Source: **SA1**

Title: **CRs to 02.69 and 42.069 on Correction on the use of calling subscriber and destination subscriber (R99, Rel-4 Rel-5, Rel-6)**

Document for: **Approval**

Agenda Item: **7.1.3**

Meeting	SA Doc	TS No.	CR No	Rev	Rel	Cat	Subject	Vers Current	Vers New	SA1 Doc
SP-28	SP-050210	02.69	A016	-	R99	F	Correction on the use of calling subscriber and destination subscriber (02.69 - R99)	8.1.0	8.2.0	S1-050473
SP-28	SP-050210	42.069	003	-	Rel-4	A	Correction on the use of calling subscriber and destination subscriber (42.069 - Rel-4)	4.1.0	4.2.0	S1-050474
SP-28	SP-050210	42.069	004	-	Rel-5	A	Correction on the use of calling subscriber and destination subscriber (42.069 - Rel-5)	5.0.1	5.1.0	S1-050475
SP-28	SP-050210	42.069	005	-	Rel-6	A	Correction on the use of calling subscriber and destination subscriber (42.069 - Rel-6)	6.0.0	6.1.0	S1-050476

TSG-SA WG1 #28 **S1-050473**
Beijing, China, 4th to 8th April 2005 **Agenda Item: 8**

CR-Form-v7

CHANGE REQUEST

⌘ **02.69** **CR** **A016** ⌘**rev** **-** ⌘ Current version: **8.1.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Correction on the use of calling subscriber and destination subscriber
Source:	⌘	SA1 (Nortel Networks, Siemens)
Work item code:	⌘	ASCI
Date:	⌘	07/04/2005
Category:	⌘	**F**
Release:	⌘	R99

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:
2 (GSM Phase 2)
R96 (Release 1996)
R97 (Release 1997)
R98 (Release 1998)
R99 (Release 1999)
Rel-4 (Release 4)
Rel-5 (Release 5)
Rel-6 (Release 6)
Rel-7 (Release 7)

Reason for change:	⌘	According to the definition in 3.1 in 02.69, a calling subscriber can be a service subscriber or a dispacher. However, the behaviour of each of these and their handling in the network is different. The stage 1does not reflect the functionality that is currently in the nework. Currently, there are two different implementations in the field due to this 2G (GSM) specification being unclear, which has to be corrected. The ambiguities the use of 'calling subscriber' creates in the specification need to be corrected. Likewise a destination subscriber can be a service subscriber or a dispatcher and the specification needs to be corrected in a similar way.
Summary of change:	⌘	Added definition for 'calling service subscriber', 'calling dispatcher', 'destination service subscriber', 'destination dispatcher' and 'destination subscriber(s)'. Deletion of definition of 'calling subscriber' and definition of 'destination subscriber'. Made corrections thoughout the specification using the new definitions.
Consequences if not approved:	⌘	Incorrect and misleading specification will cause problem in interoperability.

Clauses affected:	⌘	3.1, 4				
Other specs affected:	⌘	**Y**	**N**		⌘	
		X		Other core specifications		43.069
			X	Test specifications		

	X	O&M Specifications

Other comments: ⌘

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3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

****** *First Changed Section* ******

3.1 Definitions

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

Nnetwork operator: Entity which provides the network operating elements and resources for the execution of the VBS.

Sservice provider: Entity which offers the VBS for subscription. The network operator may be the service provider.

Sservice subscriber: Mobile subscriber which subscribes to the VBS.

Vvoice broadcast call: An instance of the VBS initiated by a VBS subscriber. This term is used synonymously with the term "VBS call".

Ggroup identification (group ID): A numerical classification. The maximum number of group IdDs which can be defined in one PLMN depends on the maximum number of group call areas defined in this PLMN. The maximum number of group IdDs and group call areas shall be 10^8, Service subscriber shall be provided with one or up to 50 group IdDs.

Ddispatcher: Particular fixed line or mobile users are identified within the network as dispatchers. Dispatchers shall receive all voice broadcast calls to a certain group ID in a group call area (this shall be done automatically by the network). In addition they can initiate voice broadcast calls to a group ID in a group call area.

Dispatchers shall be connected to a voice broadcast call by means of standard links via radio or via an ISDN. They shall be called by their MSISDN or ~~MS~~ISDN number, respectively. When dispatchers initiate voice broadcast calls, they shall call a particular MSISDN number which is related to a group ID and group call area. Dispatchers using the GSM network can be located outside of this group call area.

The identities of the dispatchers are exclusively predefined in the network by the service provider. There will be none or up to five dispatchers involved in a particular voice broadcast call.

Ddestination service subscriber: Service subscriber ~~or dispatcher~~ to which the VBS call is directed.

Ccalling service subscriber: Service subscriber ~~or dispatcher~~ which originates ~~invokes~~ the VBS call.

Calling dispatcher: Dispatcher which originates the VBS call.

Destination dispatcher: Pre-registered dispatcher to which the VBS call is directed.

Destination subscriber: Destination dispatcher(s) and/ or destination service subscriber(s) to which the VGCS call is directed.

Ggroup call area: Predefined area composed of one or a cluster of cells, to which a particular VBS call is distributed. The maximum number of group call area IdDs which can be defined in one PLMN depends on the maximum number of group IdDs defined in this PLMN. The maximum number of group IdDs and group call areas combined shall be 10^8, The composition of a group call area is predefined in the network by the service provider. Changing of cell allocations in the network due to operational reasons will need an adaptation of the group call area definition. The group call area may include cells of more then one MSC area and cells of more than one PLMN.

Originator-to-dispatcher information: Information sent by the service subscriber originating a voice group call to the network during call setup for distribution to the dispatchers to be attached to the group call during call setup.

****** *Further Changed Section* ******

4 Description

The VBS is defined in the following. Figure 1 gives an explanation of the logical concept of the VBS.

a) The VBS enables a calling service subscriber or calling dispatcher to send speech unidirectional and simultaneously to all entitled dispatchers and to destination service subscribers belonging to a predefined group call area who have a subscription to the applicable group ID.

b) The calling service subscriber may be any service subscriber which has subscribed to the related group ID and is entitled to establish a voice broadcast call by his subscription. The calling ~~or any~~ dispatcher may be any dispatcher who is entitled to originate VBS calls to the related call reference. ~~for it by his identity which shall be registered in the network.~~

The destination subscriber may be any service subscriber which has subscribed to the related group ID or any dispatcher who is entitled for it by his identity which is registered in the network.

c) The broadcast call shall be established in a group call area which is comprised of one or a cluster of cells. Group call areas shall be predefined in the network by the service provider, co-ordinated by the network operator.

In case of a calling service subscriber initiating a VBS call, the group call area is uniquely identified by the actual cell in which the service subscriber resides at the moment of VBS call initialization and by the called group ID.

A calling dispatcher initiating a VBS call will be connected to a related predefined group call area. The entitlement of the dispatcher is checked by the network element responsible for the voice broadcast call management by verification of the calling identity. Since a dispatcher may be registered to more than one group call area and group ID an indication of the wanted group call area and group ID has to be given in form of a dedicated address called by the dispatcher.

d) Destination subscribers are all destination service subscribers or a group of destination service subscribers identified by the called group ID which have their present location in the group call area, and preregistered destination dispatchers. Destination service subscribers shall be notified with the group ID, not by paging the service subscriber individually. Destination dispatchers shall be called individually with their identity.

