



A successful long-term approach in managing Client's assets

Introduction

If someone would be asked to provide a definition for "O&M services", the most common answer would include establishing an organization who would be responsible for:

- a) Supervising system movement in normal operation and recovering the installation in case of malfunctions.
- b) Scheduling and performing maintenance.
- c) Training staff responsible for the operation and the maintenance.
- d) Guarantee safety of passengers and employees.

What is then the added value when O&M Services are restricted to this definition? This added value must be generated by (1) fulfilling the Owner's vision for the ropeway they acquired, and (2) by providing access to additional know-how, expertise and resources.

Doppelmayr as a ropeway manufacturer has access to design principles, technical information or lessons learned from all kind of rope propelled systems including gondolas, tramways, people movers or funiculars that are designed to be operated in a wide range of operating conditions. Indeed, Doppelmayr has been building these installations for more than 120 years.

Ropeways are being transformed and developed to be widely observed as anybody would observe a train or a bus. At this stage, O&M plays a key role as it sets the mark in public perception. To support this transformation, ropeways can and should share certain common principles with conventional means of transport independently of the application.

Decades of experience in operation and maintenance can be used and adapted to the unique approach to transportation that ropeways can deliver. The goal shall be to implement such approach to all types of ropeways, and be able to influence early phases of design when by integrating O&M lessons learned into the ropeway design.

A Single Operational and Maintenance Concept

For Doppelmayr O&M started in the late 90's when the first people mover in Las Vegas was realized. In 2002, the people mover in Birmingham started to provide transportation services and Operations Services had its first group of 10 employees, some of them still working for us. Today, almost 300 locally contracted, permanent full-time employees provide services 24/7/365 across the globe. The target shall be that long-term O&M contracts have a long-lasting impact on the local community by generating jobs locally and supporting the local community goals.

But each of our Business Units do not provide O&M services isolated from the others. They belong to a network of knowledge and resources steered from Headquarters. The vision is to give access to a hub of differential know-how where knowledge allowing certain elements of the operation to vary between Business Units while a common culture, vision and approach to O&M is shared among all Business Units.

The goal then is not only to deliver O&M services but to utilize existing know-how to realize the Owner's vision of transportation, starting from the integration of the O&M Organization in the Owner's.

A ropeway manufacturer capable and eager to provide O&M Services allows us to deliver a project throughout the lifecycle from day one, from one hand. The ropeway designed is sharpened up using O&M



input to better adjust technical parameters that eventually can increase reliability, improve maintainability, reduce operational risk and optimize costs. Interfaces throughout the project are managed internally.

Having only but one network of Business Unit operating under the same principles, allows the organization to develop one single Operational Readiness Program that is effective in time and in costs. This can be executed using human resources that have executed a program that they know, that they live and that they experience daily.

What is the O&M Concept then? It all starts with a competence center that concentrates know-how and applies this knowledge to all current and future Business Units. At the base of the hub are our employees, thus retaining talent is the first and foremost objective, as they build and support long-term relations with the Owners.

As a Company, tools and methods to work have to be provided, which are then improved through time and experience. This is why practices, policies, procedures that are common to all technologies, operating conditions and aligned with numerous codes and standards were developed over the course of the last years. Today, over 70% of Doppelmayr's work practices are now standardized, being the remaining 30% project specific. For the Owners, this gives them peace of mind. For the employees, this lets you focus on delivering added value as the goal and the route are set.

These procedures are structured according to the seven main activities of our business, i.e. Organizational, Operation, Maintenance, Competency, Safety, Environmental and Financial, and they are supported by an in-house developed software tool. We are paperless. For management in the Business Units, the tool is the portal to schedule and track all activities, and a tool to analyze trends. For staff, this is the single door for the fulfillment of their responsibilities of critical importance when it comes to compliance audits. For the Corporate Office is an almost infinite pool of data that allows us to observe in real time what is happening in all Business Units. It allows them to identify malfunctions, potential risks and opportunities for improvement.

Conclusion

Our Customers, the Owners want peace of mind and the realization of the vision that they had when they first conceived the idea of installing a ropeway at their property. To achieve this goal, and to fulfill their vision, we believe in long-term relations with our Customers and our employees, which is achieved through a single center of competence responsible for providing O&M Services. Our worldwide network of Business Units provides services by merging more than 120 years of experience installing ropeway systems with best approaches of traditional means of transport. We integrate people who uses processes, working practices and software tools that drives the business, reduces risk and optimizes costs.

This hub allows Doppelmayr to deliver a project overserving the entire lifecycle of the system from one hand, i.e. from design and build, through operate and maintain to dismantle at the end of the system lifecycle.