ETSI EN 300 392-12-10 V1.1.1 (2001-05)

European Standard (Telecommunications series)

Terrestrial Trunked Radio (TETRA);
Voice plus Data (V+D);
Part 12: Supplementary services stage 3;
Sub-part 10: Priority Call (PC)

ETSI

Reference
DEN/TETRA-03A-12-10

Keywords
radio, tetra

ETSI

650 Route des Lucioles
F-06921 Sophia Antipolis Cedex - FRANCE

Tel.: +33 4 92 94 42 00   Fax: +33 4 93 65 47 16

Siret N° 348 623 562 00017 - NAF 742 C
Association à but non lucratif enregistrée à la
Sous-Préfecture de Grasse (06) N° 7803/88

Important notice

Individual copies of the present document can be downloaded from:
http://www.etsi.org

The present document may be made available in more than one electronic version or in print. In any case of existing or perceived difference in contents between such versions, the reference version is the Portable Document Format (PDF). In case of dispute, the reference shall be the printing on ETSI printers of the PDF version kept on a specific network drive within ETSI Secretariat.

Users of the present document should be aware that the document may be subject to revision or change of status. Information on the current status of this and other ETSI documents is available at http://www.etsi.org/tb/status/

If you find errors in the present document, send your comment to:
editor@etsi.fr

Copyright Notification

ETSI

Contents

Intellectual Property Rights

IPRs essential or potentially essential to the present document may have been declared to ETSI. The information pertaining to these essential IPRs, if any, is publicly available for **ETSI members and non-members**, and can be found in ETSI SR 000 314: *"Intellectual Property Rights (IPRs); Essential, or potentially Essential, IPRs notified to ETSI in respect of ETSI standards"*, which is available from the ETSI Secretariat. Latest updates are available on the ETSI Web server (http://www.etsi.org/ipr).

Pursuant to the ETSI IPR Policy, no investigation, including IPR searches, has been carried out by ETSI. No guarantee can be given as to the existence of other IPRs not referenced in ETSI SR 000 314 (or the updates on the ETSI Web server) which are, or may be, or may become, essential to the present document.

Foreword

This European Standard (Telecommunications series) has been produced by ETSI Project Terrestrial Trunked Radio (TETRA).

The present document had been submitted to Public Enquiry as ETS 300 392-12-10. During the processing for Vote, it was converted into an EN.

The present document is part 12 of a multi-part deliverable covering Voice plus Data (V+D), as identified below:

Part 1: "General network design";

Part 2: "Air Interface (AI)";

Part 3: "Interworking at the Inter-System Interface (ISI)";

Part 4: "Gateways basic operation";

Part 5: "Peripheral Equipment Interface (PEI)";

Part 6: "Line connected Stations (LS)";

Part 7: "Security";

Part 9: "General requirements for supplementary services";

Part 10: "Supplementary services stage 1";

Part 11: "Supplementary services stage 2";

Part 12: **"Supplementary services stage 3";**

Part 13: "SDL model of the Air Interface (AI)";

Part 14: "Protocol Implementation Conformance Statement (PICS) proforma specification;

TS 100 392-15: "TETRA frequency bands, duplex spacings and channel numbering".

National transposition dates	
Date of adoption of this EN:	25 May 2001
Date of latest announcement of this EN (doa):	31 August 2001
Date of latest publication of new National Standard or endorsement of this EN (dop/e):	28 February 2002
Date of withdrawal of any conflicting National Standard (dow):	28 February 2002

1 Scope

The present document defines the stage 3 specifications of the Supplementary Service Priority Call (SS-PC) for the Terrestrial Trunked RAdio (TETRA).

The SS-PC enables a user to have preferential access to the network resources in the TETRA system in times of congestion. The SS-PC applies for the basic services: circuit mode calls (speech or data). The SS-PC specifies the definition, activation, deactivation and interrogation for the usage of low and high call priorities in the TETRA system. The operations are defined for the Switching and Management Infrastructure (SwMI), for the Mobile Station (MS) and for the Line Station (LS). SS-PC can be defined to subscribers of one TETRA system, but the subscribers can be located in several TETRA systems and the information flows can be delivered over the Inter System Interface (ISI). SS-PC can also be invoked for basic services within one TETRA system or for basic services that extend over ISI to several TETRA systems.

The pre-emptive priorities are outside of the scope of the present document.

Man-Machine Interface (MMI) and Charging principles are outside the scope of the present document.

Supplementary Service stage 3 specification is preceded by the stage 1 and the stage 2 specifications of the service. Stage 1 describes the functional capabilities from the user's point of view. Stage 2 defines the functional behaviour in terms of Functional Entities (FEs) and information flows. Stage 3 gives a precise description of the Supplementary Service from the implementation point of view. It defines the protocol for the service and the encoding rules for the information flows. It defines the processes for the functional entities and their behaviour. The described protocols and behaviour apply to the SwMI, for the MS and for the LS and can be applied over the ISI between TETRA systems. Aspects relating to all supplementary services are detailed in ETS 300 392-9 [2].

2 References

The following documents contain provisions which, through reference in this text, constitute provisions of the present document.

- References are either specific (identified by date of publication and/or edition number or version number) or non-specific.

- For a specific reference, subsequent revisions do not apply.

- For a non-specific reference, the latest version applies.

[1]   ETSI EN 300 392-2 (V2.3.2): "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 2: Air Interface (AI)".

[2]   ETSI ETS 300 392-9: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 9: General requirements for supplementary services".

[3]   ETSI ETS 300 392-1: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 1: General network design".

[4]   ITU-T Recommendation Z.100: "Specification and Description Language (SDL)".

[5]   ISO/IEC 11574 (2000): "Information technology - Telecommunications and information exchange between systems - Private Integrated Services Network - Circuit-mode 64 kbit/s bearer services - Service description, functional capabilities and information flows".

[6]   ETSI ETS 300 392-3-1: "Terrestrial Trunked Radio (TETRA); Voice plus Data (V+D); Part 3: Interworking at the Inter-System Interface (ISI); Sub-part 1: General design".

3 Definitions and abbreviations

3.1 Definitions

For the purposes of the present document, the following terms and definitions apply:

authorized user: user who is authorized to define, activate, deactivate and interrogate the SS-PC

Functional Entity (FE): specifies the functional characteristics of the SS sub-entity within an MS, a LS or a SwMI related to an SS-PC action, e.g. management or operational functions of SS-PC

home system: TETRA system to which the subscriber identity is permanently defined

management functions: management trunked functions for SS-PC are definition, activation, deactivation and interrogation

priority level: pre-agreed value allocated to each mobile Individual TETRA Subscriber Identity (ITSI) or Group TETRA Subscriber Identity (GTSI) on a per call basis
It is used to determine priority access to network resources in the event of network congestion.

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.

system 1: TETRA system to which SS-PC is defined, activated, deactivated and interrogated and in which SS-PC can be invoked and operated

system 2: TETRA system through which SS-PC definition, activation, deactivation and interrogation can be delivered. SS-PC can also be invoked and operated in System 2

user A: calling party which invokes SS-PC

user B: called party in a call in which SS-PC is operated

3.2 Abbreviations

For the purposes of the present document, the following abbreviations apply:

CC   basic service Call Control functional entity
CCA   basic service Call Control functional entity Agent
NOTE 1: CC and CCA are applied as defined in ISO/IEC 11574 [5].

GTSI   Group TETRA Subscriber Identity
ITSI   Individual TETRA Subscriber Identity
LS   Line Station
MS   Mobile Station
SDL   Specification and Description Language
SS   Supplementary Service
NOTE 2: The abbreviation SS is only used when referring to a specific supplementary service.

SS-PC   Priority Call
SwMI   Switching and Management Infrastructure
TETRA   Terrestrial Trunked Radio

4   SS-PC stage 3 specification

4.1   General

This clause describes the SS-PC services offered by Supplementary Service (SS) and call control sub entities of CMCE of the TETRA voice plus data layer 3 service boundary in the MS/LS. The SS-PC services shall be offered at the Supplementary Services service access point (TNSS-SAP), the Call Control services Service Access Point (TNCC-SAP). The SS-PC services described in this clause shall be applicable for the MS and the LS.

   NOTE: The SS-PC services within the SwMI are outside the scope of the present document.

The SS-PC services specified in the present document shall complement the Supplementary services and Call control services specified in EN 300 392-2 [1] clause 12 and 11 respectively and the Supplementary Services general design standard ETS 300 392-9 [2]. The SS-PC services shall act as sub-services within the general Supplementary services and Call control services.

SS-PC shall be an optional supplementary service for TETRA voice plus data layer 3. If SS-PC is supported, this clause shall specify the services and their availability.

4.2   SS-PC services offered over the TNSS-SAP

When the optional SS-PC definition, user definition, activation, deactivation and interrogation -indication are supported, they shall be provided at TNSS-SAP.

   NOTE: As the present document only deals with the SS-PC all the service primitives have been shown without a TNSS-PC-prefix e.g. the TNSS-PC-ASSIGN request is shorten into an ASSIGN request.

The SS-PC primitives for the user A (FE1) at the MS/LS TNSS-SAP shall be:

   a) INTERROGATE request;

   b) INTERROGATE indication;

   c) ASSIGN indication;

   d) ASSIGN response.

The SS-PC primitives for the authorized user (FE3) at the MS/LS TNSS-SAP shall be:

   a) DEFINE request;

   b) DEFINE indication;

   c) INTERROGATE request;

   d) INTERROGATE indication.

The activation and deactivation shall be done with the DEFINE request; the acknowledgement for activation and deactivation shall be done with DEFINE indication.

The information contained in the following primitive description tables correspond to the following key:

   -   Remark: comment;

   -   C: conditional;

   -   O: optional;

   -   M: mandatory.

4.2.1 DEFINE request

DEFINE request primitive shall be offered from the user application to FE3 over TNSS-SAP. The primitive shall contain the SS-PC parameters listed in table 1.

The definition process may support a single individual subscriber or to a range or list of individual subscribers. The definition may also be made to one group or to a range or list of groups.

Table 1: DEFINE request contents

Parameter	Request	Remark
Subscriber identity	M	repeatable
Activated/deactivated	M	(see note 1)
Basic Services	M	repeatable
High priority value	O	Repeatable (see note 2)
Low priority value	O	Repeatable (see note 2)
Delivered to user A(s)	M	
Acknowledgement from user A(s)	C	(see note 3)
NOTE 1: Shall be used to indicate whether or not this PDU is used to activate a new PC value or to deactivate an existing PC value. When a PC value is deactivated, a pre-programmed default value may then apply.		
NOTE 2: It is not necessary to define both High and Low priority values. A missing high priority shall assume the same value as the low priority value while a missing low priority shall assume the lowest possible priority value.		
NOTE 3: Conditional on the information element "Delivered to user A(s)".		

4.2.2 DEFINE indication

DEFINE indication primitive shall be offered from FE3 to the user application over TNSS-SAP as an acknowledgement to a previously made definition request. The primitive shall contain the SS-PC parameters listed in table 2.

The parameters shall be interpreted as described for DEFINE request.

However, the Result for definition(s) parameter shall indicate the result for all listed subscriber numbers and all basic service types.

NOTE 1: If the acknowledgements are different for different Subscriber identities, FE3 may deliver several DEFINE indication primitives to the user application.

NOTE 2: If the Result for definition/activation/deactivation is "accepted, but some values changed by SwMI", the interrogation can be used to interrogate the values.

