2017 - Confidential Information, add on to the current CV.

Dipl. Ing. Bernhard Bowitz, some details about knowledge and experience with PSTN, fix line Telephone systems.

I worked in Fix-line Telecommunications and Telephone systems as well VoIP Systems for the past 25 Years.

As Telecommunications Engineer by education, did I study fix-line, PSTN Telephone systems.

In the late 90's I worked for deutsche Telekom in Hong Kong and designed several NOC for Fix-line and wireless Telephone systems, in a banking environment, to connect several trading floors to the International Telecommunications network.

The NOC/SOC had the task to monitor power failures, communication lines, circuits, line errors, framing errors, bit errors and other performance issues that may affect the network.

Another task was to track details about the call flaw, record the telephone conversations and messages for regulatory purposes.

Other elements that had to be monitored and tracked were teleprinter operation, microwave transmissions and international circuit switches.

Extended operation and failure of the PSTN circuits locally and international, between the trading floors worldwide.

In a separate part of the NOC was a ticket system integrated for service calls by customers and operators.

Early the E164 numbering system was used, later replaced by digital subscriber line calling.

For 10 years I do design for enterprises VoIP Telephone systems, that can connect to and thru Telecom Operators fixed line networks globally.

The NOC designs also included emergency back up systems and disaster recovery processes as devices usually derive their electrical power from the utility mains electricity.

A few years ago I, migrated my PSTN knowledge to wireless and mobile telecommunication systems.

The difference between fix line and mobile systems is not that much, except the wires have been replaced by radio communication links.

Hardware is been replaced by software. VoIP systems are increasingly used by Telecom operators.

Because of this many years experience I feel very confident and comfortable in fix line as well wireless systems.

Designing, improving or migrating a NOC from fix line to latest technologies is no problem, integrating a SOC is a natural.

I might mention, that in the late 80's I designed encrypted Satellite Phones, that could communicate into wire-line telephone systems.