

# Biometric Signature Authentication at Sao Paulo's Electric Energy Company

## Highlights

**Client:** Transmissão Paulista - Electric Energy Transmission Company

**Product:** [PenWord™](#) and [PenPDF™](#)

## Background

Transmissão Paulista was established in 1999 through a merger between CTEEP and EPTE. The company mission is to ensure the transmission and distribution of electric energy of the highest quality and utmost reliability throughout São Paulo, Brazil, a state with over 20 million inhabitants. With total assets of over R\$4 billion Transmissão Paulista is accountable for the operation and supervision of an integrated system of 99 substations with a capacity of 35,000 MVA and transmission lines of more than 18,000 kilometers transporting about 136,000 GWh of energy. The company is also committed to enhancing the control, supervision and operational reliability of its transmission services

## The Challenge

One of the major challenges facing Transmissão Paulista was the procurement of materials. Purchasing was accomplished through public bids and required massive bureaucratic activity for creating announcements and contracts. Another problematic issue was the distribution of announcements to suppliers who were required to personally collect the forms from Transmissão Paulista headquarters. Local laws decreeing that every document created and delivered had to be signed on all pages by employees in different departments – resulted in a gigantic waste of manpower hours.

## WonderNet's Solution

WonderNet's *PenWord™* made it possible to significantly reduce the number of signatures for each document, ensuring that the process became more efficient, faster and less bureaucratic. Thanks to *PenWord*, the entire process of creating, protecting and signing documents became a great deal simpler.

Transmissão Paulista uses Oracle ERP and Microsoft Word as text processor tools to ensure automatic integration of biometric signature technology into the company workflow. Transmissão Paulista has subsidiaries in many cities; *PenWord* brought mobility to company employees, enabling them to sign documents no matter how remote they were from their workstations.

## Customer Benefits

Today, the process of preparation and distribution of bids is greatly enhanced. With the *PenWord™ Reader* (which allows remote verification of the biometrical signature in a Word document – *via the* CTEEP homepage), participants in any bid can easily and reliably download announcements from the Internet. It is important to note that the entire process is based on digital certification by public keys (PKI's) and



therefore complies with local laws.

A previous analysis indicates that implementation of *PenWord* saves Transmissão Paulista (in announcements and contracts) an average of 124,000 pages of paper every year (with at least two signatures each). **More than 245,000 signatures annually represent 26 workdays of uninterrupted signing.** Other factors for consideration: time, printing depreciation, materials and the network flow involved in printing these documents.

### Technology

Based on a highly sophisticated patented algorithm, *Penflow*<sup>TM</sup> offers a reliable and secure solution for signing documents and authenticating the identity via a handwritten signature. The technology dynamically learns the variations of each signature and by analyzing biometric parameters such as pressure, acceleration, speed, and rhythm, *it* creates a unique personal profile, which is updated and fine-tuned with the natural fluctuations that occur in each person's signature. WonderNet solutions comply with the standard international electronic legislation and supports PKI. The system is easy to use and requires no staff or customer training, nor any alteration in signing modes or habits.