Table 2: DEFINE indication contents

Parameter	Indication	Remark
Subscriber identity	M	repeatable
Activated/deactivated	M	
Result for definition	M	repeatable

4.2.3   ASSIGN indication

ASSIGN indication primitive shall be offered from FE1 to the user application over TNSS-SAP. The primitive shall contain the SS-PC parameters listed in table 3.

The parameters shall be interpreted as described for DEFINE request.

FE1 shall only consider definitions made to user A's subscriber number or to a group number of which the subscriber is a member.

Table 3: ASSIGN indication contents

Parameter	Indication	Remark
Subscriber identity	M	
Activated/deactivated	M	
Basic Services	M	repeatable
High priority value	O	repeatable (see note 1)
Low priority value	O	repeatable (see note 1)
Acknowledgement from user A(s)	M	(see note 2)
NOTE 1: It is not necessary to define both High and Low priority values. A missing high priority shall assume the same value as the low priority value while a missing low priority shall assume the lowest possible priority value.		
NOTE 2: Parameter shall indicate, if FE1 shall acknowledge the reception of the definition.		

4.2.4   ASSIGN response

ASSIGN response primitive shall be offered from user application to FE1 over TNSS-SAP as an acknowledgement to a previously received ASSIGN request, if acknowledgement was requested. The primitive shall contain the SS-PC parameters listed in table 4.

The parameters shall be interpreted as described for DEFINE request/indication.

Table 4: ASSIGN response contents

Parameter	Response	Remark
Subscriber identity	M	
Activated/deactivated	M	
Basic Services	M	repeatable
Low priority value	O	repeatable
High priority value	O	repeatable
Result for definition	M	repeatable

4.2.5   INTERROGATE request

INTERROGATE request primitive shall be offered from -the user application to FE1 or FE3 over the TNSS-SAP. The primitive shall be used to interrogate SS-PC definitions. INTERROGATE request primitive shall contain the SS-PC parameters listed in table 5.

The parameters shall be interpreted as described for DEFINE request.

Table 5: INTERROGATE request contents

Parameter	Request	Remark
Subscriber identity	M	repeatable

4.2.6   INTERROGATE indication

INTERROGATE indication primitive shall be offered from FE3 or FE1 to the user application over the TNSS-SAP as a response to a previously sent interrogation request. INTERROGATE indication primitive shall contain the SS-PC parameters listed in table 6.

The parameters shall be interpreted as described for DEFINE request.

If the Subscriber identity parameter is repeated, the definition(s) shall be valid for all given numbers. The Delivered to user A(s) and Acknowledgement from user A(s) parameters shall indicate if these have been requested with the last successful definition request. The Result for interrogation shall indicate, if the definition has been distributed to user A(s) and if user A(s) have acknowledged the distribution.

NOTE: If definitions/responses are different for different Subscriber identity parameters FE3 may send several INTERROGATE confirm primitives to the user application.

Table 6: INTERROGATE indication contents

Parameter	Indication	Remark
Subscriber identity	M	repeatable
Result for interrogation	M	
Activated/deactivated	C	see note
Basic Services	C	repeatable
High priority value	C	repeatable
Low priority value	C	repeatable
Delivered to user A(s)	C	MS/LS-subscribers, note
Acknowledgement from user A(s)	C	see note
NOTE: The parameter appears only if the "Result for interrogation" has the value "accepted", "accepted but request to user A(s) pending in the SwMI" or "accepted, but user A(s) could not accept the request/ user A(s) was not reached".		

4.3   SS-PC services offered over the TNCC-SAP

When the SS-PC invocation and operation are supported they shall be provided at TNCC-SAP.

4.3.1   PRIORITY1 request - SS-PC invocation

PRIORITY1 shall act as the invocation of SS-PC and the invoked SS-PC priority shall be included within the TNCC-SETUP request primitive offered over the TNCC-SAP.

The service user, e.g. user A, invokes SS-PC by requesting a certain SS-PC priority with a call invocation. The user application may verify that the priority is within the allowed range and if not, change it, before passing the priority to CC. The user application shall pass the invoked Call priority within TNCC-SETUP to CC.

4.3.2   PRIORITY2 confirm/indication - SS-PC operation

PRIORITY2 shall act as the operation of SS-PC and the SwMI shall send the applied SS-PC priority to user A and user B(s). The CC within user A and B(s) shall include the received SS-PC priority to the TNCC-SETUP confirm and indication primitives and offer them over TNCC-SAP to the user application. The user application may indicate the SS-PC priority to the service user.

4.4   Void

4.5   Parameter descriptions

- Acknowledgement from user A(s) =

  - acknowledgement requested from user A(s);

  - acknowledgement not requested from user A(s).

- Activated/Deactivated =

  - Activated;

  - Deactivated.

- Basic services =

  - all applicable basic services (circuit mode speech and circuit mode data);

  - circuit mode speech;

  - circuit mode data;

  - packet mode data (connection-oriented).

- Delivered to user A(s) =

  - delivered;

  - not delivered.

- High priority value =

  - predefined priority;

  - lowest priority 1;

  - ....

  - highest priority 11.

- Low priority value

  - see high priority value.

- Result for definition =

  - accepted by SwMI/MS;

NOTE 1: Accepted by SwMI is applicable for DEFINE indication; accepted by MS is applicable for ASSIGN response.

  - accepted but some priority values changed by SwMI;

  - user A could not accept the request/user A was not reached;

NOTE 2: User A can be referring to several user As.

- request failed for any reason;

- user not authorized;

- unknown TETRA identity;

- parameters not valid;

- insufficient information.

- Result for interrogation =

- accepted;

- accepted but request pending in SwMI to user A(s);

- accepted but user A(s) could not accept the request/ user A(s) was not reached;

- SS-PC not defined for the given identity;

- request failed for any reason;

- user not authorized;

- unknown TETRA identity;

- parameters not valid.

- Subscriber identity =

- TETRA Subscriber Identity (TSI) = Short Subscriber Identity (SSI) + Mobile Country Code (MCC) + Mobile Network Code (MNC), see ETS 300 392-1 [3], clause 7.

5 SS-PC protocol description

5.1 General

This clause defines together with clause 6 the layer 3 SS-PC specific CMCE air interface protocol for the MS and the LS. SS-PC protocol defines the SS-PC specific protocol for Supplementary Service sub-entity and call control sub-entity within CMCE. The SS-PC specification shall be normative for the MS and the LS.

The protocol in this clause shall complement the CMCE protocol described in EN 300 392-2 [1], clauses 14 and 14.5.5 excluded, with the SS-PC specific protocol actions.

5.2 SS-PC protocol states

The normal SS-PC protocol states are described below.

5.2.1   Protocol states of FE1

The capability to receive, save and acknowledge -SS-PC definitions and interrogation request shall be an optional feature within an MS/LS. The state definitions given for the reception and acknowledgement of SS-PC definitions and interrogation in this clause shall apply only, if the feature is supported.

State IDLE shall be the normal state of FE1. In the state IDLE FE1 shall:

-   upon reception of an SS-PC definition request indicating activation from the SwMI, FE1 shall pass the request to the user application;

-   upon reception of an SS-PC definition request indicating deactivation from the SwMI, FE1 shall pass the request to the user application;

-   upon reception of an SS-PC definition acknowledgement from the user application, FE1 shall send it to the SwMI;

-   upon reception of an SS-PC interrogation request from the user application, FE1 shall send it to the SwMI;

-   upon reception of an SS-PC interrogation response from the SwMI, FE1 shall pass it to the user application.

5.2.2   Protocol states of CCA to which FE1 is collocated

5.2.2.1   State IDLE

CCA to which FE1 is collocated shall be able to receive call invocation requests including the SS-PC invocation (priority) from the user application. The requested priority shall be sent to SwMI with the call invocation request.

5.2.2.2   MO_CALL_SETUP

At the reception of the call set-up confirmation, CCA should give the priority to the user application.

   NOTE: It is possible that the SwMI has changed the SS-PC priority.

5.2.3   Protocol states of FE21

The capability to receive, save and acknowledge SS-PC definitions and interrogation request shall be an optional feature within FE21. The state definitions given for the reception and acknowledgement of SS-PC definitions and interrogation in this clause shall apply only, if the feature is supported.

5.2.3.1   State IDLE

State IDLE shall be the normal state of FE21. In the state IDLE FE21 shall:

-   upon reception of an SS-PC definition request indicating SS-PC activation, FE21 shall save the SS-PC definition in the SwMI, if the request is valid and authorized, FE21 shall acknowledge the SS-PC definition request to FE3;

-   if FE21 was requested to send the SS-PC definitions to FE1(s), FE21 should send the definitions to FE1s;

-   upon reception of an SS-PC definition request indicating SS-PC deactivation, the SS-PC definition for the indicated subscriber identity (ies) shall be removed. A default SS-PC value may then apply for the subscriber identity(ies);

-   upon reception of an SS-PC interrogation request from FE1 or FE3, FE21 should send the response to the request to FE1 or FE3 respectively.

FE21 shall apply the SS-PC definition-activation and define-deactivation from the moment it is made.

5.2.4 Protocol states of CC to which FE21 is collocated

The protocol states of CC to which FE21 is collocated shall carry the following tasks:

- start the call set-up;

- set-up the SS-PC call.

For these actions the corresponding states shall be: ANY-STATE and SETUP-STARTED.

The SETUP-STARTED corresponds to normal continuation of the call set-up.

5.2.4.1 State ANY-STATE

The protocol described for "ANY-STATE" shall refer to any state in which a call set-up request shall be received and the call set-up started.

The functional tasks for the state ANY-STATE shall be:

- upon reception of an SS-PC call invocation, CC shall accept or reject the request;

- if the request is accepted, CC should verify the SS-PC priority;

- CC shall start the set-up procedure for the SS-PC and send D-SETUP with the SS-PC priority to the called party (parties);

- CC shall move to the SETUP-STARTED state.

5.2.4.2 State SETUP-STARTED

CC shall complete the call set-up as described in EN 300 392-2 [1], clause 14. In addition, CC shall send the SS-PC priority within D-CONNECT to FE1.

5.2.5 Protocol states of FE3

State IDLE shall be the normal state of FE3. In the state IDLE FE3 shall:

- upon reception of an SS-PC definition-activation, definition-deactivation or interrogation request from the user application, FE3 shall send it to the SwMI;

- upon reception of an SS-PC definition-activation, definition-deactivation or interrogation responses from the SwMI, FE3 shall pass it to the user application.

5.2.6 Protocol states of visited SwMI FE25

The capability to receive and acknowledge SS-PC definitions and interrogation request shall be an optional feature within FE25. The state definitions given for the reception and acknowledgement of SS-PC definitions and interrogation in this clause shall apply only, if the feature is supported.

IDLE should be the normal state of the visited SwMI FE25, refer ETS 300 392-9 [2]. In this state:

- upon reception of an SS-PC definition-activation, definition-deactivation and interrogation request or response from FE3, FE25 should deliver it to FE21, the home SwMI;

- upon reception of an SS-PC definition-activation, definition-deactivation and interrogation request or response from the home SwMI FE21, FE25 should deliver it to FE3 located in visited SwMI.

5.2.7 Protocol states of CC to which FE25 is collocated

The protocol states of CC to which FE25 is collocated shall carry the following tasks:

- set-up the SS-PC call when requested by FE21.

For these actions the corresponding states shall be: ANY-STATE and SETUP-STARTED.

The SETUP-STARTED corresponds to normal continuation of the call set-up.

5.2.7.1 State ANY-STATE

The protocol described for "ANY-STATE" shall refer to any state in which a call set-up indication shall be received from FE21 and the call set-up started.