Service subscribers which leave the group call area during an on going VBS call cease to be destination subscribers. Service subscribers which enter the group call area during an on going VBS call shall become destination subscribers within 500 ms after reception of the first notification message related to the VBS call.

e) The calling service subscriber shall remain within the voice broadcast call until she terminates the call, loses contact with the network or leaves the group call area. ~~The latter case does not apply to calling subscribers who are dispatchers.~~ The VBS call shall be terminated by the network as soon as the network has determined that the calling service subscriber has left the VBS call area.

f) The calling service subscriber or calling dispatcher shall be informed by the network with a suitable indication about the successful establishment of the voice broadcast call so that he can start to speak~~-~~.

NOTE: A successful establishment means that all broadcast downlink channels are allocated, with the restrictions mentioned in clause 6, whether somebody is listening or not, and the related dispatchers are alerted.

g) Authentication is mandatory at GSM ~~-~~call set up. To allow fast call set up in VBS authenti~~fi~~cation of~~-~~ the calling service subscriber or calling dispatcher at ~~-~~invocation may optionally be delayed.

Authentication of the destination subscriber, who ~~have~~has no uplink connection, is not required.

Confidentiality on the radio path is optional.

h) Different levels of priority and pre-emption shall be applied as defined in the corresponding stage 1 description on the enhanced Multi-Level Precedence and Pre-emption service (eMLPP), GSM 02.67.

i) A number of voice broadcast calls may exist simultaneously intended for different groups of destination subscribers in the same group call area.

Parallel voice broadcast calls are possible to the same group of destination subscribers in different, possibly overlapping group call areas.

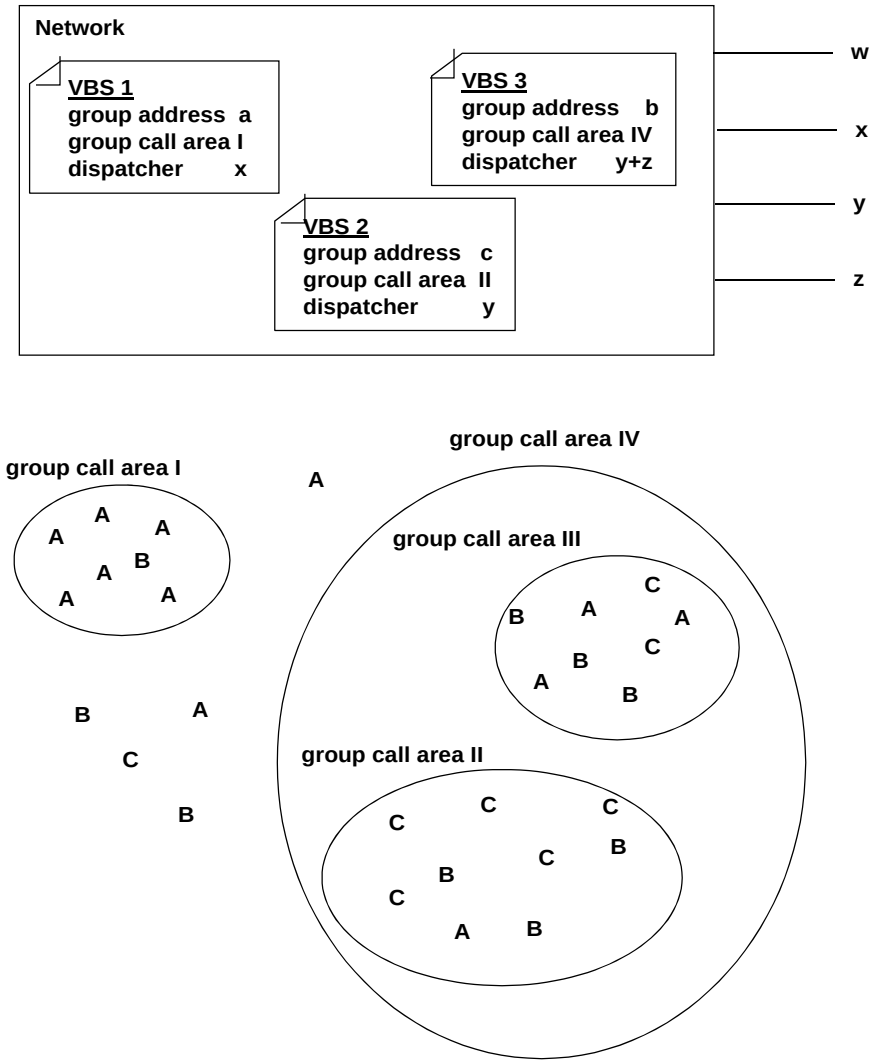
j) VBS shall also be provided in case of roaming. For this, certain group Id~~D~~s shall be defined as supra-PLMN group Id~~D~~s which have to be co-ordinated between the network operators and which shall be known in the networks and in the SIM. A service subscriber which is entitled by his subscription to establish voice broadcast calls while roaming shall only be able to use supra-PLMN group Id~~D~~s in case of roaming.

k) For certain levels of priorities an acknowledgement of receipt of a voice broadcast call can be required as an application option (e.g. for railway emergency calls) from all or from nominated destination service subscribers (the nomination is recorded on the SIM). The acknowledgement itself shall be performed at the end of the voice broadcast call. The acknowledgement shall indicate the time the reception started and the time the reception terminated. The acknowledgement has to be given to a predefined recipient.

l) It shall be possible for a service subscriber to activate or deactivate the voice broadcast reception for different group Id~~D~~s. The selection list is stored on the SIM corresponding to the subscribed group Id~~D~~s. It shall be possible to prohibit the deactivation of group Id~~D~~s used for high priority voice broadcast calls.

Mobile users that are configured as d~~D~~ispatchers and which are registered in the network for a certain voice broadcast call and which have also a subscription for VBS with the same group ID as the voice broadcast call for which they are dispatcher shall deactivate this group ID when they are located in the corresponding group call area in order to avoid conflicts between paging for the dispatcher and notifications for the group ID.

m) The calling service subscriber may specify, at call setup, information to be presented at call setup to the dispatchers. This information is sent as originator-to-dispatcher information to the network, and sent as UUS1 by the network to the dispatchers in the message for call setup. For normal call setup, the information is subject to the same constraints as UUS1 information in the setup of a point-to-point call. For fast setup, the information is restricted to 12 digits (with leading zeros); inclusion of originator-to-dispatcher information at fast setup is only possible if the mobile station has a valid TMSI. It is a network option to support originator-to-dispatcher information, or to ignore it. The inclusion of originator-to-dispatcher information in the VBS call setup is not subject to provision or withdrawal.



NOTE: VBS1, VBS2, VBS3 = particular voice broadcast calls with the attributes preregistered in the network. A, B, C, D = service subscriber with group ID a, b, c or d, respectively.

I. II, III, IV = group call areas.

w, x, y, z = dispatchers connected via normal GSM links or external networks.

Figure 1: Logical concept of the VBS

5 Normal operation with successful outcome

5.1 Provision

The VBS is provided to be used by a service subscriber after prior arrangements with the service provider. The provision includes the assignment of group IDs to the service subscriber. A subscription shall not provide more than 50 group IDs to the service subscriber.

The service can be offered with two subscription options:

	Subscription option	**Value**
-	subscriber has the capability of initiating voice broadcast calls	No Yes;
-	subscriber has the capability to initiate voice broadcast calls in case of roaming	No Yes.

5.2 Withdrawal

The VBS is withdrawn at the service provider's request or for administrative reasons.

5.3 Network related service configuration

The network related service configuration defines the attributes of a particular voice broadcast call which shall be pre-registered in the network by the service provider. This is not related to one specific service subscriber.

The attributes of a particular broadcast call are group ID, group call area composition, a list of dispatcher identities to be connected to this area, a list of dispatchers allowed to initiate voice broadcast calls to this area, the broadcast call reference identity which shall be used in case of COLP (see subclause 7.3) and recipient ~~dispatcher~~ identities to which an optional acknowledgement can be routed. Changes to the group call area composition shall be co-ordinated with the network operator.

