



EUROPEAN
TELECOMMUNICATION
STANDARD

ETS 300 392-10-03

April 1996

Source: ETSI TC-RES

Reference: DE/RES-06001-10-03

ICS: 33.020, 33.060.50

Key words: TETRA, V+D

**Radio Equipment and Systems (RES);
Trans-European Trunked Radio (TETRA);
Voice plus Data (V+D);
Part 10: Supplementary services stage 1;
Part 10-03: Talking party identification**

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Foreword

This European Telecommunication Standard (ETS) has been produced by the Radio Equipment and Systems (RES) Technical Committee of the European Telecommunications Standards Institute (ETSI).

This ETS is a multi-part standard and will consist of the following parts:

- Part 1: "General network design".
- Part 2: "Air Interface (AI)".
- Part 3: "Inter-working", (DE/RES-06001-3).
- Part 4: "Gateways", (DE/RES-06001-4).
- Part 5: "Terminal equipment interface", (DE/RES-06001-5).
- Part 6: "Line connected stations", (DE/RES-06001-6).
- Part 7: "Security".
- Part 8: "Management services", (DE/RES-06001-8).
- Part 9: "Performance objectives", (DE/RES-06001-9).
- Part 10: "Supplementary services stage 1".**
- Part 11: "Supplementary services stage 2", (DE/RES-06001-11).
- Part 12: "Supplementary services stage 3", (DE/RES-06001-12).
- Part 13: "SDL Model of the Air Interface", (DE/RES-06001-13).
- Part 14: "PICS Proforma", (DE/RES-06001-14).
- Part 15: "Interworking - Extended Operations", (DE/RES-06001-15).
- Part 16: "Gateways for Supplementary Services", (DE/RES-06001-16).

Transposition dates	
Date of adoption of this ETS:	1 March 1996
Date of latest announcement of this ETS (doa):	31 July 1996
Date of latest publication of new National Standard or endorsement of this ETS (dop/e):	31 January 1997
Date of withdrawal of any conflicting National Standard (dow):	31 January 1997

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1 Scope

This European Telecommunication Standard (ETS) defines the stage 1 specifications of the Talking Party Identification (TPI) supplementary service for the Trans-European Trunked RAdio (TETRA) as provided by European operators. Stage 1 is an overall service description from the users point of view but does not deal with the details of the human interface itself.

This ETS specifies the service description of the supplementary service and the procedures to be expected with successful and unsuccessful outcomes. In addition the ETS specifies the interactions with other TETRA supplementary services and inter-working considerations.

Charging principles are outside the scope of this ETS.

The TPI supplementary service enables connected parties in a call to receive the identification of the talking party.

2 Normative references

This ETS incorporates, by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this ETS only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

- [1] CCITT Recommendation I.130 (1988): "Method for the characterization of telecommunication services supported by an ISDN and network capabilities of an ISDN".
- [2] ITU-T Recommendation Z.100 (1993): "Specification and Description Language (SDL)".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of this ETS, the following definitions apply:

bearer service: A type of telecommunication service that provides the capability for the transmission of signals between user-network interfaces.

ident tag: The signalling message sent by each member of a call in progress, when asking the infrastructure for permission to transmit.

ident presentation: The store/displayed identification provided to the connected parties receiving the ident tag.

listening parties: The members of a call who are not transmitting.

supplementary service: A supplementary service modifies or supplements a bearer service or a teleservice. A supplementary service cannot be offered to a customer as a stand alone service. It should be offered in combination with a bearer service or a teleservice.

Switching and Management Infrastructure (SwMI): All of the TETRA equipment for a Voice plus Data (V+D) network except for subscriber terminals. The SwMI enables subscriber terminals to communicate with each other via the SwMI.

talking party: The member of the call who has been given permission to transmit.

teleservice: A type of telecommunications service that provides the complete capability, including terminal equipment functions, for communication between users according to agreed protocols.

3.2 Abbreviations

3.2.1 General abbreviations

For the purposes of this ETS, the following general abbreviations apply:

GTSI	Group TETRA Subscriber Identity
ISDN	Integrated Services Digital Network
ITSI	Individual TETRA Subscriber Identity
SDL	(Functional) Specification and Description Language
SS	Supplementary Service

NOTE: The abbreviation SS is only used when referring to a specific supplementary service.