The functional tasks for the state ANY-STATE shall be:

- upon reception of an SS-PC call indication CC shall send D-SETUP with the SS-PC priority to the called party (parties);

- CC shall move to the SETUP-STARTED state.

5.2.7.2 State SETUP-STARTED

CC shall complete the call set-up as described in EN 300 392-2 [1], clause 14.

5.2.8 Protocol states of CCA to which FE5 is collocated

5.2.8.1 ANY STATE

The protocol described for "ANY STATE" shall refer to any state in which a call set-up request shall be received and the call set-up started.

The functional tasks for the state ANY STATE shall be: Upon reception of an incoming basic service invocation with SS-PC operation from the SwMI, CCA shall indicate the SS-PC priority to the user application.

5.3 SS-PC Signalling Procedures

The normal SS-PC procedures are described below.

5.3.1 Procedures for FE1

Upon reception of SS-PC interrogation request from the user application, FE1 shall send the request to FE21.

FE1 shall construct the INTERROGATE PDU for the served user according to the user's request. The user may interrogate the defined priority values of:

- one subscriber or group number;

- a list of group numbers.

    NOTE: The served user may only interrogate it's own priority or the priorities of affiliated talkgroups.

FE1 may recognize an ASSIGN PDU received from FE21. The ASSIGN PDU is an optional feature for the MS. If the MS supports the ASSIGN PDU, the defined priorities shall be passed to the user application. If the user application does not find any reason for rejection, FE1 shall send acknowledgement if requested by FE21 in the ASSIGN ACK PDU.

5.3.2   Procedures for FE21

5.3.2.1   Definition in FE21

Upon reception of SS-PC definition request, FE21 if supported shall:

- verify that the request is authorized;

NOTE 1: Only FE3 is allowed to define SS-PC.

- verify that the parameters are in the correct range;

- the parameters in the DEFINE PDU shall be used in the following way:

    - either continue to carry out the request and acknowledge it to FE3, or rejects it and send a rejection to FE3.

NOTE 2: If a definition is requested for a subscriber number range or a list of subscriber numbers, the "Result for definition" can be different for different subscriber.

5.3.2.2   Distribution in FE21

FE21 makes the definition to the SwMI, locates the FE1(s) and the definition request(s) to FE1(s).

FE21 shall construct the SS-PC assign (ASSIGN) Protocol Data Unit (PDU) for user A according to the authorized user's request when this service is supported. FE21 may, however, change the priority values if authorized user has defined values he is not allowed to define. The assignment shall be made to:

- one subscriber or group number;

- a list of group numbers for a subscriber;

- a range of group numbers for a subscriber.

The priority may be defined to have different values for different basic services.

User A (FE1s) may acknowledge the definition request with ASSIGN-ACK, if requested.

5.3.2.3 Interrogation in FE21

FE21 shall fetch the interrogated data in order to send it to FE3 or FE1 when this service is supported.

FE21 shall construct the SS-PC interrogation (INTERROGATE) information elements for authorized user or served user (user A) according to the user's request. The authorized user may interrogate the defined priority value for:

- one subscriber or group number;

- a list of subscriber or group numbers;

- a range of subscriber or group numbers.

The served user (user A) may interrogate the defined priority value for:

- it's own subscriber number;

- one group number;

- a list of group numbers;

- a range of group numbers.

    NOTE: The served user may only interrogate it's own priority or the priorities of affiliated talkgroups.

The SS-PC priority may be defined to have different values for different basic services. All defined values should be included in the INTERROGATE-ACK.

If the user has interrogated the SS-PC for a subscriber number range or list, and if any of the parameters listed below are different for any of these numbers, FE21 should send separate INTERROGATE-ACK flows to FE3 or FE1:

- result for interrogation;

- number of basic service definitions;

- number of basic services;

- basic services;

- priority for the basic service(s).

5.3.3 Procedures for CC to which FE21 is collocated

5.3.3.1 Verification of priority in CC to which FE21 is collocated

CC to which FE21 is collocated should receive call invocation requests including the priority from user A. CC should check the priority and if it finds it valid, should set-up the call using the requested priority.

The SS-PC definition should be applied in the following way, if SS-PC is defined and if the user A invokes SS-PC with the service request:

- the SS-PC definition for user A should be applicable, when user A invokes an individual call;

- the SS-PC definition for a group ID should be applicable, when user A invokes a group call to the defined group identity and user A is a member of the called group;

- optionally, a separate SS-PC definition for a group ID may be applicable, when user A invokes a group call to the defined group identity and user A is **not** a member of the called group.

FE21 may change the requested call priority, if:

- the requested priority was not authorized;

- as an operator option, FE21 may always change the requested priority, e.g. due to congestion, migrated FE1 or activation only know within SwMI.

If the SS-PC call extends to several TETRA systems, FE25 in the terminating SwMI shall not change the SS-PC priority, however, it need not to use this priority for resource allocation of the SS-PC call.

5.3.4   Procedures for FE3

5.3.4.1   Verification in FE3

Upon reception of SS-PC definition or interrogation request from the user application, FE3 shall send the request to FE21.

FE3 shall construct the DEFINE PDU according to the user's request. The definition shall be made to:

- one subscriber or group number;

- a list of subscriber or group numbers;

- a range of subscriber or group numbers.

The authorized user can define different priority values for different basic services, if needed.

FE3 shall construct the -INTERROGATE PDU for authorized user according to the user's request. The user can interrogate the defined priority values of:

- one subscriber or group number;

- a list of subscriber or group numbers;

- a range of subscriber or group numbers.

5.3.5   Procedures for visited SwMI FE25

Refer ETS 300 392-9 [2] and ETS 300 392-3-1 [6].

5.4   PDU Descriptions

The SS-FACILITY and Call priority information element shall be used to convey the supplementary service information to and from the MS/LS and over the ISI. SS-FACILITY information element shall be transported in any call control PDU -or in a D/U-FACILITY PDU. The Call priority information element used for circuit mode basic service operation and invocation shall be conveyed in U/D-SETUP and D-CONNECT PDU. The information element coding used for SS-PC is in accordance with the general rules specified in EN 300 392-2 [1], clause 14.

The information element coding for SS-PC is detailed in the following clauses.

The information contained in the following primitive description tables correspond to the following key:

- Length: length of the information element in bits;

- Type: information element type (1, 2 or 3) described in EN 300 392-2 [1], clause 14;

- C/O/M: conditional/optional/mandatory;

- Remark: comment.

5.4.1 ASSIGN PDU

The ASSIGN PDU shall be used by the SwMI to assign SS-PC values to an affected user or to one of the affected user's group.

A SS-PC value can be assigned per basic service or for all basic services per ASSIGN PDU.

The ASSIGN PDU shall contain the SS-PC information elements listed in table 7.

Table 7: Definition of ASSIGN PDU

Information Element	Length	Type	C/O/M	Value	Remark
SS-Type	6	1	M	011100_2	SS-PC
SS-PC PDU type	5	1	M		ASSIGN
Activated/Deactivated, see note 1	1	1	M	0	Activated
				1	Deactivated
Number of SS-PC definitions	3	1	M		
SS-PC assignment	variable		C		repeatable, see note 2
Acknowledgement from user A(s)	1	1	M	0	Ackn. requested
				1	Do not ackn. requested
NOTE 1: Shall be used to indicate whether or not this PDU is used to activate a new PC value or to deactivate an existing PC value. When a PC value is de-activated, a pre-programmed default value may then apply.					
NOTE 2: Information element shall be repeated as many times as indicated in the Number of SS-PC definitions information element.					

5.4.2 ASSIGN ACK PDU

The ASSIGN ACK PDU shall be used to acknowledge an assign SS-PC request, if acknowledgement was requested in the ASSIGN PDU.

An ASSIGN ACK PDU may be sent for each assigned SS-PC value. If more then one assigned SS-PC value exist in the ASSIGN ACK PDU, then the indicated Result shall apply for all the values.

The ASSIGN ACK PDU shall contain the SS-PC information elements listed in table 8.

Table 8: Definition of ASSIGN ACK PDU

Information Element	Length	Type	C/O/M	Value	Remark
SS-Type	6	1	M	011100_2	SS-PC
SS-PC PDU type	5	1	M		ASSIGN ACK
Activated/Deactivated	1	1	M	0	Activated
				1	Deactivated
Number of SS-PC definitions	2	1	M		
SS-PC assignment			C		see note
Result of definition	3	1	M		
NOTE: Information element shall be repeated as many times as indicated in the Number of SS-PC definitions information element.					

5.4.3   DEFINE

The DEFINE PDU shall be used to define either SS-PC values for individual identities or SS-PC values for group identities by an authorized user, FE3.

DEFINE PDU shall contain the SS-PC information elements listed in table 9.

Table 9: Definition of DEFINE PDU

Information Element	Length	Type	C/O/M	Value	Remark
SS-Type	6	1	M	011100_2	SS-PC
SS-PC PDU type	5	1	M		DEFINE
Range type for subscriber identity	4	1	M		see note 1
Subscriber identity	variable		C		repeatable, see note 2
Activated/Deactivated, see note 3	1	1	M	0	Activated
				1	Deactivated
Number of SS-PC definitions	2	1	M		
SS-PC definition	variable		C		see note 4
Delivered to user A(s)	1	1	M	0	To be delivered
				1	Not to be delivered
Acknowledgement from user A(s)	1	1	M	0	Ackn. requested
				1	Do not ackn. request
NOTE 1: The Range type value, "no element", shall not be applicable for this PDU.					
NOTE 2: Information element shall appear as many times as indicated in the "Range type" information element.					
NOTE 3: Shall be used to indicate whether or not this PDU is used to activate a new SS-PC value or to deactivate an existing SS-PC value. When a SS-PC value is de-activated, a pre-programmed default value may then apply.					
NOTE 4: Information element shall be repeated as many times as indicated in the Number of SS-PC definitions information element.					

5.4.4   DEFINE-ACK

DEFINE ACK PDU shall contain the SS-PC information elements listed in table 10.

   NOTE: If the Result is different for different Subscriber identities, FE21 shall send several DEFINE ACKs to FE3.

Table 10: DEFINE-ACK PDU contents

Information Element	Length	Type	C/O/M	Value	Remark
SS-Type	6	1	M	011100_2	SS-PC
SS-PC PDU Type	5	1	M		DEFINE ACK
Range type for subscriber identity	4	1	M		
Subscriber identity	variable		C		repeatable, see note
Activated/Deactivated	1	1	M	0	Activated
				1	Deactivated
Result for definition	3	1	M		
NOTE: Information element shall be conditional and appear as many times as indicated in the "Range type" information element.					

5.4.5 INTERROGATE

INTERROGATE PDU shall contain the SS-PC information elements listed in table 11.

Table 11: Definition of INTERROGATE PDU

Information Element	Length	Type	C/O/M	Value	Remark
SS-Type	6	1	M	011100_2	SS-PC
SS-PC PDU type	5	1	M	0011_2	Interrogation
Range type for subscriber identity	4	1	M		
Subscriber identity	variable		C		repeatable, see note
NOTE: Information element shall be conditional and appear as many times as indicated in the "Range type" information element.					

5.4.6 INTERROGATE-ACK

INTERROGATE-ACK PDU shall contain the SS-PC information elements listed in table 12.

NOTE: If definitions/responses are different for different Subscriber identity information elements, FE21 shall send several INTERROGATE-ACKs to FE1/FE3.

