevention, which was being developed by Chilean consultants, was delivered (Annexes 9 and 10).

To close the first day of the meeting, representatives from Chile's Ministry of Public Works and Peru's Ministry of Transport and Communications delivered a presentation on the lessons learned and proposed the next steps. The following are the conclusions drawn during the debate about the methodology and its application experience:

- The development of the DRM Methodology focused on the analysis of the territories where the COSIPLAN Portfolio infrastructure projects are implemented. However, the scope of the methodology is broader, as it can be used to assess different kinds of hazards threatening infrastructure networks or components both in the Integration and Development Hubs and in the domestic networks of the Member States. In addition, consideration was given to the application of the methodology to logistics systems and chains to manage the risks to which they may be exposed.
- Lack of information is a factor constraining the application of the DRM methodology; therefore, in
 most cases it becomes necessary to create or adjust information in the field to be used with the
 methodology. In this regard, a proposal was put forth to make headway with a methodology of a
 deterministic nature (Regional Deterministic Methodology), which can be applied at a local level,
 as it helps generate the information needed to fill this gap involving fewer resources.
- As a corollary to the above, it is recommended to move forward in the development of the deterministic analysis (Regional Methodology) software so as to start applying it to the projects groups of the COSIPLAN Hubs as requested by the countries and move towards the other steps recommended in the DRM methodology.
- Most of the infrastructure analyzed during the application is operated by public-private partnerships. However, it is the State that defines the acceptable level of risk to ensure the operating conditions of the infrastructure. In this regard, it is recommended that DRM regulatory instruments be developed to incorporate them into the concession contracts according to each country's rules on risk management.
- The vulnerability to natural hazards of a single infrastructure and of the system of which it is part is a factor not usually taken into account yet when assessing an investment project. A methodological effort needs to be made to include the notion of the benefits resulting from natural disaster risk mitigation in the social and economic assessment of the projects.
- An effective implementation of the recommendations that arise from the application of the methodology to the infrastructure analyzed by Chile and Peru will contribute to incorporate risk management into South American physical integration project planning. Taking into account the practical results obtained from the application in terms of recommendations, infrastructure solutions, and risk mitigation specific costs, it is recommended that this methodology be also applied gradually to other Project Groups in the COSIPLAN Integration and Development Hubs.

 It is recommended to carry out an estimation and characterization of the natural hazards and a vulnerability analysis —using the probabilistic method— for the 10 projects originally chosen in the pilot application to Group 5 of the Central Interoceanic Hub.

On the second day of the meeting, the progress made by the UNASUR High Level Working Group for Comprehensive Disaster Risk Management (GTAN-GIRD, in Spanish), which seeks to coordinate the different initiatives of the Sectoral Councils on this topic, was presented (Annex 12). Next, a series of presentations concerning the experience of the UNASUR countries in comprehensive disaster risk management were delivered (Annexes 13 to 19).

Finally, a round table on disaster risk management regional policies was held to reflect on the experiences described during the day and to identify possible actions to be performed within the framework of COSIPLAN. The main conclusions were the following:

DRM Experiences, Tools and Future in South America

- Promote comprehensive disaster risk management in the COSIPLAN planning processes at both the national and regional levels as a necessary and indispensable factor in such processes. Among other things, this will help avoid building or rehabilitating infrastructure or connectivity systems that are vulnerable to natural disasters.
- The development of the DRM Methodology and its application have been successful in terms of
 providing a large set of methodologies, concepts and tools with proven effectiveness. It is
 important to include the DRM Methodology in the Integration Territorial Programs (PTIs) as an
 analytical tool to address hazards, vulnerability and risks, as it was the case with the Production
 Integration and Logistics (IPrLg) and Strategic Environmental and Social Evaluation (EASE)
 methodologies.
- Systematically record the activities carried out (i) in the course of the planning processes to incorporate comprehensive risk management; (ii) in the case of a disaster to quickly resume the operations of infrastructure; and (iii) to rebuild and rehabilitate the infrastructure affected. The purpose of all this is to ensure that the experience is transferable and to promote the official establishment/harmonization of these mechanisms at the national and regional levels.
- Promote mechanisms to include citizens in comprehensive disaster risk management within UNASUR.
- In view of the fact that climate change is worsening natural disaster events, the inclusion of this subject in the COSIPLAN agenda as part of the risk management or other initiatives is necessary.