5.4 Normal operation for voice broadcast call establishment

The VBS service shall be automatically initiated by the network when a calling service subscriber or calling dispatcher dials a particular short code or address at call set-up.

On successful initiation of the VBS, the voice broadcast call shall be established between the calling service subscriber or calling dispatcher and the destination subscribers. The destination subscribers are:

- all destination service subscribers at any time during the voice broadcast call with the corresponding active group ID when located in the group call area, where the group call area is uniquely defined by:
  - the location (radio cell) of the calling service subscriber at invocation and group ID if the call is originated by a calling subscriber is a service subscriber;
  - the addressed group call area if the call is originated by a calling ~~subscriber is a~~ dispatcher;
- the preregistered destination dispatchers related to that group call area and group ID.

The calling service subscriber or calling dispatcher shall be informed by the network with a suitable indication about the successful establishment of the voice broadcast call so that the user can start to speak.

The call can be released by the calling service subscriber or by the calling dispatcher or by the network (e.g. in case of a higher priority call) or by an entitled dispatcher~~s~~ predefined in the network.

Destination subscribers leaving the voice broadcast call for any reason shall not release the on going voice broadcast call.

5.5 Charging requirements

Normal event data according to GSM 12.05 shall be recorded as a network option related to calling subscriber or related to all VBS calls to one group ID in a specific group call area. . In addition data to be passed to the anchor MSC for charging purposes is the resources (i.e. cell identities) used during a call.

6 Exceptional procedures or unsuccessful outcome

If a service subscriber wants to establish a voice broadcast call while not subscribed to the service or the network cannot provide the service for some reason, an indication shall be provided to the calling service subscriber to notify him with the reason of failure.

If a dispatcher wants to establish a voice broadcast call while not entitled to do it or the network cannot provide the service for some reason, the call shall be rejected. The network shall give an appropriate indication to calling dispatchers who are GSM subscribers.

If a voice broadcast call cannot be established to all cells and dispatchers in a pre-set time, the call shall be considered established provided that at least the originated cell in case of a service subscriber originated broadcast call or any one cell within the group call area in case of a dispatcher originated broadcast call has been included within this time.

If a cell is excluded from the group call area because of pre-emption, the voice broadcast call is maintained as long as the calling subscriber is not pre-empted.

7 Interaction with GSM services and features

7.1 Calling Line Identification Presentation (CLIP)

If CLIP is applied, the group call reference ~~–~~ including the group call area ID and the group ID ~~–~~ shall be presented to the destination dispatchers. In addition the subaddress field of the calling party may be used to identify the calling service subscriber or calling dispatcher to the destination dispatchers.

The receiving mobile stations of the destination subscribers shall display the paged group ID regardless the destination subscribers have a subscription to CLIP.

7.2 Calling Line Identification Restriction (CLIR)

CLIR shall be supported.

The network shall have the possibility to override CLIR or reject the request to establish a voice broadcast call for a calling service subscriber or calling dispatcher who has CLIR actived.

7.3 Connected Line Identification Presentation (COLP)

If COLP is applied, the broadcast call reference - including the group call area ID and the group ID - shall be presented to the calling service subscriber or calling dispatcher. No destination subscriber identities will be presented.

TSG-SA WG1 #28 **S1-050474**
Beijing, China, 4th to 8th April 2005 **Agenda Item: 8**

CR-Form-v7

CHANGE REQUEST

⌘ **42.069** **CR** **003** ⌘ **rev** **-** ⌘ Current version: **4.1.0** ⌘

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Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

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Source:	⌘	SA1 (Nortel Networks, Siemens)
Work item code:	⌘	ASCI
Date:	⌘	07/04/2005
Category:	⌘	**A**
Release:	⌘	Rel-4

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Reason for change:	⌘	According to the definition in 3.1 in 42.069, a calling subscriber can be a service subscriber or a dispacher. However, the behaviour of each of these and their handling in the network is different. The stage 1does not reflect the functionality that is currently in the nework. Currently, there are two different implementations in the field due to this 2G (GSM) specification being unclear, which has to be corrected. The ambiguities the use of 'calling subscriber' creates in the specification need to be corrected. Likewise a destination subscriber can be a service subscriber or a dispatcher and the specification needs to be corrected in a similar way.
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		Y	**N**			
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Other comments: ⌘

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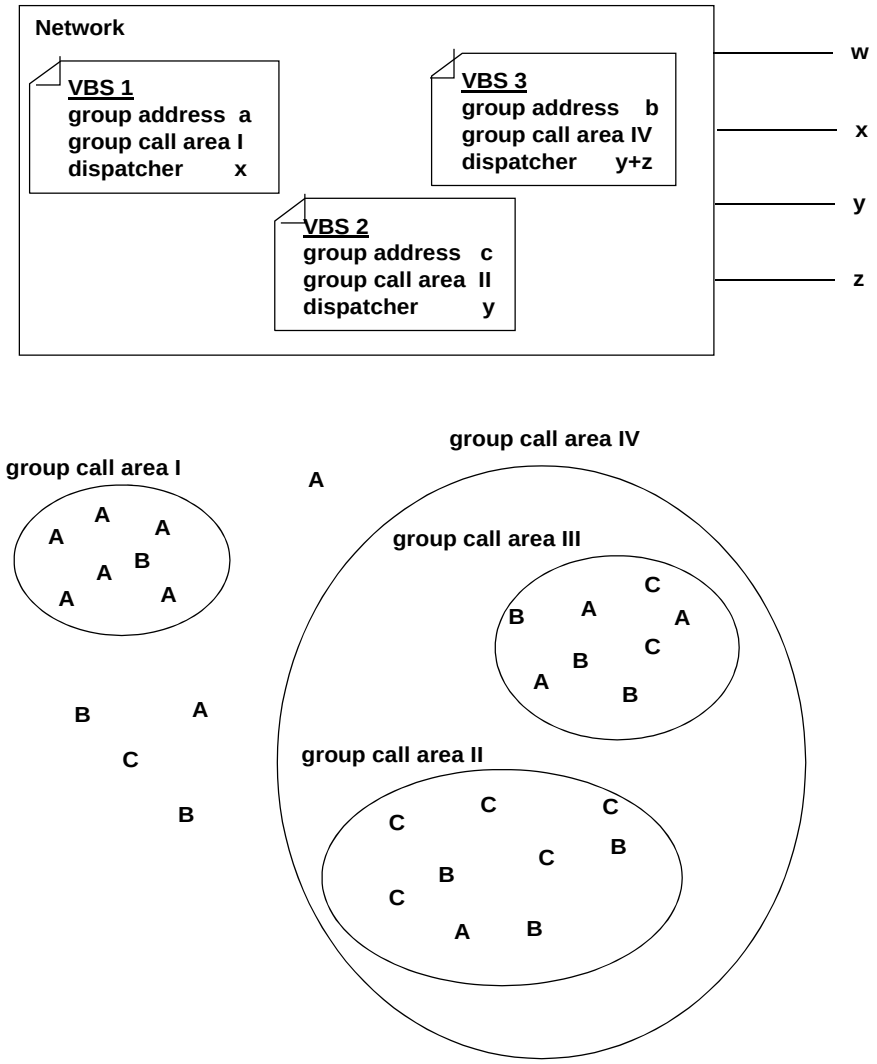
m) The calling service subscriber may specify, at call setup, information to be presented at call setup to the dispatchers. This information is sent as originator-to-dispatcher information to the network, and sent as UUS1 by the network to the dispatchers in the message for call setup. For normal call setup, the information is subject to the same constraints as UUS1 information in the setup of a point-to-point call. For fast setup, the information is restricted to 12 digits (with leading zeros); inclusion of originator-to-dispatcher information at fast setup is only possible if the mobile station has a valid TMSI. It is a network option to support originator-to-dispatcher information, or to ignore it. The inclusion of originator-to-dispatcher information in the VBS call setup is not subject to provision or withdrawal.