Table 12: INTERROGATE-ACK PDU contents

Information Element	Length	Type	C/O/M	Value	Remark
SS-Type	6	1	M	011100_2	SS-PC
SS-PC PDU type	5	1	M	0011_2	Interrogation
Range type for subscriber identity	4	1	M		
Subscriber identity	variable		C		repeatable, see note 1
Result for interrogation	3	1	M		
Activated/Deactivated, see note 2	1		C	0	Activated
				1	Deactivated
Number of SS-PC definitions	2		C		see note 2
SS-PC definition			C		see note 3
Delivered to user A(s), see note 2	1		C	0	Delivered
				1	Not delivered
Acknowledgement from user A(s), see note 2	1		C	0	Ackn. requested
				1	Ackn. not requested
NOTE 1: Information element shall be conditional and appear as many times as indicated in the "Range type" information element.					
NOTE 2: Information element shall be conditional on the value of Result for interrogation. The information element shall be present if the value is accepted; accepted, but request pending in SwMI to user A(s); accepted, but user A(s) could not accept the request/user A(s) not reached.					
NOTE 3: Information element shall be repeated as many times as indicated in the Number of SS-PC definitions information element.					

5.4.7 Priority 1 and Priority 2

5.4.7.1 D-CONNECT PDU

D-CONNECT PDU shall contain the information elements defined in EN 300 392-2 [1], clause 14. The Call priority information element coding is described in clause 5.5.2.

5.4.7.2 D-SETUP

D-SETUP PDU shall contain the information elements defined in EN 300 392-2 [1], clause 14. The Call priority information element coding is described in clause 5.5.2.

5.4.7.3   U-SETUP

U-SETUP PDU shall contain the information elements defined in EN 300 392-2 [1], clause 14. The Call priority information element coding is described in clause 5.5.2.

5.4.8   Void

5.5   Information element coding

This clause shall specify the information element coding for the information elements within the PDUs defined in clause 5.4.

5.5.1   Basic Service

Basic service(s) shall indicate the basic service(s) to which the high and low priority values are defined. Basic service information element is described in table 13.

All applicable basic services shall comprise of circuit mode speech and circuit mode data.

Table 13: Basic services contents

Information Element	Length	Value	Remarks
Basic service	3	000_2	all applicable basic services
		001_2	circuit mode speech
		010_2	circuit mode data
		100_2	reserved
		101_2	reserved
		110_2	reserved
		111_2	reserved

5.5.2   Call priority

See high priority value.

5.5.3 High priority value

High priority shall indicate the numeric value for the call priority for circuit mode basic service.

The priority shall be defined as the highest value for the high priority calls.

High priority value element is described in table 14.

Table 14: High priority value contents

Information Element	Length	Value	Remarks
High priority value	4	0000_2	Priority not defined, see note
		0001_2	1
		0010_2	2
		0011_2	3
		0100_2	4
		0101_2	5
		0110_2	6
		0111_2	7
		1000_2	8
		1001_2	9
		1010_2	10
		1011_2	11
		1100_2	- (pre-emptive; not used for SS-PC)
		...	etc.
		1111_2	- (pre-emptive; not used for SS-PC)
NOTE: This value shall be used, when this PDU does not define priority.			

5.5.4   Low priority value

See high priority value.

The priority shall be defined as the highest value for the low priority calls.

5.5.5 Number of SS-PC definitions

The Number of SS-PC definitions information element shall indicate how many Basic service and SS-PC priority information elements shall follow in the PDU. Number of SS-PC definition information element is described in table 15.

Table 15: Number of SS-PC definitions contents

Information Element	Length	Value	Remarks
Number of SS-PC definitions	3	000_2	Reserved
		001_2	1
		010_2	2
		011_2	3
		100_2	Reserved
		101_2	Reserved
		110_2	Reserved
		111_2	Reserved

5.5.6   Range type

The Range type information element shall indicate how many Subscriber identity information elements shall follow in the PDU and how the information elements shall be interpreted, i.e. single identity, list of identities or a range of identities. The generic definition of the information element range type in ETS 300 392-9 [2] applies, with the restriction that due to the way that information element is used in the present document, its value shall never be equal to 0.

In case of range, first and last information element of the range shall be given and the definition shall be requested to all subscriber numbers within the range including the first and last information element of the range.

5.5.7   Result for definition

Result for definition shall indicate whether the previously made definition request was successful or unsuccessful. Result for definition information element is described in table 16.

Table 16: Result for definition contents

Information Element	Length	Value	Remark
Result for definition	3	000_2	accepted by SwMI or accepted by MS, see note
		001_2	accepted but SS-PC priority values changed, see note
		010_2	users A(s) could not accept the request/ user A(s) was not reached, see note
		011_2	request failed for any reason
		100_2	user not authorized, see note
		101_2	unknown TETRA identity
		110_2	parameters not valid
		111_2	insufficient information
NOTE: The following definition results only apply for the SwMI: "accepted by SwMI", "accepted but SS-PC priority values changes", "user A(s) was not reachable" and "user not authorized".			

5.5.8   Result for interrogation

Result for interrogation shall indicate whether the previously made interrogation request was successful or unsuccessful. Result for interrogation information element is described in table 17.

Table 17: Result for interrogation contents

Information Element	Length	Value	Remark
Result for interrogation	3	000_2	accepted
		001_2	accepted, but one or more affected users could not accept the request/accepted, but one or more affected users where not reached
		010_2	SS-PC not defined for the given identity
		011_2	request failed for any reason
		100_2	user not authorized
		101_2	unknown TETRA identity
		110_2	parameters not valid
		111_2	Reserved

5.5.9   SS-PC assignment

This information element is used to assign a SS-PC value for the indicated basic service.

Table 18: SS-PC assignment contents

Parameter	Length	Type	C/O/M	Remark
Basic service	3	1	M	
High priority value	4	1	O	see note
Low priority value	4	1	O	see note
NOTE: It is not necessary to define both High and Low priority values. A missing high priority shall assume the same value as the low priority value while a missing low priority shall assume the lowest possible priority value.				

The high priority value and low priority value constitutes two priority ranges available for the specified individual or group. Only the highest value of each range is defined.

The lowest definable value for the low priority range shall be the lowest possible priority value (0). The highest definable value for the low priority range shall be the highest value of the priority range (11).

The lowest definable value for the high priority range shall be the lowest non-low priority value defined. The highest definable value for the high priority range shall be the highest value of the priority range (11).

The defined high and low values should be used as the default value for the high and low range.

   NOTE: If a high priority value is defined to value 8 and a low priority value is defined to value 3:

-          the high priority range will then exist from four to eight, eight being the default value for the high range,

-          while the low priority range will exist from zero to three, three being the default value for the low priority range.

5.5.10   SS-PC definition

See SS-PC assignment contents.

5.5.11   SS-PC PDU type

The SS-PC PDU type information element shall indicate the type of the action as described in table 19.

Table 19: SS-PC PDU type contents

Information Element	Length	Value	Remark
SS-PC PDU type	5	00000_2	Defined in ETS 300 392-9 [2]
		00001_2	Defined in ETS 300 392-9 [2]
		00010_2	Defined in ETS 300 392-9 [2]
		00011_2	Defined in ETS 300 392-9 [2]
		00100_2	Defined in ETS 300 392-9 [2]
		00101_2	DEFINE
		00110_2	DEFINE ACK
		00111_2	ASSIGN
		01000_2	ASSIGN ACK
		01001_2	Reserved
		01010_2	Reserved
		01011_2	Reserved
		01100_2	Reserved
		01101_2	INTERROGATE
		01110_2	INTERROGATE ACK
		01111_2	Reserved
		10000_2	Reserved
		10001_2	Reserved
		…	etc.
		11111_2	Reserved

5.5.12   Subscriber extension present

The Subscriber extension present information element shall indicate whether the MNI part of the TSI address of the subscriber is present in the PDU. The information element shall be as defined in table 20.

Table 20: Subscriber extension information element contents

Information element	Length	Value	Remark
Subscriber extension present	1	0	No group extension present
		1	Subscriber extension present

5.5.13   Subscriber identity

The Subscriber identity information element shall define a TSI. The Subscriber identity information element is described in table 21.

Table 21: Subscriber identity contents

Information Element	Length	Type	C/O/M	Remark
Short subscriber identity, SSI	24	1	M	See ETS 300 392-1 [3], clause 7
Subscriber extension present	1	1	M	
Mobile Network Identity, MNI	24	2	C	See ETS 300 392-1 [3], clause 7

6   SS-PC FE behaviour

The figures contained in this clause are intended to illustrate typical SS-PC specific FE behaviour in terms of information flows sent and received.

> NOTE: The intention of the figures in this clause is to describe the functionality of SS-PC and the call related information flows are not complete, e.g. all the call set-up or call release primitives and PDUs are not included in the figures.

The behaviour of each FE is shown using the (Functional) Specification and Description Language (SDL) defined in ITU-T Recommendation Z.100 [4]. Notice, however, that due to simplicity there are deviations from syntactical rules.

The convention used in the figures below is that output signals to the left represent information flows towards the user and output signals to the right represents information flows towards the SwMI part of the PC function. Input signals from the left represent information from the user and input signals from the right represent information flows from the central part of the SwMI.
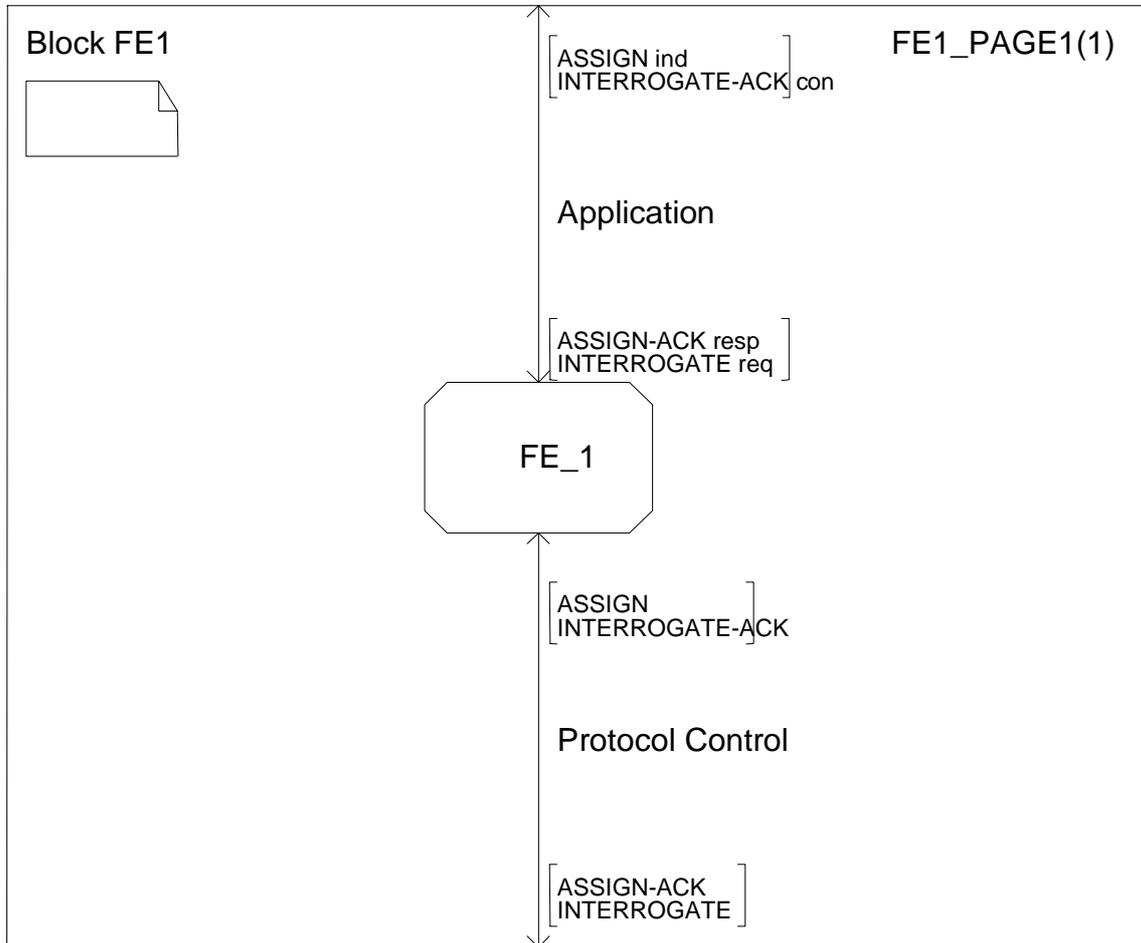
FE1 refers to a block and FE_1 refers to a process in the figures below.