SwMI	Switching and Management Infrastructure
TETRA	Trans-European Trunked RADio
V+D	Voice Plus Data

3.2.2 Supplementary service abbreviations

For the purposes of this ETS, the following Supplementary Service abbreviations apply:

CLIR	Calling/Connected Line Identification Restriction
TPI	Talking Party Identification

4 SS-TPI stage 1 specification

4.1 Description

4.1.1 General description

Talking Party Identification (TPI) enables all connected parties to be made aware of the identity of the talking party.

4.1.2 Qualifications on applicability to telecommunication services

This supplementary service shall be applicable to all TETRA teleservices and to all TETRA circuit mode unprotected speech bearer services.

4.2 Procedures

4.2.1 Provision/Withdrawal

SS-TPI is available to all TETRA users with the ability to receive this information.

Subscription shall be on a TETRA number (Individual TETRA Subscriber Identity (ITSI)/Group TETRA Subscriber Identity (GTSI)) basis. For each ITSI/GTSI, the supplementary service may be subscribed to for every applicable service subscribed to at that ITSI/GTSI, or for only some of the applicable services subscribed to.

The subscription parameters and values offered by a Switching and Management Infrastructure (SwMI) shall be an implementation matter. A SwMI may offer more or less parameters and values than those specified in table 1. As a default a SwMI shall present the ITSI of the talking party to the listening parties, however the subscribing party may wish that the talking parties are identified by name. This option shall be supported and the subscribing party may assign names to the ITSIs.

Table 1: SS-TPI subscription parameters

Subscription parameter	Value
Parties of the call receive name	-Yes - No
Parties of the call receive ITSI and name	- Yes - No
Parties of the call receive ITSI	- Yes - No

4.2.2 Normal procedures

4.2.2.1 Activation/deactivation, definition, registration, interrogation and cancellation

4.2.2.1.1 Activation/Deactivation

SS-TPI may be activated upon provision and deactivated upon withdrawal.

As an implementation option the supplementary service may be activated against the GTSI during the call.

4.2.2.1.2 Definition

Shall not be applicable.

4.2.2.1.3 Registration

Shall not be applicable.

4.2.2.1.4 Interrogation

The infrastructure may provide interrogation, which can be local, remote or both.

If local interrogation is provided, a SwMI shall support interrogation on a per number basis for:

- 1) all TETRA teleservices/bearer services as defined previously; and/or
- 2) a user specified basic service and/or;
- 3) a user specified group and/or;
- 4) associated names.

The SwMI response to an interrogation request shall provide the following information to the user:

- provided or not provided including subscription option;
- applicable service;
- applicable group;
- participants of group;
- associated names.

Remote interrogation may be possible by a special authorized user. The remote interrogation request and response may include the information as specified for local interrogation and additionally the ITSI of the activating user.

4.2.2.1.5 Cancellation

Shall not be applicable.

4.2.2.2 Invocation and operation

In a call, each member of the call requests the infrastructure for permission to transmit before talking. Included in the request is the identification of the user. If the service is activated against a GTSI then, upon awarding a talking party permission to transmit, the service shall be invoked and the infrastructure provides all listening parties with the identification of the talking party.

If SS-TPI is activated against a user's ITSI and the user has joined a multipoint call, he shall not receive the identifications of the talking parties unless SS-TPI has been activated against the GTSI of the ongoing multipoint call. Activation against an ITSI shall only be applicable for individual calls.

The number presented is accompanied by indications of the numbering plan and shall sufficiently unambiguously identify the talking party. As an option the name of the talking party may be presented.

4.2.3 Exceptional procedures

4.2.3.1 Activation/deactivation, definition, registration, interrogation and interrogation

4.2.3.1.1 Activation/deactivation

Shall not be applicable.

4.2.3.1.2 Definition

Shall not be applicable.

4.2.3.1.3 Registration

Shall not be applicable.

4.2.3.1.4 Interrogation

If the SwMI cannot accept an interrogation request, the interrogating user shall receive a notification that TPI interrogation was unsuccessful. Possible causes for rejection can for example be:

- service or option not subscribed to;
- insufficient information;
- basic service to relevance as requested is not subscribed to;
- invalid GTSI;
- unauthorized user.

4.2.3.1.5 Cancellation

Shall not be applicable.

4.2.3.2 Invocation and operation

In cases where members of the call normally receive the identification of the talking party, and this identification is unavailable (e.g. due to SS-Calling Connected Line Identification Restriction (CLIR) being activated at the talking party, or due to inter-working), the members of the call shall not receive any identification but shall receive an indication that the identification is unavailable.

