

Sets the Event Status Bit (ESB - bit No. 5) of the Service Request Enable Register (SRE) to 1 to enable ESB service request.

3. Send the overlapped command with *OPC

Example: INIT; *OPC

4. Wait for an ESB service request.

The service request indicates that the overlapped command has finished.

***OPC? with a service request**

1. Execute *SRE 16

Sets the Message Available bit (MAV - bit No. 4) of the Service Request Enable Register (SRE) to 1 to enable MAV service request.

2. Send the overlapped command with *OPC?

Example: INIT; *OPC?

3. Wait for an MAV service request.

The service request indicates that the overlapped command has finished.

Event status enable register (ESE)

1. Execute *ESE 1

Sets the OPC mask bit (bit No. 0) of the Standard Event Status Register (ESR) to 1

2. Send the overlapped command without *OPC, *OPC? or *WAI.

Example: INIT; *OPC?

3. Poll the operation complete state periodically (with a timer) using the sequence:

*OPC; *ESR?

A return value (LSB) of 1 indicates that the overlapped command has finished.

5.5 Status reporting system

The status reporting system stores all information on the current operating state of the instrument, and on errors which have occurred. This information is stored in the status registers and in the error queue.

You can query both with the commands of the [STATus subsystem](#).

5.5.1 Hierarchy of the status registers

The [Figure 5-1](#) shows the hierarchical structure of information in the status registers (ascending from left to right).

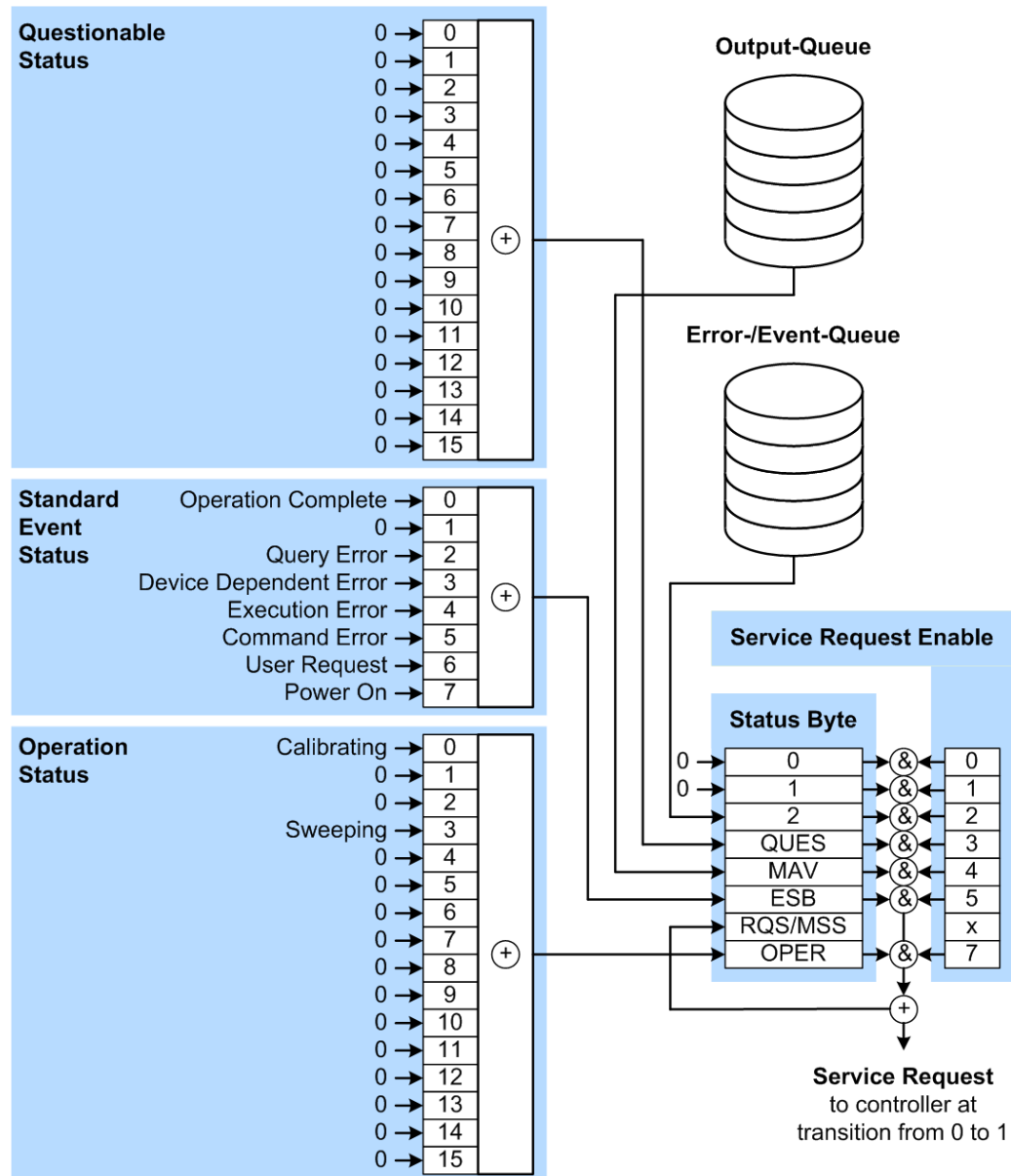


Figure 5-1: Graphical overview of the status registers hierarchy

OPER = Operation Status Summary Bit
 RQS/MSS = Service Request Generation
 ESB = Standard Event Status Summary Bit
 MAV = Message Available in Output Queue
 QUES = Questionable Status Summary Bit
 2 = Error- /Event-Queue
 1, 0 = not used

Note: This legend explains the abbreviations to the Status Byte Register.

The R&S SMB uses the following status registers:

- **Status Byte (STB)** and **Service Request Enable (SRE)**, see [Chapter 5.5.3, "Status byte \(STB\) and service request enable register \(SRE\)"](#), on page 277.