The invocation and operation of SS-PC is only shown for circuit mode basic service.

6.1   Behaviour of FE1 (SS entity of user A)

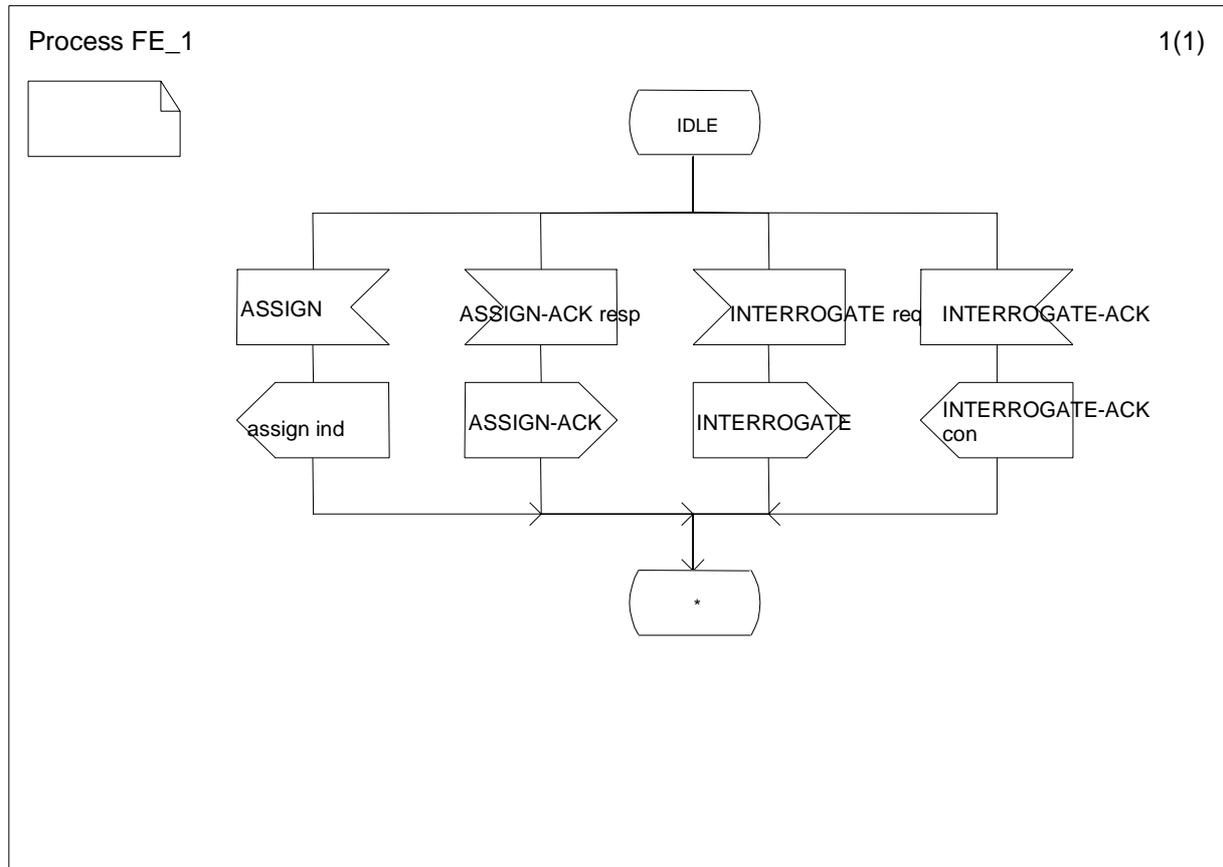## 6.1.1   Service interaction for FE1

Service interaction for FE1 is shown in figure 1.

Figure 1: Service interaction for FE1

6.1.2   Process description for FE1

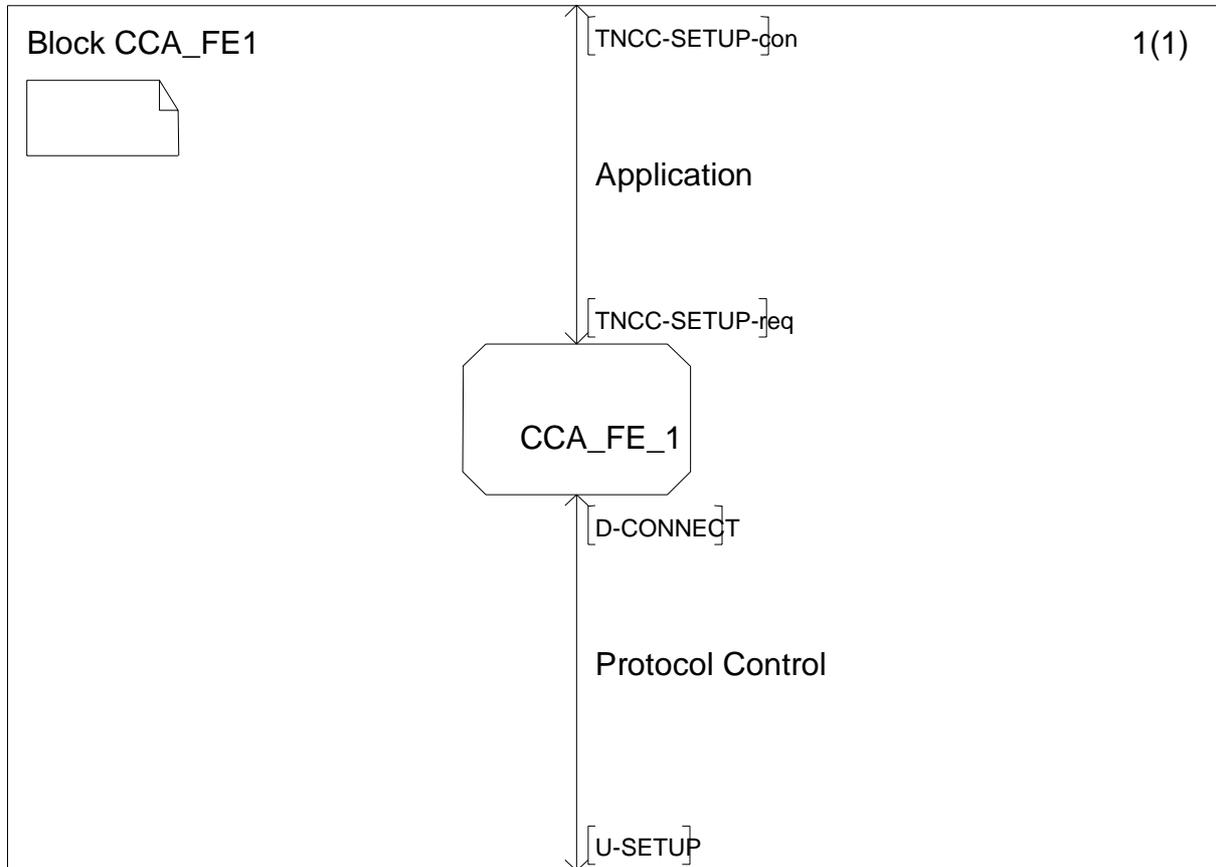Process description of FE1 is shown in figure 2.

Figure 2: Process description for FE1

6.2   Behaviour of CCA to which FE1 is collocated

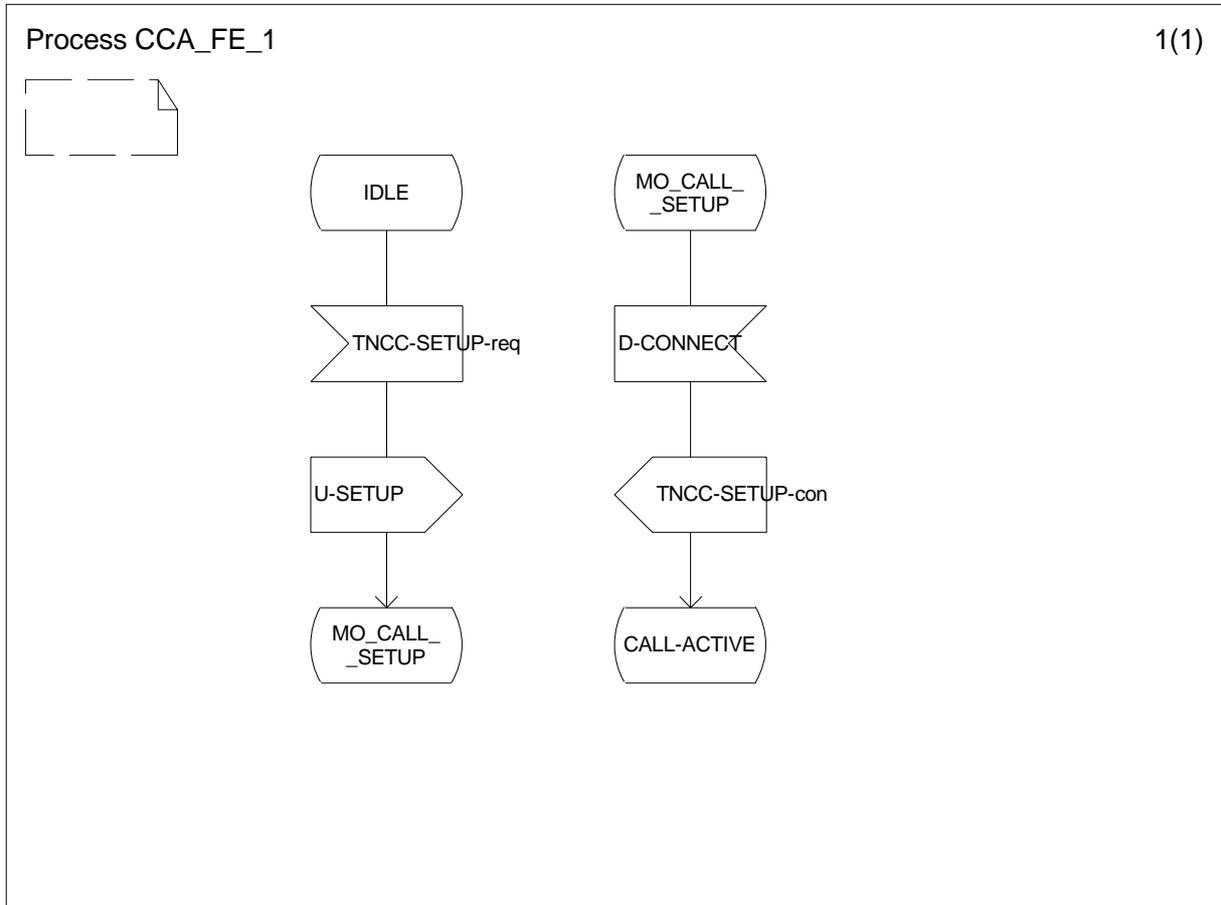## 6.2.1   Service interaction for CCA to which FE1 is collocated

Service interaction for CCA to which FE1 is collocated is shown in figure 3.