Proposed Activities within COSIPLAN

- Analyze the possibility of developing a training program in comprehensive infrastructure disaster risk management targeted for officials from the different UNASUR countries' government agencies concerned.
- Recommend that the countries include the analysis of infrastructure hazards, vulnerability and risks in the study and discussion of integration projects in the territories of the Hub, using the methodologies as well as the different tools presented at this meeting.
- Define a permanent mechanism/instrument for the exchange of experiences. A first step would be the creation of a new section on the COSIPLAN-IIRSA website to record national cases, policies and regulations, and consultations (a technical forum for discussion).
- Request the CCT to support the comprehensive development of the deterministic methodology, and promote its application to COSIPLAN Portfolio Project Groups.
- Implement the recommendations derived from the application of the DRM Methodology to specific infrastructures belonging to Project Group 5 of the Central Interoceanic Hub.
- Disseminate the products developed by COSIPLAN (Document Including the DRM Methodology and Final Report on the Chile-Peru Application) at the national level, in activities of the Council and at UNASUR. Use audiovisual tools to inform citizens of the importance of comprehensive infrastructure risk management and of the progress made by COSIPLAN in this field.
- Transfer the COSIPLAN experience to the UNASUR High Level Working Group for Comprehensive Disaster Risk Management with the aim of contributing to the development of its objectives, mainstream the discussion of this topic with other UNASUR Councils, and strengthen the partnerships with specialized institutions, including academia. As a result, build synergies, reduce efforts and improve efficiency in dealing with this topic.
- Make arrangements so as to coordinate with the Working Group on the COSIPLAN Geographic Information System (GIS) the consideration of the inclusion of regional hazard and risk layers.
- Coordinate the preparation of a joint document on the hazards and risks that have affected the region in the last five years (events that have recently occurred in the countries) and on the countries' experience.

List of Annexes:

Annex 1: Agenda of the GTE Meeting on Risk and Disaster Prevention and Management

Annex 2: List of Participants in the GTE Meeting on Risk and Disaster Prevention and Management

Annex 3: From the Methodology Proposed to its Application to the Territory

Annex 4: Integration Infrastructure Risk Management

Annex 5: Methodology for the Incorporation of Disaster Risk Management to the COSIPLAN Infrastructure Projects Annex 6: Binational Work on and Commitment to the Application and Its Results

Annex 7: Comparative Analysis of the Application of the DRM Methodology to the Arica Port, Chile, and the Matarani Port, Peru

Annex 8: Comparative Analysis of the Application of the DRM Methodology to the Arica Airport, Chile, and the Tacna Airport, Peru

Annex 9: Progress Made in the New Regional Deterministic Methodology for Risk Prevention

Annex 10: Risk Analysis and Identification of Potential Risk Reduction Measures

Annex 11: Pilot Plan Conclusions: Regional Deterministic Methodology for Risk Prevention

Annex 12: UNASUR High Level Working Group for Comprehensive Disaster Risk Management

Annex 13: Chile's Ministry of Public Works in the 2015 Disasters

Annex 14: Argentina, Hydric Emergency Program

Annex 15: Colombia, Guidelines for Risk Management in Reconstructing Infrastructure

Annex 16: Chile, Planning the Coastal Territory and Coastal Protection Infrastructure

Annex 17: Peru, Experiences Developed by CENEPRED in the Prospective and Corrective Disaster Risk Management Components

Annex 18: Recent Tsunamis in Chile, New Knowledge and Tools to Estimate the Impact of Tsunamis in Port Cities and Towns

Annex 19: Assessment of Seismic Damage in Transportation Roads through Satellite Information