NOTE: VBS1, VBS2, VBS3 = particular voice broadcast calls with the attributes preregistered in the network. A, B, C, D = service subscriber with group ID a, b, c or d, respectively.

I. II, III, IV = group call areas.

w, x, y, z = dispatchers connected via normal GSM links or external networks.

Figure 1: Logical concept of the VBS

5 Normal operation with successful outcome

5.1 Provision

The VBS is provided to be used by a service subscriber after prior arrangements with the service provider. The provision includes the assignment of group IDs to the service subscriber. A subscription shall not provide more than 50 group IDs to the service subscriber.

The service can be offered with two subscription options:

	Subscription option	**Value**
-	subscriber has the capability of initiating voice broadcast calls	No Yes;
-	subscriber has the capability to initiate voice broadcast calls in case of roaming	No Yes.

5.2 Withdrawal

The VBS is withdrawn at the service provider's request or for administrative reasons.

5.3 Network related service configuration

The network related service configuration defines the attributes of a particular voice broadcast call which shall be pre-registered in the network by the service provider. This is not related to one specific service subscriber.

The attributes of a particular broadcast call are group ID, group call area composition, a list of dispatcher identities to be connected to this area, a list of dispatchers allowed to initiate voice broadcast calls to this area, the broadcast call reference identity which shall be used in case of COLP (see subclause 7.3) and recipient ~~dispatcher~~ identities to which an optional acknowledgement can be routed. Changes to the group call area composition shall be co-ordinated with the network operator.

5.4 Normal operation for voice broadcast call establishment

The VBS service shall be automatically initiated by the network when a calling service subscriber or calling dispatcher dials a particular short code or address at call set-up.

On successful initiation of the VBS, the voice broadcast call shall be established between the calling service subscriber or calling dispatcher and the destination subscribers. The destination subscribers are:

- all destination service subscribers at any time during the voice broadcast call with the corresponding active group ID when located in the group call area, where the group call area is uniquely defined by:
  - the location (radio cell) of the calling service subscriber at invocation and group ID if the call is originated by a calling subscriber is a service subscriber;
  - the addressed group call area if the call is originated by a calling ~~subscriber is a~~ dispatcher;
- the preregistered destination dispatchers related to that group call area and group ID.

The calling service subscriber or calling dispatcher shall be informed by the network with a suitable indication about the successful establishment of the voice broadcast call so that the user can start to speak.

The call can be released by the calling service subscriber or by the calling dispatcher or by the network (e.g. in case of a higher priority call) or by an entitled dispatcher~~s~~ predefined in the network.

Destination subscribers leaving the voice broadcast call for any reason shall not release the on going voice broadcast call.

5.5 Charging requirements

Normal event data according to GSM 12.05 shall be recorded as a network option related to calling subscriber or related to all VBS calls to one group ID in a specific group call area. . In addition data to be passed to the anchor MSC for charging purposes is the resources (i.e. cell identities) used during a call.

6 Exceptional procedures or unsuccessful outcome

If a service subscriber wants to establish a voice broadcast call while not subscribed to the service or the network cannot provide the service for some reason, an indication shall be provided to the calling service subscriber to notify him with the reason of failure.

If a dispatcher wants to establish a voice broadcast call while not entitled to do it or the network cannot provide the service for some reason, the call shall be rejected. The network shall give an appropriate indication to calling dispatchers who are GSM subscribers.

If a voice broadcast call cannot be established to all cells and dispatchers in a pre-set time, the call shall be considered established provided that at least the originated cell in case of a service subscriber originated broadcast call or any one cell within the group call area in case of a dispatcher originated broadcast call has been included within this time.

If a cell is excluded from the group call area because of pre-emption, the voice broadcast call is maintained as long as the calling subscriber is not pre-empted.

7 Interaction with GSM services and features

7.1 Calling Line Identification Presentation (CLIP)

If CLIP is applied, the group call reference ~~–~~ including the group call area ID and the group ID ~~–~~ shall be presented to the destination dispatchers. In addition the subaddress field of the calling party may be used to identify the calling service subscriber or calling dispatcher to the destination dispatchers.

The receiving mobile stations of the destination subscribers shall display the paged group ID regardless the destination subscribers have a subscription to CLIP.

7.2 Calling Line Identification Restriction (CLIR)

CLIR shall be supported.

The network shall have the possibility to override CLIR or reject the request to establish a voice broadcast call for a calling service subscriber or calling dispatcher who has CLIR actived.

7.3 Connected Line Identification Presentation (COLP)

If COLP is applied, the broadcast call reference - including the group call area ID and the group ID - shall be presented to the calling service subscriber or calling dispatcher. No destination subscriber identities will be presented.

TSG-SA WG1 #28 **S1-050475**
Beijing, China, 4th to 8th April 2005 **Agenda Item: 8**

CR-Form-v7

CHANGE REQUEST

⌘ **42.069** **CR** **004** ⌘ **rev** **-** ⌘ Current version: **5.0.1** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Correction on the use of calling subscriber and destination subscriber
Source:	⌘	SA1 (Nortel Networks, Siemens)
Work item code:	⌘	ASCI
Date:	⌘	07/04/2005
Category:	⌘	**A**
Release:	⌘	Rel-5

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
C *(functional modification of feature)*
D *(editorial modification)*
Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*
Rel-7	*(Release 7)*

Reason for change:	⌘	According to the definition in 3.1 in 42.069, a calling subscriber can be a service subscriber or a dispacher. However, the behaviour of each of these and their handling in the network is different. The stage 1does not reflect the functionality that is currently in the nework. Currently, there are two different implementations in the field due to this 2G (GSM) specification being unclear, which has to be corrected. The ambiguities the use of 'calling subscriber' creates in the specification need to be corrected. Likewise a destination subscriber can be a service subscriber or a dispatcher and the specification needs to be corrected in a similar way.
Summary of change:	⌘	Added definition for 'calling service subscriber', 'calling dispatcher', 'destination service subscriber', 'destination dispatcher' and 'destination subscriber(s)'. Deletion of definition of 'calling subscriber' and definition of 'destination subscriber'. Made corrections thoughout the specification using the new definitions.
Consequences if not approved:	⌘	Incorrect and misleading specification will cause problem in interoperability.

Clauses affected:	⌘	3.1, 4				
		Y	**N**			
Other specs affected:	⌘	**X**		Other core specifications	⌘	43.069
			X	Test specifications		

	X	O&M Specifications

Other comments: ⌘

How to create CRs using this form:

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1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest version, look for the directory name with the latest date e.g. 2001-03 contains the specifications resulting from the March 2001 TSG meetings.
3) With "track changes" disabled, paste the entire CR form (use CTRL-A to select it) into the specification just in front of the clause containing the first piece of changed text. Delete those parts of the specification which are not relevant to the change request.

****** *First Changed Section* ******

3.1 Definitions

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

Nnetwork operator: Entity which provides the network operating elements and resources for the execution of the VBS.

Sservice provider: Entity which offers the VBS for subscription. The network operator may be the service provider.

Sservice subscriber: Mobile subscriber which subscribes to the VBS.

Vvoice broadcast call: An instance of the VBS initiated by a VBS subscriber. This term is used synonymously with the term "VBS call".

Ggroup identification (group ID): A numerical classification. The maximum number of group IdDs which can be defined in one PLMN depends on the maximum number of group call areas defined in this PLMN. The maximum number of group IdDs and group call areas shall be 10^8, Service subscriber shall be provided with one or up to 50 group IdDs.

