

Herschel	<b>TEST-EQUIPMENT INTERFACE SOW</b>	Doc. no. : SRON-U/HIFI/SP/2001-008
<b>HIFI</b>		Issue : D 1.2
		Date : 4 May 2001
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**Title                    Test-Equipment Interface SOW**

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## 1 SCOPE OF WORK

The purpose of the Test-equipment interface as described in this document is to connect Test-equipment to SCOS-2000.

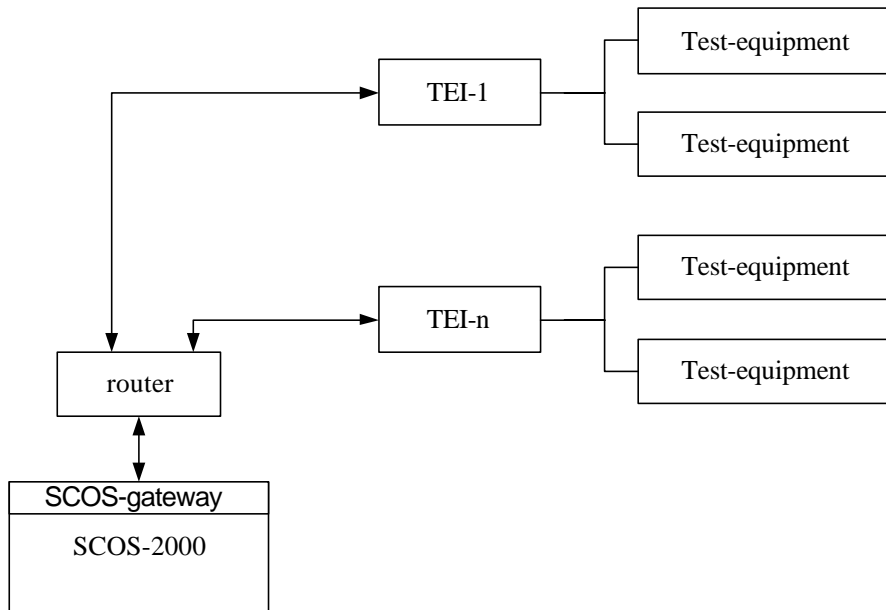


Figure 1 TEI applications connected to SCOS-2000

## 2 DOCUMENT REFERENCES

### 2.1 Applicable Documents

- AD 1. Packet Structure ICD SCI-PT-ICD-7527 issue 1.0
- AD 2. Herschel EGSE packet router ICD

### 2.2 Reference Documents

- RD 1. Herschel Router SOW SRON-U/HIFI/SP/2000-005

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### 3 SPECIFICATION

#### 3.1 General

The TEI work provided by HIFI will consist of the development of a prototype TEI, demonstrating the capability to control and read an external instrument, using PS-ICD compliant telecommand and telemetry packets send through the EGSE router. The work shall be sufficient to allow a competent programmer to develop new TEI applications for the control of other hardware interfaces running on a similar computer platform.

#### 3.2 Work packages

1. Write a user requirements document for the software and the hardware platform
2. Develop a software library supporting the generic parts of TC acceptance, TM transmission, and the interface with the EGSE router and SCOS-2000
3. Develop a skeleton TEI application demonstrating the use of the software library.
4. Develop a TEI prototype.
5. Demonstrate the TEI prototype in an end-to-end test using SCOS2000 and the EGSE routing system

#### 3.3 Deliverables

1. The user requirements document
2. A hardware and software design specification for the work done in work packages 2, 3, and 4.
3. The source code of the software developed.
4. A user manual specifying how to assemble the prototype hardware, and how to install and maintain the TEI software on the prototype.