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*ETSI Standard*

**Integrated Services Digital Network (ISDN);  
Signalling System No.7 (SS7);  
ISDN User Part (ISUP);  
Signalling aspects of charging**

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## Foreword

This ETSI Standard (ES) has been produced by ETSI Technical Committee Services and Protocols for Advanced Networks (SPAN).

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# 1 Scope

The present document specifies the stage three of the transfer of charging related information between a charge determination point and a charge registration or charge generation point by means of the Signalling System No.7 protocol. Additionally a connection control point may be located between determination point and a charge registration or charge generation point. Stage three identifies the protocol procedures and switching functions needed to support a feature.

The present document is applicable to an environment where different operators are working together. It is also applicable to a single network operator environment.

Whether the present document is applicable to a national environment and/or can be used for inter-network purposes depends on regulatory demands and/or bilateral agreements. It should be noted that there are network requirements and signalling limitations that are not covered because they are outside the scope of the present document. Examples of these are as follows:

- which currency is used;
- capabilities that require a translation function of currencies or for the translation of currencies into metering pulses;
- with an analogue access with pulse metering, no distinction can be made between pulses resulting from charges imposed by different operators;
- the on-line provided advice of charge information may not accurately reflect the correct charging rate due to discount rates, special charging arrangements, etc.;
- in association with these charging procedures, changes of the ISDN AoC supplementary services may be required for the identification of the network operator;
- new services like B-ISDN and new IN call concepts are not fully considered in the present document; especially the relay of charging information within configurations with more than one 'B' subscriber at the same time (e.g. conference calls) is not supported;
- no interworking is covered with existing implementations making use of implicit information elements pointing to locally available charging data;
- complaint handling between network operators in case of incorrect advice of charge information;
- explicit encryption or special security mechanisms.

This application makes use of the Application Transport Mechanism (APM) described in [2]. The present document specifies the respective user, i.e. the APM-user, to support the transfer of charging related information.