3GPP TSG CN Plenary Meeting #22 **NP-030507**
10th – 12th December 2003 Maui, USA.

Source: TSG CN WG4

Title: Corrections on small Technical Enhancements and Improvements MAP Rel-5

Agenda item: 8.8

Document for: APPROVAL

Spec	CR	Rev	Doc-2nd-Level	Phase	Subject	Cat	Ver_C
29.002	694	1	N4-031337	Rel-5	Remove reduntant option for retrieval of routeing information in figure 21.2.3	F	5.7.0
29.002	695	1	N4-031338	Rel-6	Remove reduntant option for retrieval of routeing information in figure 21.2.3	A	6.3.0

3GPP TSG CN WG4 Meeting #21 **N4-031337**
Bangkok, THAILAND, 27th – 31st October 2003

CR-Form-v7

CHANGE REQUEST

⌘ **29.002** **CR** **694** ⌘ **rev** **1** ⌘ Current version: **5.7.0** ⌘

*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:	⌘	Remove reduntant option for retrieval of routeing information in figure 21.2.3
Source:	⌘	CN4
Work item code:	⌘	TEI5
Date:	⌘	30/10/2003
Category:	⌘	**F**
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)*

Reason for change:	⌘	In the scope of 3GPP TS 23.018 is written: The specification of the handling of a request from the HLR for subscriber information is not part of basic call handling, but is required for both CAMEL (3GPP TS 23.078 [12]) and optimal routeing (3GPP TS 23.079 [13]). The use of the Provide Subscriber Information message flow is shown in 3GPP TS 23.078 [12] and 3GPP TS 23.079 [13]. By checking 3GPP TS 23.078 it is clear that Optimal Routeing is not invoked for gsmSCF initiated calls (see clauses 4.6.15.1 where O.R. parameters are missing). Additionally, Provide Subscriber Information (PSI) could be initiated by HLR in case of terminating CAMEL calls for a subscriber having additional CAMEL data indicating that LocInfo/SubsState shall be sent in SRIack. But gsmSCF is always indicating to HLR to suppress T-CSI for that call. As long as this is not a terminating CAMEL call, the subscriber data that may request the sending of additional information is not applicable for this process, resulting that PSI is never sent in case the call was initiated in gsmSCF. Thus, as MAP-PSI is not sent for gsmSCF calls, neither due to O.R. nor due to CAMEL, the flow in figure 21.2.3 is not real and should be corrected. **This is an essential correction.**
Summary of change:	⌘	Remove the redundant optional message from the flow in figure 21.2.3.
Consequences if not approved:	⌘	There will be misalignment between 3GPP TS 29.002 and 3GPP TSs 23.018, 23.078, 23.079 causing implementation confusion. Compliance to TSs will be mutually exclusive. As PSI is optional, if one node is implemented according to 29.002 and sends this message, but the receiving node does not expect it, then an error is returned and the call may be disconnected.

Clauses affected:	⌘	21.2.1			
Other specs affected:	⌘	**Y**	**N**		
			X	Other core specifications	⌘
			X	Test specifications	
			X	O&M Specifications	
Other comments:	⌘				

How to create CRs using this form:

Comprehensive information and tips about how to create CRs can be found at http://www.3gpp.org/specs/CR.htm. Below is a brief summary:

1) Fill out the above form. The symbols above marked ⌘ contain pop-up help information about the field that they are closest to.

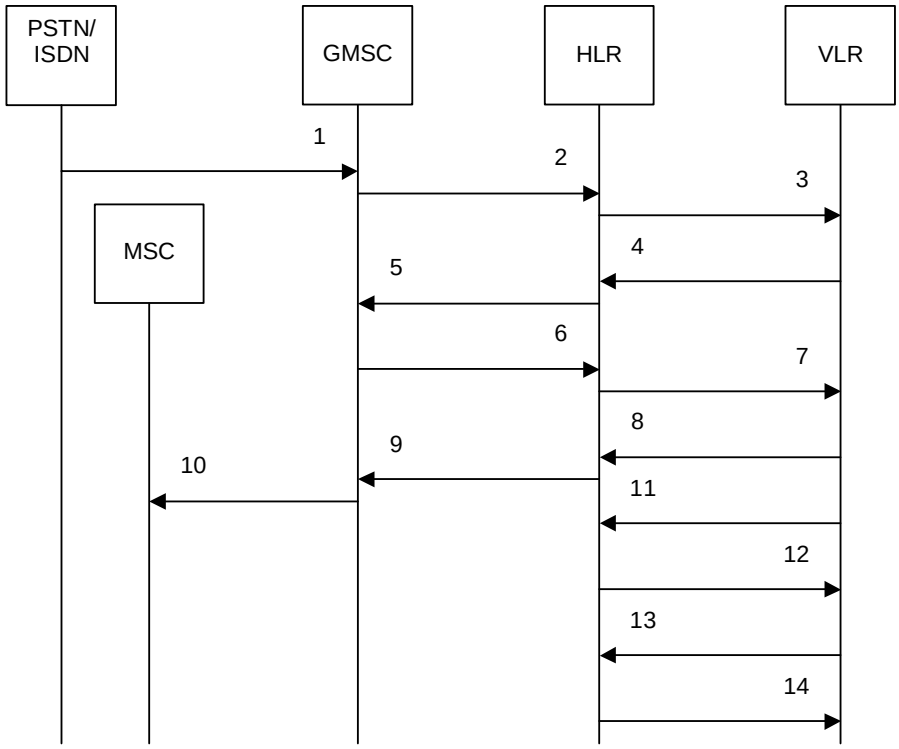
2) Obtain the latest version for the release of the specification to which the change is proposed. Use the MS Word "revision marks" feature (also known as "track changes") when making the changes. All 3GPP specifications can be downloaded from the 3GPP server under ftp://ftp.3gpp.org/specs/ For the latest 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.

