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## **1 EVENT RECORDER - SUBSTATION CONTROL SYSTEM**

### **1.1 Application**

When using Substation Control System (SCS), events can be polled continuously from the terminal. These events can come from any available signal in the protection terminal.

This event list is always available in the REx 5xx protection terminals - no special option in the terminal is required.

### **1.2 Theory of operation**

All events according to the event mask, are stored in a buffer, which contains 1000 events. If new events appear before the oldest event in the buffer is read, the oldest event is overwritten and an overflow alarm will appear. The event polling and the event masks are treated individually for each SPA-channel (A and B). The time tagging resolution on the events emerging from the internal logical signals and binary input signals have a resolution of 1 ms.

### **1.3 Setting**

An event mask can be set individually for each available signal in the terminal, deciding which type of events that will be reported. The setting of the event mask can only be performed via SCS or Station Monitoring System (SMS). The setting is denoted SPAEvents, and can be set for Normal Mode and Test Mode individually.

The event reporting can be switched off if desired, or the event mask can be neglected, so that all available events will be reported to SCS.

All event mask settings are treated individually for Channel A and Channel B for rear SPA-bus communication of the terminal.

The signals available for this event list are the following:

- all binary input signals
- all 48 binary signals selected for the disturbance report
- all logged events in the "Internal event" list
- four special signals for event registration purposes

### **1.4 Testing**

During TestMode, the event polling can be switched off if desired, or the event mask can be neglected, so that all events available will be reported to SCS.