Figure 3: Service interaction for CCA to which FE1 is collocated

6.2.2 Process description for CCA to which FE1 is collocated

Process description for CCA to which FE1 is collocated is shown in figure 4.
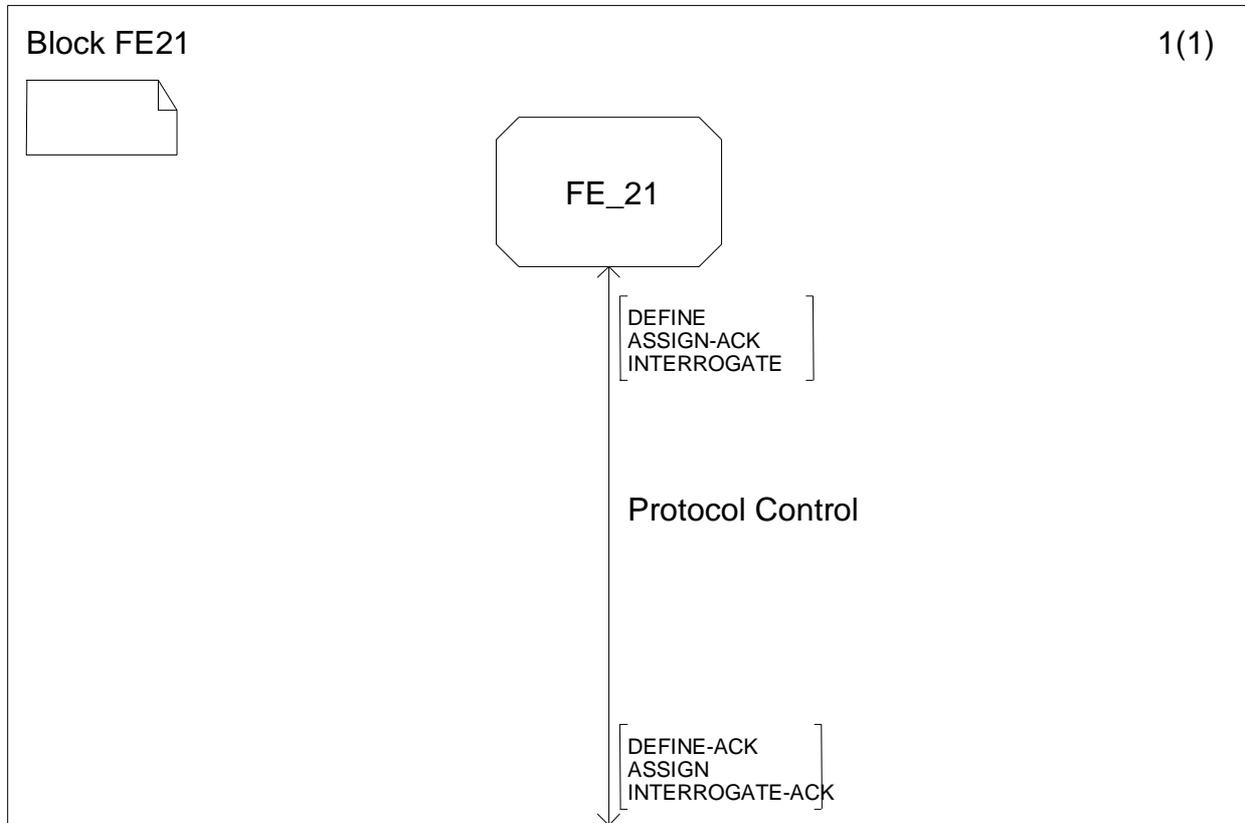

Figure 4: Process description for CCA to which FE1 is collocated

6.3   Behaviour of FE21

6.3.1   Service interaction for FE21

Service interaction for FE21 is shown in figure 5.

Figure 5: Service interaction for FE21

6.3.2   Process description for FE21

Process descriptions for FE21 state IDLE-- is shown in figure 6.

Define Information Flow:

The element "subscriber identity" shall be repeated if this is indicated in the element "range type". The Range type information element shall indicate how many Subscriber identity information elements shall follow in the PDU and how the information elements shall be interpreted, i.e. single identity, list of identities or a range of identities. The generic definition of the information element range type in ETS 300 392-9 [2] applies, with the restriction that due to the way that information element is used in the present document, its value shall never be equal to 0.

The element "Number of SS-PC definitions" indicates the number of basic services a priority value is being defined for. A high and low priority value shall apply to each basic service being defined. If either a high or low priority is missing in the definition then the following shall apply:

- a missing high priority shall assume the same value as the defined low priority value;

- while a missing low priority shall assume the lowest possible priority value.

The high priority value and low priority value shall constitute two priority ranges available for the specified individual or group. Only the highest value of each range is defined.

The combinations of elements basic service type and high priority value/low priority value can appear several times in DEFINE request in order to allow different priority value definitions for different basic service types, e.g. the elements can appear in the following way:

- basic service $type_1$ + high priority $value_1$ + low priority $value_2$;

- basic service $type_2$ + high priority $value_3$ + low priority $value_4$.

The SS-PC service can be activated/deactivated with the information flow in the SwMI. The SS-PC can only be operated if activated.

Define Ack Information Flow:

The element "subscriber identity" shall be repeated if this is indicated in the element "range type". The Range type information element shall indicate how many Subscriber identity information elements shall follow in the PDU and how the information elements shall be interpreted, i.e. single identity, list of identities or a range of identities. The generic definition of the information element range type in ETS 300 392-9 [2] applies, with the restriction that due to the way that information element is used in the present document, its value shall never be equal to 0.

If a priority value was defined for more than one basic service, the result for definition element shall apply to all the basic service types in the DEFINE information flow.

Assign Information Flow:

The ASSIGN information flow is addressed to either an individual or group. The Assign information flow is not addressed to a range of identities.

The element "Number of SS-PC definitions" indicates the number of basic services a priority value is being defined for. A high and low priority value shall apply to each basic service being defined. If either a high or low priority is missing in the definition then the following shall apply:

- a missing high priority shall assume the same value as the defined low priority value;

- while a missing low priority shall assume the lowest possible priority value.

The high priority value and low priority value shall constitute two priority ranges available for the specified individual or group. Only the highest value of each range is defined.

The combinations of elements basic service type and high priority value/low priority value can appear several times in the ASSIGN request in order to allow different priority value definitions for different basic service types, e.g. the elements can appear in the following way:

- basic service type$_1$ + high priority value$_1$ + low priority value$_2$;

- basic service type$_2$ + high priority value$_3$ + low priority value$_4$.

Figure 6: Process description for FE21 state IDLE

6.4   Behaviour of CC to which FE21 is collocated

6.4.1   Service interaction for CC to which FE21 is collocated

Service interaction for CC to which FE21 is collocated is shown in figure 7.
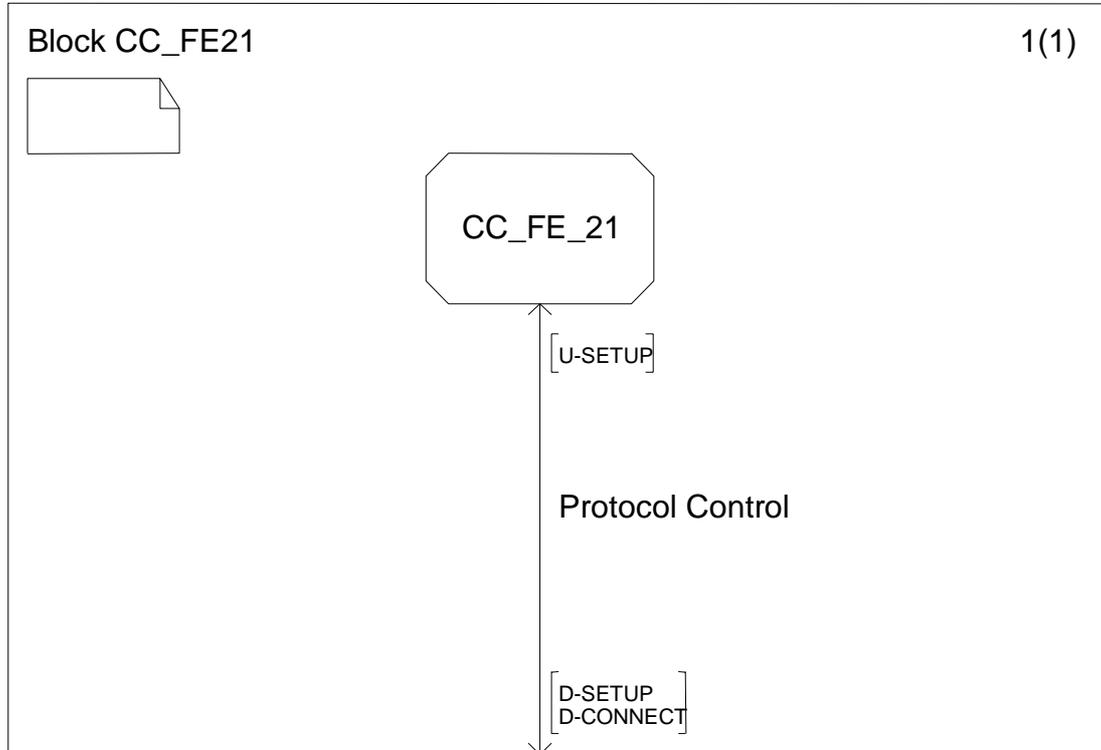
Figure 7: Service interaction for CC to which FE21 is collocated

