



An Overview of the BIM implementation on Chilean Bridges

Matías A. Valenzuela Pontificia Universidad Católica de Valparaíso, Valparaíso, Chile

Marcelo Marquez & Leonardo Roca

Ministry of Public Works, Santiago, Chile

José Luis Seguel

JLS Ingeniería, Santiago, Chile

Contact: matias.valenzuela@pucv.cl

Abstract

In Chile the Building Information Modelling is developing since 2015. During that year, the president of Chile announced encourage of use BIM in public infrastructure with two main objectives:

1. Request of the implementation of BIM in Public contracts by term of reference, in order to standardize the request process from the Public Services.

2. The review of the project using IFC format in the municipalities for private buildings, in order to obtain the construction permission.

On that framework it was create the initiative Plan BIM, which integrate the collaboration of Academia, Public and Private Entities in order to improve the knowledge and use of BIM.

This paper provides a comprehensive overview of the developing of BIM apply on Chilean bridges, highlighting the contribution of several stakeholders. Cases of study of the implementation of BIM is presented.

Keywords: BIM; bridges; design; Public and Private Overview; Chile.

1 Introduction

Chile presents a territorial extension of great geographical diversity, and therefore there is a large number of bridges (over 6,500) which must be under constant monitoring and maintenance as they are considered critical points within the road network since they allow and generate communication, circulation and integration for people as well as the movement of products and services that facilitate the country's economy.

1.1 BIM beginnings in Chile

Between 2013 and 2016, a national survey was developed in Chile through the Department of Architecture of the University of Chile to know the development in the subject and evaluate the level of BIM integration of the different construction