Ddispatcher: Particular fixed line or mobile users are identified within the network as dispatchers. Dispatchers shall receive all voice broadcast calls to a certain group ID in a group call area (this shall be done automatically by the network). In addition they can initiate voice broadcast calls to a group ID in a group call area.

Dispatchers shall be connected to a voice broadcast call by means of standard links via radio or via an ISDN. They shall be called by their MSISDN or ~~MS~~ISDN number, respectively. When dispatchers initiate voice broadcast calls, they shall call a particular MSISDN number which is related to a group ID and group call area. Dispatchers using the GSM network can be located outside of this group call area.

The identities of the dispatchers are exclusively predefined in the network by the service provider. There will be none or up to five dispatchers involved in a particular voice broadcast call.

Ddestination service subscriber: Service subscriber ~~or dispatcher~~ to which the VBS call is directed.

Ccalling service subscriber: Service subscriber ~~or dispatcher~~ which originates ~~invokes~~ the VBS call.

Calling dispatcher: Dispatcher which originates the VBS call.

Destination dispatcher: Pre-registered dispatcher to which the VBS call is directed.

Destination subscriber: Destination dispatcher(s) and/ or destination service subscriber(s) to which the VGCS call is directed.

Ggroup call area: Predefined area composed of one or a cluster of cells, to which a particular VBS call is distributed. The maximum number of group call area IdDs which can be defined in one PLMN depends on the maximum number of group IdDs defined in this PLMN. The maximum number of group IdDs and group call areas combined shall be 10^8, The composition of a group call area is predefined in the network by the service provider. Changing of cell allocations in the network due to operational reasons will need an adaptation of the group call area definition. The group call area may include cells of more then one MSC area and cells of more than one PLMN.

Originator-to-dispatcher information: Information sent by the service subscriber originating a voice group call to the network during call setup for distribution to the dispatchers to be attached to the group call during call setup.

****** *Further Changed Section* ******

4 Description

The VBS is defined in the following. Figure 1 gives an explanation of the logical concept of the VBS.

a) The VBS enables a calling service subscriber or calling dispatcher to send speech unidirectional and simultaneously to all entitled dispatchers and to destination service subscribers belonging to a predefined group call area who have a subscription to the applicable group ID.

b) The calling service subscriber may be any service subscriber which has subscribed to the related group ID and is entitled to establish a voice broadcast call by his subscription. The calling ~~or any~~ dispatcher may be any dispatcher who is entitled to originate VBS calls to the related call reference. ~~for it by his identity which shall be registered in the network.~~

The destination subscriber may be any service subscriber which has subscribed to the related group ID or any dispatcher who is entitled for it by his identity which is registered in the network.

c) The broadcast call shall be established in a group call area which is comprised of one or a cluster of cells. Group call areas shall be predefined in the network by the service provider, co-ordinated by the network operator.

In case of a calling service subscriber initiating a VBS call, the group call area is uniquely identified by the actual cell in which the service subscriber resides at the moment of VBS call initialization and by the called group ID.

A calling dispatcher initiating a VBS call will be connected to a related predefined group call area. The entitlement of the dispatcher is checked by the network element responsible for the voice broadcast call management by verification of the calling identity. Since a dispatcher may be registered to more than one group call area and group ID an indication of the wanted group call area and group ID has to be given in form of a dedicated address called by the dispatcher.

d) Destination subscribers are all destination service subscribers or a group of destination service subscribers identified by the called group ID which have their present location in the group call area, and preregistered destination dispatchers. Destination service subscribers shall be notified with the group ID, not by paging the service subscriber individually. Destination dispatchers shall be called individually with their identity.

Service subscribers which leave the group call area during an on going VBS call cease to be destination subscribers. Service subscribers which enter the group call area during an on going VBS call shall become destination subscribers within 500 ms after reception of the first notification message related to the VBS call.

e) The calling service subscriber shall remain within the voice broadcast call until she terminates the call, loses contact with the network or leaves the group call area. ~~The latter case does not apply to calling subscribers who are dispatchers.~~ The VBS call shall be terminated by the network as soon as the network has determined that the calling service subscriber has left the VBS call area.

f) The calling service subscriber or calling dispatcher shall be informed by the network with a suitable indication about the successful establishment of the voice broadcast call so that he can start to speak~~-~~.

NOTE: A successful establishment means that all broadcast downlink channels are allocated, with the restrictions mentioned in clause 6, whether somebody is listening or not, and the related dispatchers are alerted.

g) Authentication is mandatory at GSM ~~-~~call set up. To allow fast call set up in VBS authenti~~fi~~cation of~~-~~ the calling service subscriber or calling dispatcher at ~~-~~invocation may optionally be delayed.

Authentication of the destination subscriber, who ~~have~~has no uplink connection, is not required.

Confidentiality on the radio path is optional.

h) Different levels of priority and pre-emption shall be applied as defined in the corresponding stage 1 description on the enhanced Multi-Level Precedence and Pre-emption service (eMLPP), GSM 02.67.

i) A number of voice broadcast calls may exist simultaneously intended for different groups of destination subscribers in the same group call area.

Parallel voice broadcast calls are possible to the same group of destination subscribers in different, possibly overlapping group call areas.

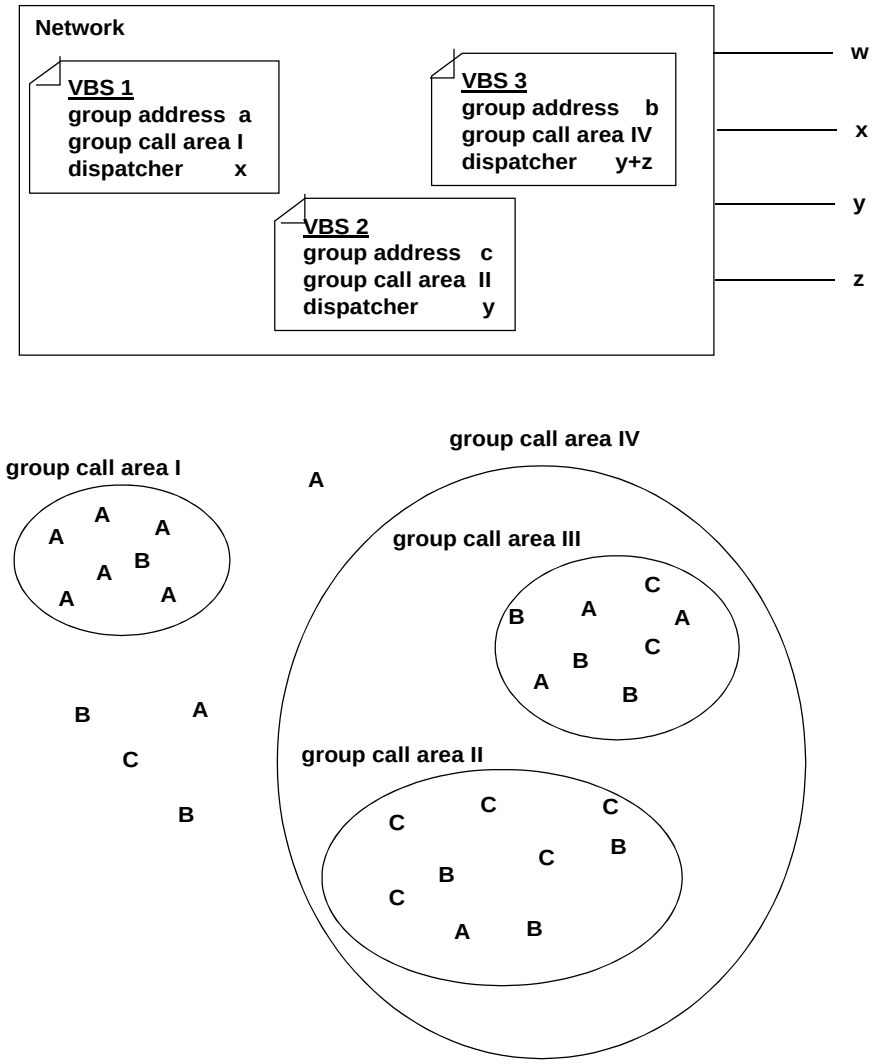
j) VBS shall also be provided in case of roaming. For this, certain group Id~~D~~s shall be defined as supra-PLMN group Id~~D~~s which have to be co-ordinated between the network operators and which shall be known in the networks and in the SIM. A service subscriber which is entitled by his subscription to establish voice broadcast calls while roaming shall only be able to use supra-PLMN group Id~~D~~s in case of roaming.