6.4.2   Process description for CC to which FE21 is collocated

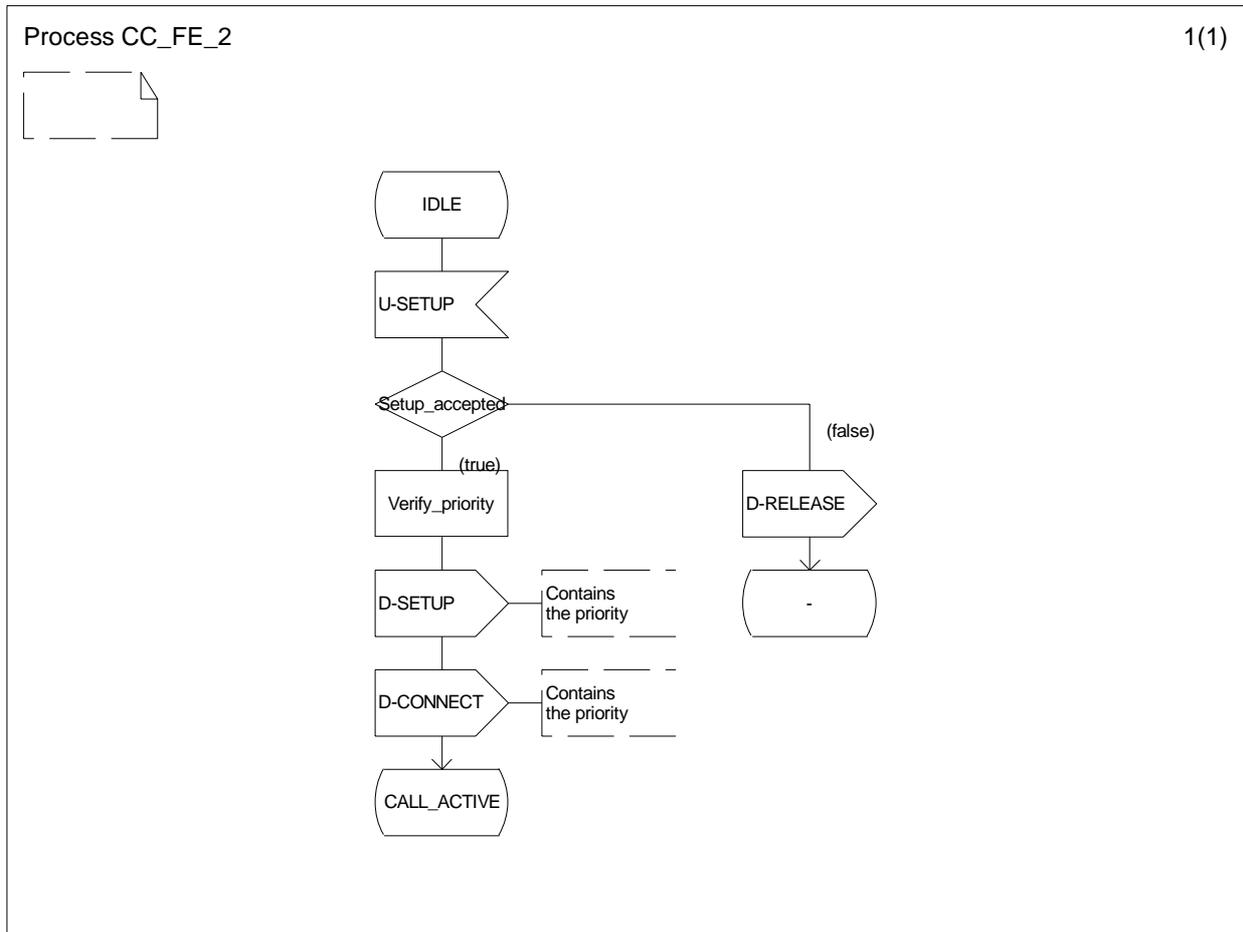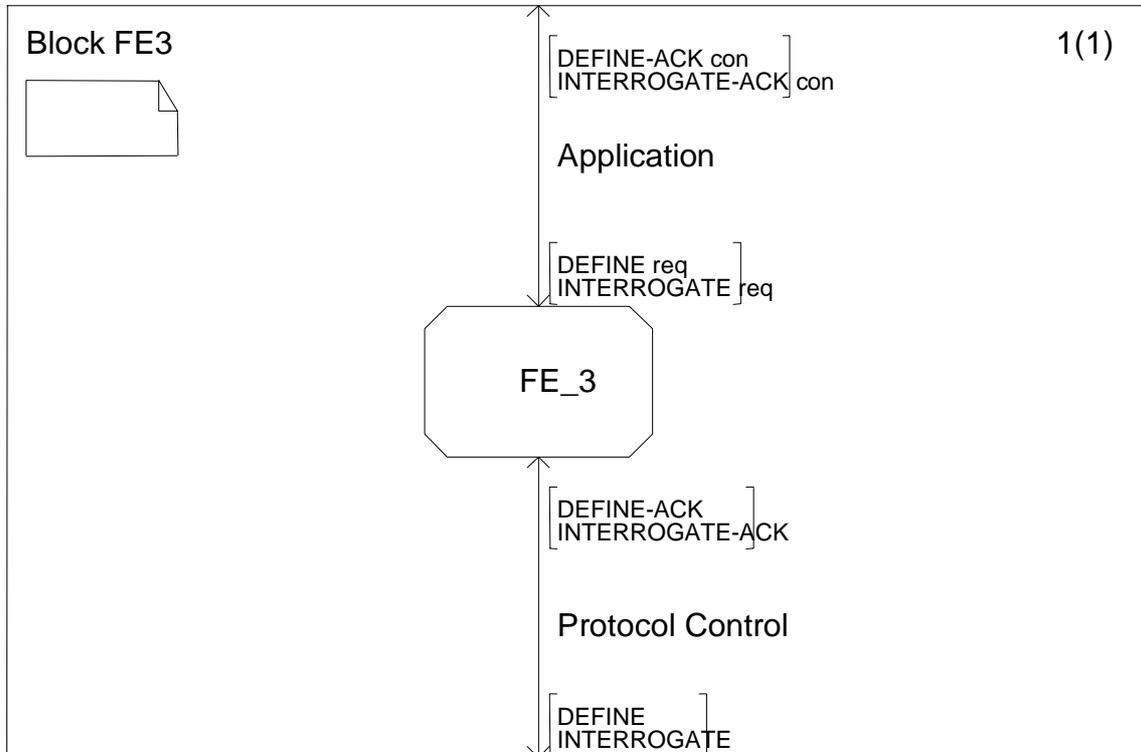Process description for CC to which FE21 is collocated is shown in figure 8.

Figure 8: Process description for CC to which FE21 is collocated

6.5   Behaviour of FE3 (SS entity of authorized user)

6.5.1   Service interaction for FE3

Service interaction for FE3 is shown in figure 9.

Figure 9: Service interaction for FE3

6.5.2   Process description for FE3

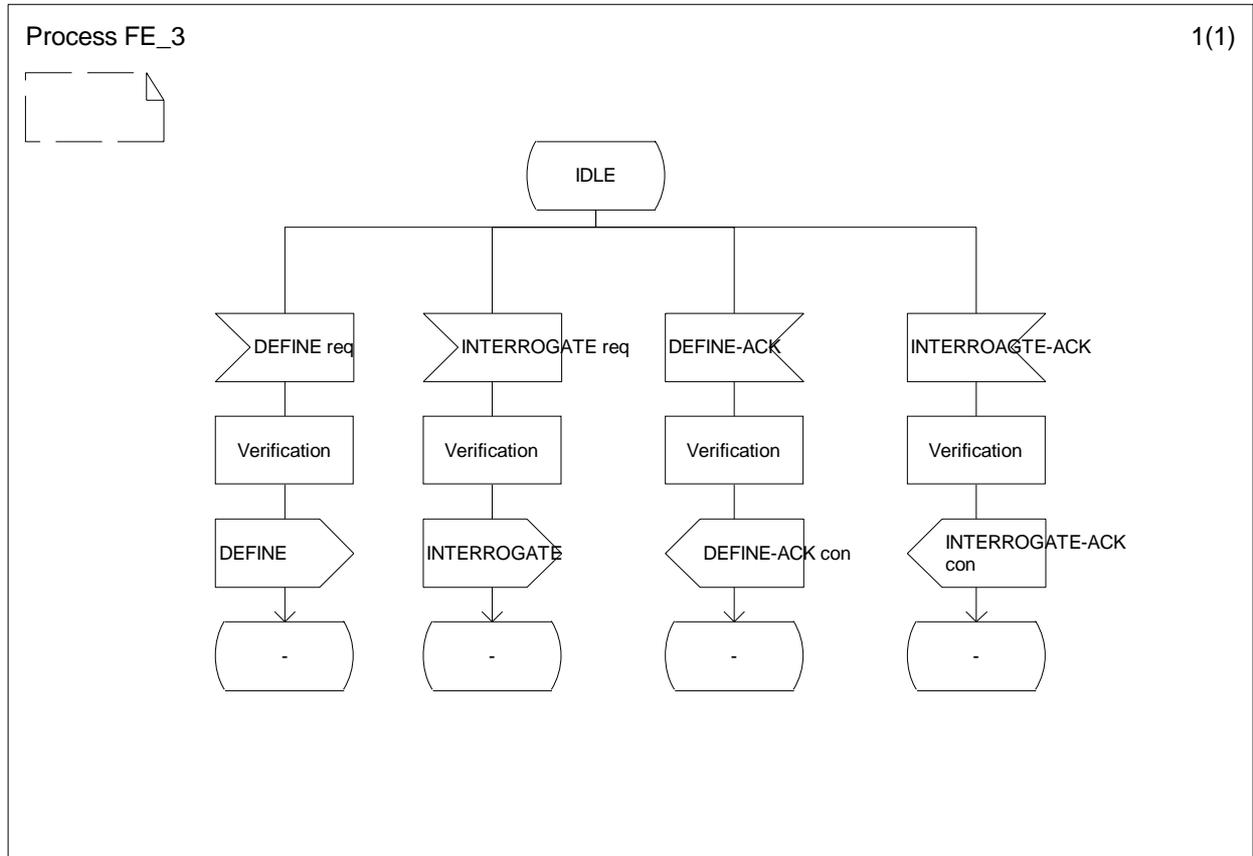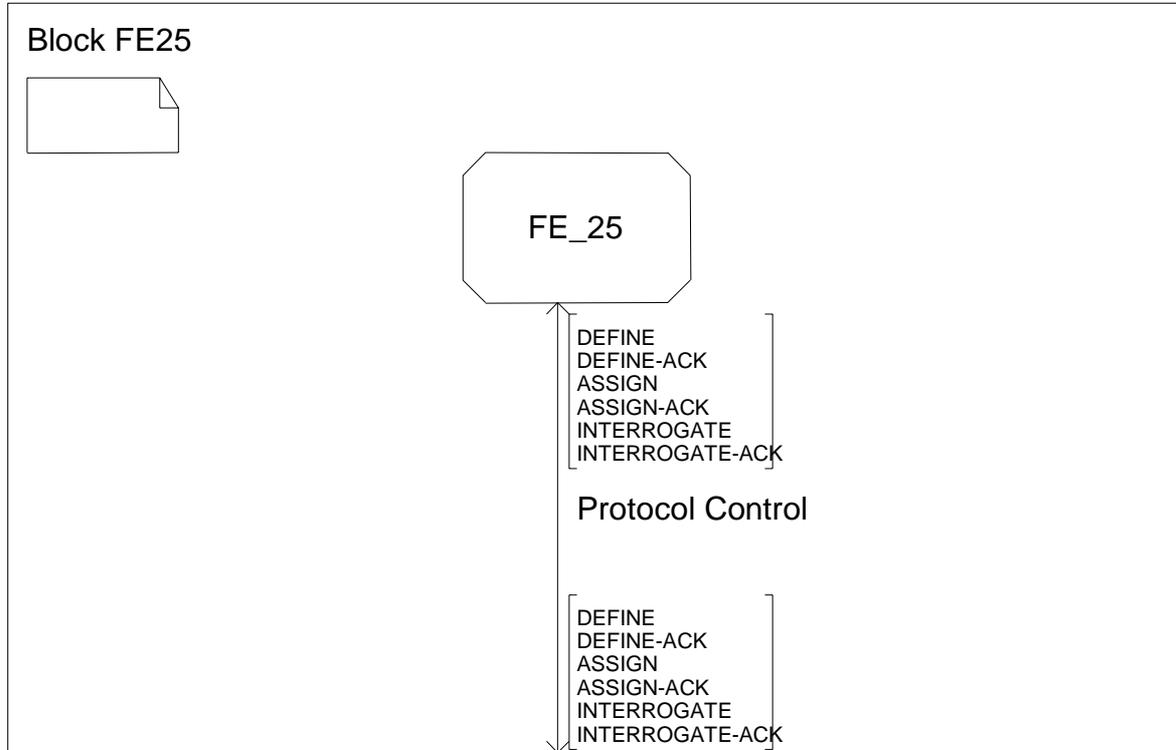Process description of FE3 is shown in figure 10.

