SemaCare R on the field

Westnetz characterises the existing communication network with SemaCare

Westnetz (a brand name of the RWE Group) is the Germany's largest distribution system operator supplying power and gas to approx. 7.5 million people. Westnetz is in charge of planning, building, maintaining and operating the power and gas distribution systems. Westnetz continuously invests in the extension and reconstruction of networks for the smart technology of tomorrow's infrastructure.

For which activity did you buy SemaCare R* ?

The existing communication network needs to be characterized. Each pair needs to be classified according to its performances (5 to 10 classes). The utilisation of each pair is decided accordingly.

Why having chosen SemaCare R?

Performing manually several tests and measurements is time consuming. SemaCare combines several tests and measurements (continuity test, LF, HF measurements,…) and provides consolidated reports. SemaCare helps to significantly reduce the time for characterization.

What is the characterisation process?

The first connecting frame is installed in station A, the second in station B. The distance between the two stations can be 150m as well as 20 km. Then the segment A-B is characterized (one operator is required at each station). At the end, we move station A to C and continue the characterization B-C and so on.

How many segments are characterised per day?

The measurements performed with SemaCare R take 30 to 45 minutes for 14 pairs (depends on the distance, then on the frequency used for LF parameters). The complete process takes about 2 hours. Then we usually characterize 3 segments a day.

How do both stations communicate with each other?

Our first idea was to use the GSM function of SemaCare. Unfortunately, even here in Germany, the GSM coverage is not perfect. Then SemaCare is set to use one pair of the segment to link both connecting frames. Both operators communicate with their GSM (if signal available), but from time to time they have to utilise the tested segment!

When do you proceed with the characterization?

The characterization is performed on the existing network. Then communications of the segment under test have to be stopped. The characterisation is performed in parallel of maintenance operations.

Why did you choose an AESA's equipment?

When we started to classify the cable segments, it was a time consuming manual job. Then, we acquired an automatic tester from AESA in the 80th. Since the system became unappropriated to meet the 21st century requirements. We didn't find any similar automatic equipment by your competition. And we were satisfied by the quality of your equipment and services, why changing?

What can we do to still simplify your job?

The consolidated report provides all the characterization's information. But we have to sort manually the pairs in the right class. By introducing our qualification criteria into the software, an automatic sorting would additionally save about 30 minutes per segment.

How do you see the future of this activity?

The western German telecom network includes 16'000 stations. Other companies and regions have the same needs. Today we can spend 3 to 5 days per month for characterizations, the equipment is underused. We want to allocate more resources to develop this activity.

Jean-Luc Allemann, Business Development Manager, AESA-Cortaillod

** **SemaCare R** is the remote version of the standard SemaCare S*