k) For certain levels of priorities an acknowledgement of receipt of a voice broadcast call can be required as an application option (e.g. for railway emergency calls) from all or from nominated destination service subscribers (the nomination is recorded on the SIM). The acknowledgement itself shall be performed at the end of the voice broadcast call. The acknowledgement shall indicate the time the reception started and the time the reception terminated. The acknowledgement has to be given to a predefined recipient.

l) It shall be possible for a service subscriber to activate or deactivate the voice broadcast reception for different group Id~~D~~s. The selection list is stored on the SIM corresponding to the subscribed group Id~~D~~s. It shall be possible to prohibit the deactivation of group Id~~D~~s used for high priority voice broadcast calls.

Mobile users that are configured as d~~D~~ispatchers and which are registered in the network for a certain voice broadcast call and which have also a subscription for VBS with the same group ID as the voice broadcast call for which they are dispatcher shall deactivate this group ID when they are located in the corresponding group call area in order to avoid conflicts between paging for the dispatcher and notifications for the group ID.

m) The calling service subscriber may specify, at call setup, information to be presented at call setup to the dispatchers. This information is sent as originator-to-dispatcher information to the network, and sent as UUS1 by the network to the dispatchers in the message for call setup. For normal call setup, the information is subject to the same constraints as UUS1 information in the setup of a point-to-point call. For fast setup, the information is restricted to 12 digits (with leading zeros); inclusion of originator-to-dispatcher information at fast setup is only possible if the mobile station has a valid TMSI. It is a network option to support originator-to-dispatcher information, or to ignore it. The inclusion of originator-to-dispatcher information in the VBS call setup is not subject to provision or withdrawal.



NOTE: VBS1, VBS2, VBS3 = particular voice broadcast calls with the attributes preregistered in the network. A, B, C, D = service subscriber with group ID a, b, c or d, respectively.

I. II, III, IV = group call areas.

w, x, y, z = dispatchers connected via normal GSM links or external networks.

Figure 1: Logical concept of the VBS

5 Normal operation with successful outcome

5.1 Provision

The VBS is provided to be used by a service subscriber after prior arrangements with the service provider. The provision includes the assignment of group IDs to the service subscriber. A subscription shall not provide more than 50 group IDs to the service subscriber.

The service can be offered with two subscription options:

	Subscription option	**Value**
-	subscriber has the capability of initiating voice broadcast calls	No Yes;
-	subscriber has the capability to initiate voice broadcast calls in case of roaming	No Yes.

5.2 Withdrawal

The VBS is withdrawn at the service provider's request or for administrative reasons.

5.3 Network related service configuration

The network related service configuration defines the attributes of a particular voice broadcast call which shall be pre-registered in the network by the service provider. This is not related to one specific service subscriber.

The attributes of a particular broadcast call are group ID, group call area composition, a list of dispatcher identities to be connected to this area, a list of dispatchers allowed to initiate voice broadcast calls to this area, the broadcast call reference identity which shall be used in case of COLP (see subclause 7.3) and recipient ~~dispatcher~~ identities to which an optional acknowledgement can be routed. Changes to the group call area composition shall be co-ordinated with the network operator.

5.4 Normal operation for voice broadcast call establishment

The VBS service shall be automatically initiated by the network when a calling service subscriber or calling dispatcher dials a particular short code or address at call set-up.

On successful initiation of the VBS, the voice broadcast call shall be established between the calling service subscriber or calling dispatcher and the destination subscribers. The destination subscribers are:

- all destination service subscribers at any time during the voice broadcast call with the corresponding active group ID when located in the group call area, where the group call area is uniquely defined by:
  - the location (radio cell) of the calling service subscriber at invocation and group ID if the call is originated by a calling subscriber is a service subscriber;
  - the addressed group call area if the call is originated by a calling ~~subscriber is a~~ dispatcher;
- the preregistered destination dispatchers related to that group call area and group ID.

The calling service subscriber or calling dispatcher shall be informed by the network with a suitable indication about the successful establishment of the voice broadcast call so that the user can start to speak.

The call can be released by the calling service subscriber or by the calling dispatcher or by the network (e.g. in case of a higher priority call) or by an entitled dispatcher~~s~~ predefined in the network.

Destination subscribers leaving the voice broadcast call for any reason shall not release the on going voice broadcast call.

5.5 Charging requirements

Normal event data according to GSM 12.05 shall be recorded as a network option related to calling subscriber or related to all VBS calls to one group ID in a specific group call area. . In addition data to be passed to the anchor MSC for charging purposes is the resources (i.e. cell identities) used during a call.

6 Exceptional procedures or unsuccessful outcome

If a service subscriber wants to establish a voice broadcast call while not subscribed to the service or the network cannot provide the service for some reason, an indication shall be provided to the calling service subscriber to notify him with the reason of failure.

If a dispatcher wants to establish a voice broadcast call while not entitled to do it or the network cannot provide the service for some reason, the call shall be rejected. The network shall give an appropriate indication to calling dispatchers who are GSM subscribers.

If a voice broadcast call cannot be established to all cells and dispatchers in a pre-set time, the call shall be considered established provided that at least the originated cell in case of a service subscriber originated broadcast call or any one cell within the group call area in case of a dispatcher originated broadcast call has been included within this time.

If a cell is excluded from the group call area because of pre-emption, the voice broadcast call is maintained as long as the calling subscriber is not pre-empted.

7 Interaction with GSM services and features

7.1 Calling Line Identification Presentation (CLIP)

If CLIP is applied, the group call reference ~~–~~ including the group call area ID and the group ID ~~–~~ shall be presented to the destination dispatchers. In addition the subaddress field of the calling party may be used to identify the calling service subscriber or calling dispatcher to the destination dispatchers.

The receiving mobile stations of the destination subscribers shall display the paged group ID regardless the destination subscribers have a subscription to CLIP.

7.2 Calling Line Identification Restriction (CLIR)

CLIR shall be supported.

The network shall have the possibility to override CLIR or reject the request to establish a voice broadcast call for a calling service subscriber or calling dispatcher who has CLIR actived.

7.3 Connected Line Identification Presentation (COLP)

If COLP is applied, the broadcast call reference - including the group call area ID and the group ID - shall be presented to the calling service subscriber or calling dispatcher. No destination subscriber identities will be presented.

TSG-SA WG1 #28 **S1-050476**
Beijing, China, 4th to 8th April 2005 **Agenda Item: 8**

CR-Form-v7

CHANGE REQUEST

⌘ **42.069** **CR** **005** ⌘ **rev** **-** ⌘ Current version: **6.0.0** ⌘

*For **HELP** on using this form, see bottom of this page or look at the pop-up text over the ⌘ symbols.*

Proposed change affects: UICC apps⌘ ☐ ME ☐ Radio Access Network ☐ Core Network ☒

Title:	⌘	Correction on the use of calling subscriber and destination subscriber
Source:	⌘	SA1 (Nortel Networks, Siemens)
Work item code:	⌘	ASCI
Date:	⌘	07/04/2005
Category:	⌘	**A**
Release:	⌘	Rel-6

Use one of the following categories:
F *(correction)*
A *(corresponds to a correction in an earlier release)*
B *(addition of feature),*
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Detailed explanations of the above categories can be found in 3GPP TR 21.900.

