DESCRIPTION OF INSTALLED CABLES DATA BASE

Patrick DELCOURT, Joel BOUYER, RTE, (France), patrick.delcourt@rte-france.com, joel.bouyer@rte-france.com

ABSTRACT

Knowledge of the installed cables is essential to facilitate routine management (maintenance, repairs, history), life cycle management and to ensure the safety of people. RTE has implemented a coherent policy and the tools to improve and share this detailed knowledge of the installed cables.

KEYWORDS

Data base, maintenance, policy, environment

INTRODUCTION

The system implemented by RTE consists of, at a national level:

- a ‘Infocable’ database of installed cables that can be used to record:
  - information about progress of the modification and/or creation of links,
  - updating of equipment after curative or preventive maintenance operations,
  - display of links diagrams and worksheets.

- a documentation database (Doc liaisons) which integrates all the documentation specific to underground cables: statistical plan, stringing log book.

The two databases that contribute to the knowledge of the installed cables will be presented, focusing on the collection of information during worksite, and the completion of the documentation database.

Since March 2010 (Infocable V6.00): A description of the installed cables up to date with worksite thanks to the ICE (InfoCable Externalisation) module.

The object of this type of installed cables description is:

- to initialise and capitalise on all of the elements arising from design directly into the Information Tool (IT) at design time: location of the link, route, environmental conditions.

- to enrich this description throughout the work phase by allowing modification or completion of data elements directly into the IT – (change of installation method, limited modification of the route due to a hazard...)

Since version 6.00, by way of the ICE module, Infocable allows all workers (design office, civil engineering, manufacturer) to enter their own data (e.g. “type of power cable”) and/or to modify or add to the link’s data (e.g. location of joints in the chamber).

The direct capitalisation in the IT of all information accessible during the work is essential and constitutes all of what is at stake in the ‘ICE’ approach.

RTE’s installed cables described in ‘Infocable’:

Since 2003, RTE has described its underground links and optical fiber network in this application.

This easy-to-use application is made up of tabs and can be used to describe:

- The physical elements of the work “tie points and sections”
- Certain geographical data “street - town - x-y coordinates...”
- The different equipment types and the associated reference data “DRN DRL - national and local reference data”
- The data for the RCM (reliability centred maintenance) preventive maintenance programme (e.g. “earthing types”) 
- Information about curative maintenance, in the history tracking anomalies and monitoring events after the creation of the trouble ticket.
- Information for creating feedback from the event sheets related to the trouble ticket.

Tools tab:

Particularly used to display a graphical diagram of certain components of the cable for rapid visualisation of the information. Cable type, length, earthing type...