If the infrastructure cannot invoke the service, the cause shall be returned to the subscriber, e.g. service not provided.

4.3 Interactions with other supplementary services

Interactions with other TETRA supplementary services for which interim standards were available at the time of publication of this interim standard are specified below.

4.3.1 Calling line identification presentation

Talking party identification shall not have any interaction with calling line identification presentation.

4.3.2 Connected line identification presentation

Talking party identification shall not have any interaction with connected line identification presentation.

4.3.3 Calling/Connected line identification restriction

In the case where the talking party has activated SS-CLIR then this supplementary service shall take precedence over SS-TPI and the identity of the talking party shall not be given to the other parties in the call.

4.3.4 Call report

Talking party identification shall not have any interaction with call report.

4.3.5 Talking party identification

Not applicable.

4.3.6 Call forwarding unconditional

Talking party identification shall not have any interaction with call forwarding unconditional.

If a user has diverted all calls to another station, this station shall become a temporary member of the call and its own identity (and not the identity of the diverting party) shall be made known to other members of the call when the diverted-to caller speaks.

The identity shall not be accompanied by an indication that the user is a diverted-to party.

4.3.7 Call forwarding on busy

Talking party identification shall not have any interaction with call forwarding on busy.

If a user has diverted all calls to another station, this station shall become a temporary member of the call and its own identity (and not the identity of the diverting party) shall be made known to other members of the call when the diverted-to caller speaks.

The identity shall not be accompanied by an indication that the user is a diverted-to party.

4.3.8 Call forwarding on no reply

Talking party identification shall not have any interaction with call forwarding on no reply.

If a user has diverted all calls to another station, this station shall become a temporary member of the call and its own identity (and not the identity of the diverting party) shall be made known to other members of the call when the diverted-to caller speaks.

The identity shall not be accompanied by an indication that the user is a diverted-to party.

4.3.9 Call forwarding on not reachable

Talking party identification shall not have any interaction with call forwarding on not reachable.

If a user has diverted all calls to another station, this station shall become a temporary member of the call and its own identity (and not the identity of the diverting party) shall be made known to other members of the call when the diverted-to caller speaks.

The identity shall not be accompanied by an indication that the user is a diverted-to party.

4.3.10 List search call

Talking party identification shall not have any interaction with list search call.

4.3.11 Call authorized by dispatcher

Talking party identification shall not have any interaction with call authorized by dispatcher.

4.3.12 Short number addressing

Talking party identification shall not have any interaction with short number addressing.

4.3.13 Area selection

Talking party identification shall not have any interaction with area selection.

4.3.14 Access priority

Talking party identification shall not have any interaction with access priority.

4.3.15 Priority call

Talking party identification shall not have any interaction with priority call.

4.3.16 Call waiting

Talking party identification shall not have any interaction with call waiting.

4.3.17 Call hold

Talking party identification shall not have any interaction with call hold.

4.3.18 Call completion to busy subscriber

Talking party identification shall not have any interaction with call completion to busy subscriber.

4.3.19 Late entry

Talking party identification shall not have any interaction with late entry.

4.3.20 Transfer of control

Talking party identification shall not have any interaction with transfer of control.

4.3.21 Pre-emptive priority call

Talking party identification shall not have any interaction with pre-emptive priority call.

4.3.22 Include call

Talking party identification shall not have any interaction with include call.

4.3.23 Advice of charge

Talking party identification shall not have any interaction with advice of charge.

4.3.24 Barring of outgoing calls

Talking party identification shall not have any interaction with barring of outgoing calls.

4.3.25 Barring of incoming calls

Talking party identification shall not have any interaction with barring of incoming calls.

4.3.26 Discreet listening

Talking party identification shall not have any interaction with discreet listening.

4.3.27 Ambience listening

Talking party identification shall not have any interaction with ambience listening.

4.3.28 Dynamic group number assignment

Talking party identification shall not have any interaction with dynamic group number assignment.

4.3.29 Call completion on no reply

Talking party identification shall not have any interaction with call completion on no reply.

4.3.30 Call retention

Talking party identification shall not have any interaction with call retention.

4.4 Interworking considerations

When interworking with another network and no number is provided by the other network when the interworking party is the talking party, the members of the call shall be given the indication that the number is unavailable due to interworking or that the number is presentation restricted, as appropriate.

