

Senior Expert Corps – a Project of Swisscontact

Promoting entrepreneurship through expertise – Imparting technical skills through volunteer work

The retired professionals of our Senior Expert Corps (SEC) are qualified experts on site. Through their consulting services, they provide hands-on, cost-effective support towards sustainable development of companies and institutions.

SEC Assignment in Benin, 2018

Assignment No. 3342

Location Abomey-Calavi, Benin

Client University

Expert Markus Liniger,
Mathematicien

Period 13.10. - 10.12.2018



Client Profile

Phoran (Photonic and Radio diffusion numeric) is an institute of EPAC, the university of Abomey-Calavi and offers the education for masters in optical transmission, digital radio T-DAB and digital television DVB-T2.

Tasks

Lectures on the following topics for the professors:

- Source coding (reduction of redundancy) for Sound (MUSICAM, Masking Pattern Adapted Universal Subband Integrated Coding And Multiplexing), fixed images (JPEC, Joint Photographic Experts Group) and moving images (MPEG, Moving Pictures Experts Group).
- Channel coding (error correction) with convolution and bloc coding
- Digital modulation (COFDM Coded Orthogonal Frequency Division Multiplex)

The theory was accompanied with measurements in the field and the development of a program for the planning of the new digital distribution system for DVB-T2.

Results

A group of professors and engineers - three woman and five men - have now a better knowledge in the fields mentioned above and are ready to support students in theoretical and practical training in digital broadcasting.