Use one of the following releases:

2	*(GSM Phase 2)*
R96	*(Release 1996)*
R97	*(Release 1997)*
R98	*(Release 1998)*
R99	*(Release 1999)*
Rel-4	*(Release 4)*
Rel-5	*(Release 5)*
Rel-6	*(Release 6)*
Rel-7	*(Release 7)*

Reason for change:	⌘	According to the definition in 3.1 in 42.069, a calling subscriber can be a service subscriber or a dispacher. However, the behaviour of each of these and their handling in the network is different. The stage 1does not reflect the functionality that is currently in the nework. Currently, there are two different implementations in the field due to this 2G (GSM) specification being unclear, which has to be corrected. The ambiguities the use of 'calling subscriber' creates in the specification need to be corrected. Likewise a destination subscriber can be a service subscriber or a dispatcher and the specification needs to be corrected in a similar way.
Summary of change:	⌘	Added definition for 'calling service subscriber', 'calling dispatcher', 'destination service subscriber', 'destination dispatcher' and 'destination subscriber(s)'. Deletion of definition of 'calling subscriber' and definition of 'destination subscriber'. Made corrections thoughout the specification using the new definitions.
Consequences if not approved:	⌘	Incorrect and misleading specification will cause problem in interoperability

Clauses affected:	⌘	3.1, 4				
Other specs affected:	⌘	**Y**	**N**			
		X		Other core specifications	⌘	43.069
			X	Test specifications		

	X	O&M Specifications

Other comments: ⌘

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****** *First Changed Section* ******

3.1 Definitions

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

Nnetwork operator: Entity which provides the network operating elements and resources for the execution of the VBS.

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Ddestination service subscriber: Service subscriber ~~or dispatcher~~ to which the VBS call is directed.

Ccalling service subscriber: Service subscriber ~~or dispatcher~~ which originates ~~invokes~~ the VBS call.

Calling dispatcher: Dispatcher which originates the VBS call.

Destination dispatcher: Pre-registered dispatcher to which the VBS call is directed.

Destination subscriber: Destination dispatcher(s) and/ or destination service subscriber(s) to which the VGCS call is directed.

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****** *Further Changed Section* ******

4 Description

The VBS is defined in the following. Figure 1 gives an explanation of the logical concept of the VBS.

a) The VBS enables a calling service subscriber or calling dispatcher to send speech unidirectional and simultaneously to all entitled dispatchers and to destination service subscribers belonging to a predefined group call area who have a subscription to the applicable group ID.

b) The calling service subscriber may be any service subscriber which has subscribed to the related group ID and is entitled to establish a voice broadcast call by his subscription. The calling ~~or any~~ dispatcher may be any dispatcher who is entitled to originate VBS calls to the related call reference. ~~for it by his identity which shall be registered in the network.~~

The destination subscriber may be any service subscriber which has subscribed to the related group ID or any dispatcher who is entitled for it by his identity which is registered in the network.

c) The broadcast call shall be established in a group call area which is comprised of one or a cluster of cells. Group call areas shall be predefined in the network by the service provider, co-ordinated by the network operator.

In case of a calling service subscriber initiating a VBS call, the group call area is uniquely identified by the actual cell in which the service subscriber resides at the moment of VBS call initialization and by the called group ID.

A calling dispatcher initiating a VBS call will be connected to a related predefined group call area. The entitlement of the dispatcher is checked by the network element responsible for the voice broadcast call management by verification of the calling identity. Since a dispatcher may be registered to more than one group call area and group ID an indication of the wanted group call area and group ID has to be given in form of a dedicated address called by the dispatcher.

d) Destination subscribers are all destination service subscribers or a group of destination service subscribers identified by the called group ID which have their present location in the group call area, and preregistered destination dispatchers. Destination service subscribers shall be notified with the group ID, not by paging the service subscriber individually. Destination dispatchers shall be called individually with their identity.

Service subscribers which leave the group call area during an on going VBS call cease to be destination subscribers. Service subscribers which enter the group call area during an on going VBS call shall become destination subscribers within 500 ms after reception of the first notification message related to the VBS call.

e) The calling service subscriber shall remain within the voice broadcast call until she terminates the call, loses contact with the network or leaves the group call area. ~~The latter case does not apply to calling subscribers who are dispatchers.~~ The VBS call shall be terminated by the network as soon as the network has determined that the calling service subscriber has left the VBS call area.

f) The calling service subscriber or calling dispatcher shall be informed by the network with a suitable indication about the successful establishment of the voice broadcast call so that he can start to speak~~-~~.

NOTE: A successful establishment means that all broadcast downlink channels are allocated, with the restrictions mentioned in clause 6, whether somebody is listening or not, and the related dispatchers are alerted.

g) Authentication is mandatory at GSM ~~-~~call set up. To allow fast call set up in VBS authenti~~fi~~cation of~~-~~ the calling service subscriber or calling dispatcher at ~~-~~invocation may optionally be delayed.

Authentication of the destination subscriber, who ~~have~~has no uplink connection, is not required.

Confidentiality on the radio path is optional.

h) Different levels of priority and pre-emption shall be applied as defined in the corresponding stage 1 description on the enhanced Multi-Level Precedence and Pre-emption service (eMLPP), GSM 02.67.

i) A number of voice broadcast calls may exist simultaneously intended for different groups of destination subscribers in the same group call area.

Parallel voice broadcast calls are possible to the same group of destination subscribers in different, possibly overlapping group call areas.

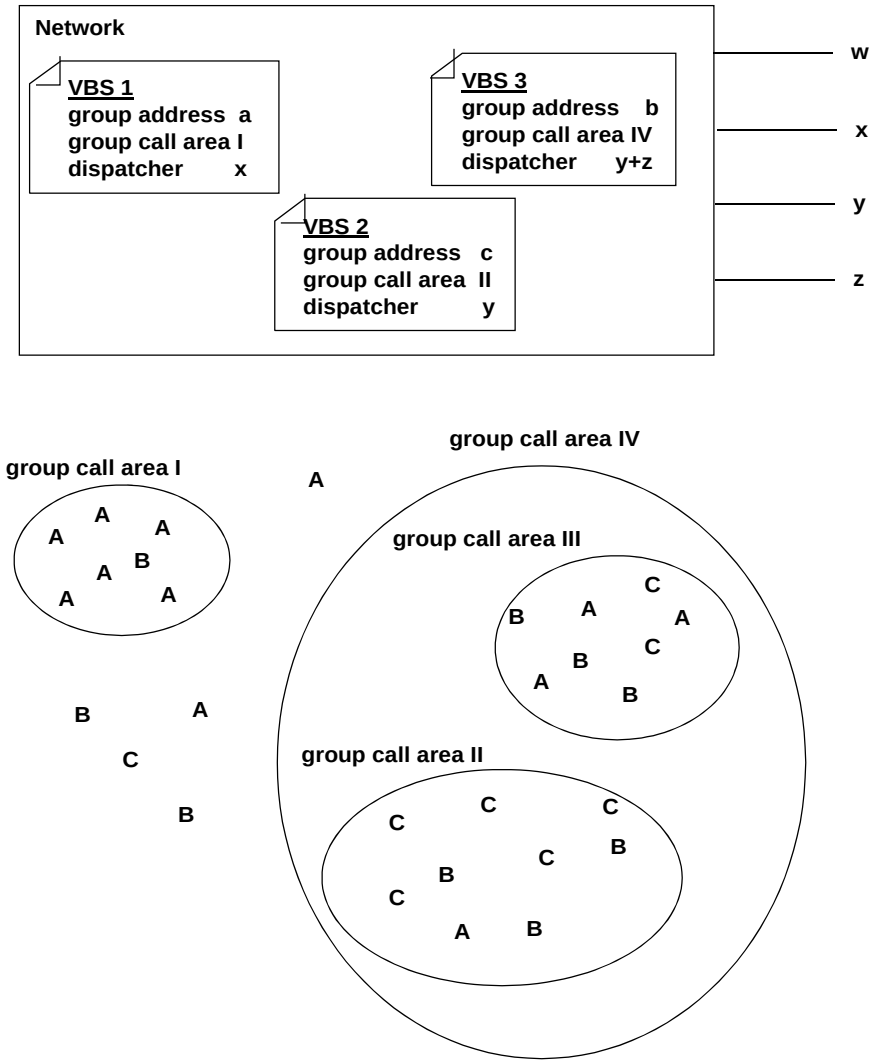
j) VBS shall also be provided in case of roaming. For this, certain group Id~~D~~s shall be defined as supra-PLMN group Id~~D~~s which have to be co-ordinated between the network operators and which shall be known in the networks and in the SIM. A service subscriber which is entitled by his subscription to establish voice broadcast calls while roaming shall only be able to use supra-PLMN group Id~~D~~s in case of roaming.