Figure 10: Process description for FE3

6.6   Behaviour of visited SwMI FE25

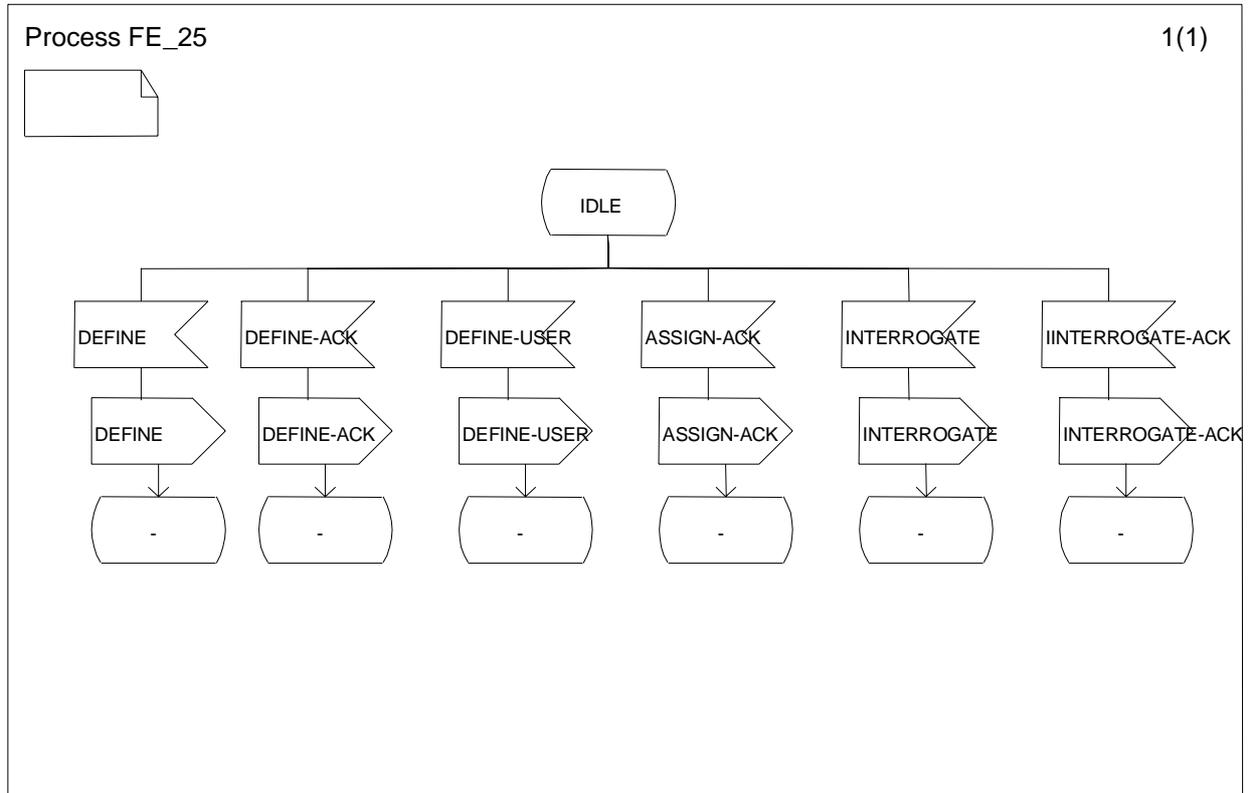## 6.6.1   Service interaction for FE25

Service interaction for FE25 is shown in figure 11.

Block FE25

FE_25

DEFINE
DEFINE-ACK
ASSIGN
ASSIGN-ACK
INTERROGATE
INTERROGATE-ACK

Protocol Control

DEFINE
DEFINE-ACK
ASSIGN
ASSIGN-ACK
INTERROGATE
INTERROGATE-ACK

Figure 11: Service interaction for visited SwMI FE25

6.6.2   Process description for visited SwMI FE25
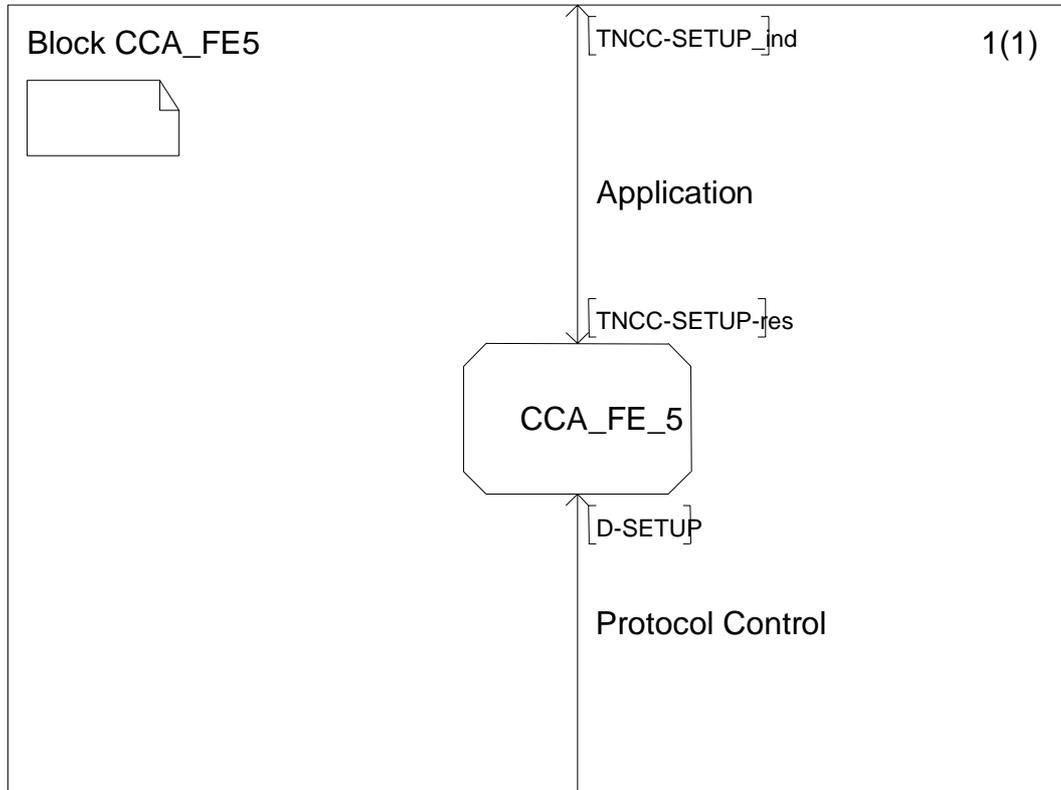
Process description for FE25 is shown in figure 12.

Figure 12: Process description for FE25

6.7   Behaviour of CCA to which FE5 is collocated

6.7.1   Service interaction for CCA to which FE5 is collocated

Service interaction for CCA to which FE5 is collocated is shown in figure 13.

Figure 13: Service interaction for CCA to which FE5 is collocated

6.7.2   Process description for CCA to which FE5 is collocated

Process description for CCA to which FE5 is collocated is shown in figure 14.
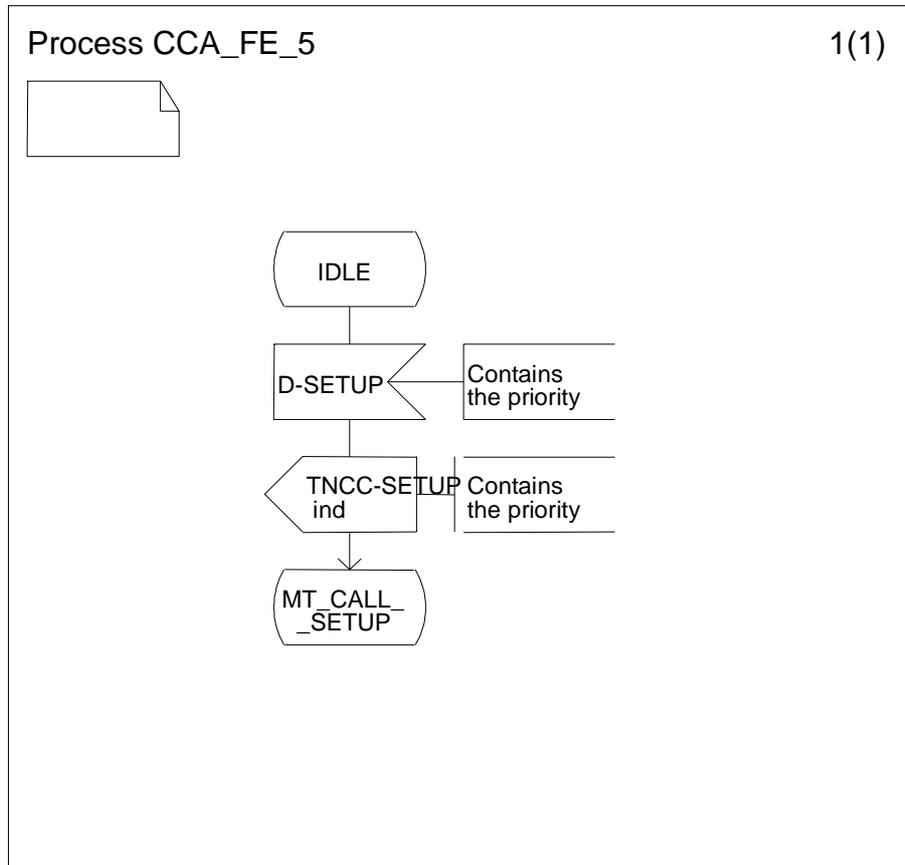

Figure 14: Process description for CCA to which FE5 is collocated

6.8   Inter-working considerations

In order to enable the SS-PC to extend to several TETRA systems over the ISI, the FEs (FE2s and FE4s) in different TETRA systems shall be able to send and receive SS information flows over the ISI.

Annex A (informative):
Mapping of SS-PC priorities received from the user application to priorities in basic service PDUs (for MS/LS)

The capability to save SS-PC definitions in MS/LS is an optional feature within MS/LS and the recommendations given below are applicable only for user A (calling party), if this optional feature is supported in the MS/LS of user A.

FE1 should pass the SS-PC definition requests to the user application in MS/LS. The user application should save the definition in the database in MS/LS. The user application should always accept the definition if the definition is made to the ITSI(s) related to the MS/LS or to any GTSI defined in the MS/LS. After saving the definition, FE1 should acknowledge the SS-PC request, if this was requested.

When the SS-PC service is invoked to a call, the user application should give the correct SS-PC priority value to layer 3. The correct sub-entity within layer 3 should then include the priority into the correct basic service PDU. When SwMI (FE21 or FE25) then receives the requested priority, it should check it and if needed, SwMI can change the priority level (value) for the basic service. The invoked priority value is given in the downlink messages to FE5(s), and to FE1 if applicable. FE5 (and FE1) should then pass the priority to the user application. The user application should accept the received priority and act upon it.

A.1   Mapping of SS-PC priorities for circuit mode speech and data

FE1 should map the value of "call priority" received in the basic service primitive from the user application to circuit mode speech call PDUs. The user application should allow the user to only request values, that are allowed for the user. If the user is requesting a value that is not allowed for the user, the user application should replace the value with a correct value and indicate this to the user or bar the service request. When CC receives the call priority value from the user application, it should not need to check the value. CC should only add the requested value to the basic service PDU.

SS-PC is only applicable to the non-pre-emptive priorities.

A.2   Void

History

Document history			
Edition 1	August 1996	Public Enquiry	PE 111: 1996-08-05 to 1996-11-29
	February 2001	Converted to an EN between Public Enquiry and Vote	
V1.1.1	March 2001	Vote	V 20010525: 2001-03-26 to 2001-05-25
V1.1.1	May 2001	Publication	