

# X25 training course content

Since it was founded in 1982, *Philog* has been taking part to numerous projects implementing the X25 a,d ISO protocols (Transport and session).

If today, these protocols are less common than the protocols based on TCP / IP, they still exist.

This training course is designed for technicians that have to intervene on X25 equipments.

It takes place over 2 days in your premises or in those of *Philog*.

## **Detailed content of the training course:**

### **THE X25 PROTOCOL**

- OSI model and X25,
- X25 physical level: branch circuits, connecting means of the subscribers equipments (modems used), interfaces X21 bis, V24, V28, V35,
- X25 frame level: LAP-B, frames types, addressing (command and response), frame structure, performance, flow control, detection and errors correction,
- X25 packet level: packets types, call, release, interruption, reset, recovery, performance, diagnosis, flow control, complementary services.

### **DIRECT / UNDIRECT ACCESS**

- Establishment of the dial-up connection via RTC modem or B RNIS channel,
- XID frame (identification of the caller),
- Access via specialized channel,
- Access via D RNIS channel.

### **PAD**

- Asynchronous access : X3, X28, X29

### **EXERCICES**

- Connecting the physical level and the frame level,
- Study of the life of a virtual circuit, decoding of facilities,
- Traffic analysis with a protocol analyzer.