k) For certain levels of priorities an acknowledgement of receipt of a voice broadcast call can be required as an application option (e.g. for railway emergency calls) from all or from nominated destination service subscribers (the nomination is recorded on the SIM). The acknowledgement itself shall be performed at the end of the voice broadcast call. The acknowledgement shall indicate the time the reception started and the time the reception terminated. The acknowledgement has to be given to a predefined recipient.

l) It shall be possible for a service subscriber to activate or deactivate the voice broadcast reception for different group Id~~D~~s. The selection list is stored on the SIM corresponding to the subscribed group Id~~D~~s. It shall be possible to prohibit the deactivation of group Id~~D~~s used for high priority voice broadcast calls.

Mobile users that are configured as d~~D~~ispatchers and which are registered in the network for a certain voice broadcast call and which have also a subscription for VBS with the same group ID as the voice broadcast call for which they are dispatcher shall deactivate this group ID when they are located in the corresponding group call area in order to avoid conflicts between paging for the dispatcher and notifications for the group ID.

m) The calling service subscriber may specify, at call setup, information to be presented at call setup to the dispatchers. This information is sent as originator-to-dispatcher information to the network, and sent as UUS1 by the network to the dispatchers in the message for call setup. For normal call setup, the information is subject to the same constraints as UUS1 information in the setup of a point-to-point call. For fast setup, the information is restricted to 12 digits (with leading zeros); inclusion of originator-to-dispatcher information at fast setup is only possible if the mobile station has a valid TMSI. It is a network option to support originator-to-dispatcher information, or to ignore it. The inclusion of originator-to-dispatcher information in the VBS call setup is not subject to provision or withdrawal.



NOTE: VBS1, VBS2, VBS3 = particular voice broadcast calls with the attributes preregistered in the network. A, B, C, D = service subscriber with group ID a, b, c or d, respectively.

I. II, III, IV = group call areas.

w, x, y, z = dispatchers connected via normal GSM links or external networks.

Figure 1: Logical concept of the VBS

5 Normal operation with successful outcome

5.1 Provision

The VBS is provided to be used by a service subscriber after prior arrangements with the service provider. The provision includes the assignment of group IDs to the service subscriber. A subscription shall not provide more than 50 group IDs to the service subscriber.

The service can be offered with two subscription options:

	Subscription option	**Value**
-	subscriber has the capability of initiating voice broadcast calls	No Yes;
-	subscriber has the capability to initiate voice broadcast calls in case of roaming	No Yes.

5.2 Withdrawal

The VBS is withdrawn at the service provider's request or for administrative reasons.

5.3 Network related service configuration

The network related service configuration defines the attributes of a particular voice broadcast call which shall be pre-registered in the network by the service provider. This is not related to one specific service subscriber.

The attributes of a particular broadcast call are group ID, group call area composition, a list of dispatcher identities to be connected to this area, a list of dispatchers allowed to initiate voice broadcast calls to this area, the broadcast call reference identity which shall be used in case of COLP (see subclause 7.3) and recipient ~~dispatcher~~ identities to which an optional acknowledgement can be routed. Changes to the group call area composition shall be co-ordinated with the network operator.

5.4 Normal operation for voice broadcast call establishment

The VBS service shall be automatically initiated by the network when a calling service subscriber or calling dispatcher dials a particular short code or address at call set-up.

On successful initiation of the VBS, the voice broadcast call shall be established between the calling service subscriber or calling dispatcher and the destination subscribers. The destination subscribers are:

- all destination service subscribers at any time during the voice broadcast call with the corresponding active group ID when located in the group call area, where the group call area is uniquely defined by:
  - the location (radio cell) of the calling service subscriber at invocation and group ID if the call is originated by a calling subscriber is a service subscriber;
  - the addressed group call area if the call is originated by a calling ~~subscriber is a~~ dispatcher;
- the preregistered destination dispatchers related to that group call area and group ID.

The calling service subscriber or calling dispatcher shall be informed by the network with a suitable indication about the successful establishment of the voice broadcast call so that the user can start to speak.

The call can be released by the calling service subscriber or by the calling dispatcher or by the network (e.g. in case of a higher priority call) or by an entitled dispatcher~~s~~ predefined in the network.

Destination subscribers leaving the voice broadcast call for any reason shall not release the on going voice broadcast call.

5.5 Charging requirements

Normal event data according to GSM 12.05 shall be recorded as a network option related to calling subscriber or related to all VBS calls to one group ID in a specific group call area. . In addition data to be passed to the anchor MSC for charging purposes is the resources (i.e. cell identities) used during a call.

6 Exceptional procedures or unsuccessful outcome

If a service subscriber wants to establish a voice broadcast call while not subscribed to the service or the network cannot provide the service for some reason, an indication shall be provided to the calling service subscriber to notify him with the reason of failure.

If a dispatcher wants to establish a voice broadcast call while not entitled to do it or the network cannot provide the service for some reason, the call shall be rejected. The network shall give an appropriate indication to calling dispatchers who are GSM subscribers.

If a voice broadcast call cannot be established to all cells and dispatchers in a pre-set time, the call shall be considered established provided that at least the originated cell in case of a service subscriber originated broadcast call or any one cell within the group call area in case of a dispatcher originated broadcast call has been included within this time.

If a cell is excluded from the group call area because of pre-emption, the voice broadcast call is maintained as long as the calling subscriber is not pre-empted.

7 Interaction with GSM services and features

7.1 Calling Line Identification Presentation (CLIP)

If CLIP is applied, the group call reference ~~–~~ including the group call area ID and the group ID ~~–~~ shall be presented to the destination dispatchers. In addition the subaddress field of the calling party may be used to identify the calling service subscriber or calling dispatcher to the destination dispatchers.

The receiving mobile stations of the destination subscribers shall display the paged group ID regardless the destination subscribers have a subscription to CLIP.

7.2 Calling Line Identification Restriction (CLIR)

CLIR shall be supported.

The network shall have the possibility to override CLIR or reject the request to establish a voice broadcast call for a calling service subscriber or calling dispatcher who has CLIR actived.

7.3 Connected Line Identification Presentation (COLP)

If COLP is applied, the broadcast call reference - including the group call area ID and the group ID - shall be presented to the calling service subscriber or calling dispatcher. No destination subscriber identities will be presented.