4.5 Overall SDL

Figure 1 contains the dynamic description of SS-TPI using the Specification Description Language (SDL) defined in ITU-T Recommendation Z.100 [2]. The SDL process represents the behaviour of the network in providing SS-TPI.

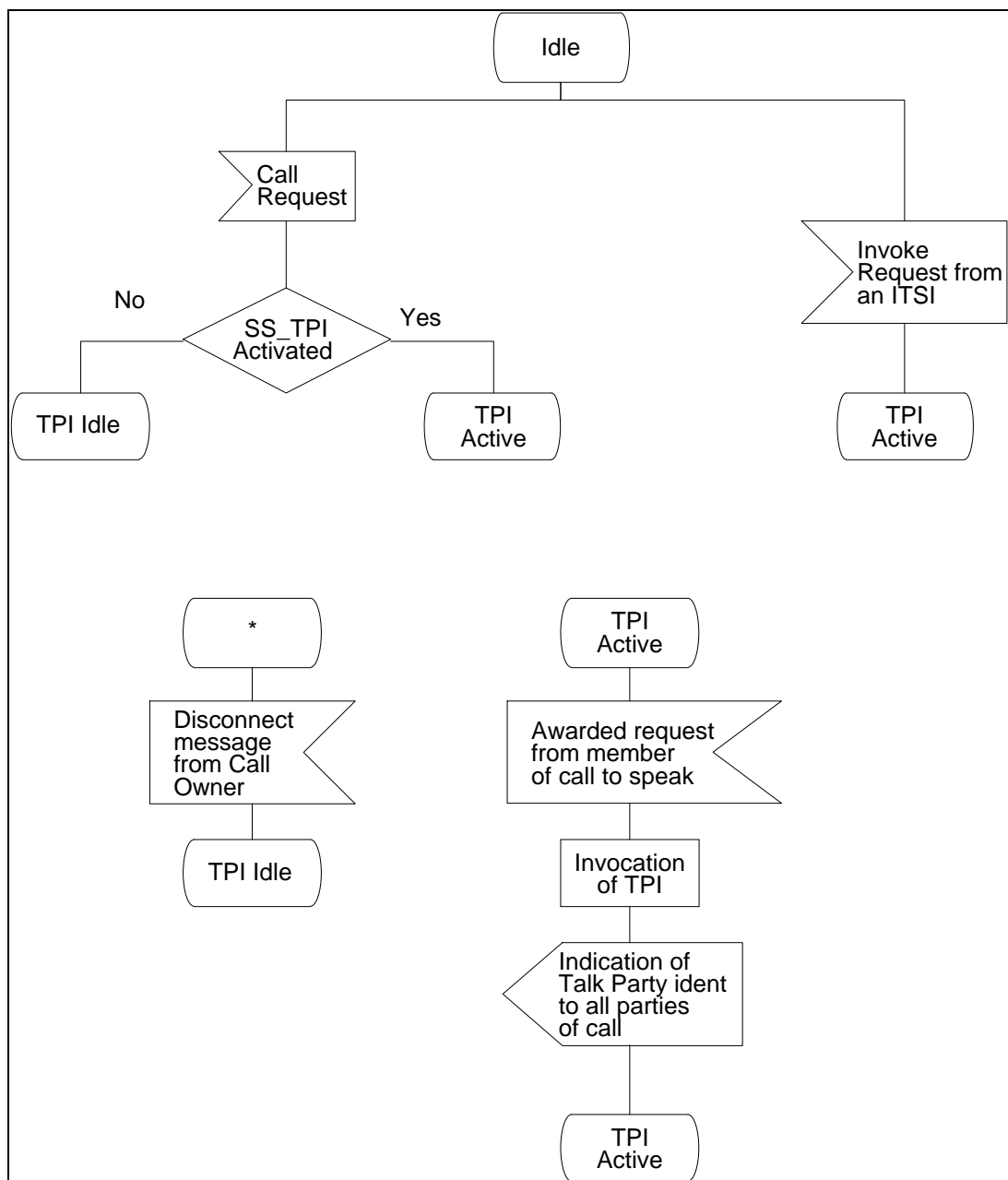


Figure 1: SS-TPI, Overall SDL

History

Document history			
November 1994	Public Enquiry	PE 73:	1994-11-07 to 1995-03-03
December 1995	Vote	V 94:	1995-12-27 to 1996-02-16
April 1996	First Edition		