21.2 Retrieval of routing information

21.2.1 General

The message flows for successful retrieval of routeing information for a mobile terminating call are shown in figure 21.2/1 (mobile terminating call which has not been optimally routed) and 21.2/2 (mobile-to-mobile call which has been optimally routed). The message flow for successful retrieval of routeing information for a gsmSCF initiated call is shown in figure 21.2/3.

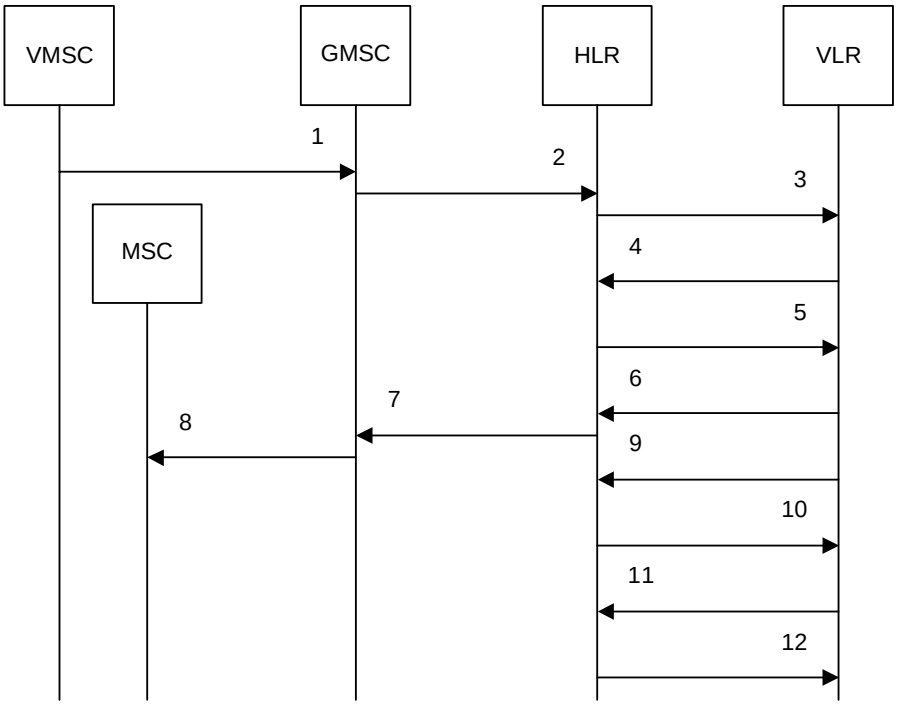


1) I_IAM (Note 1)
2) MAP_SEND_ROUTING_INFORMATION_req/ind (Note 2)
3) *MAP_PROVIDE_SUBSCRIBER_INFO_req/ind* (Note 3, Note 4)
4) *MAP_PROVIDE_SUBSCRIBER_INFO_rsp/cnf* (Note 4)
5) *MAP_SEND_ROUTING_INFORMATION_rsp/cnf* (Note 4)
6) *MAP_SEND_ROUTING_INFORMATION_req/ind* (Note 4)
7) MAP_PROVIDE_ROAMING_NUMBER_req/ind
8) MAP_PROVIDE_ROAMING_NUMBER_rsp/cnf
9) MAP_SEND_ROUTING_INFORMATION_rsp/cnf
10) I_IAM (Note 1)
11) *MAP_RESTORE_DATA_req/ind* (Note 4)
12) *MAP_INSERT_SUBSCRIBER_DATA_req/ind* (Note 4)
13) *MAP_INSERT_SUBSCRIBER_DATA_rsp/cnf* (Note 4)
12) *MAP_RESTORE_DATA_rsp/cnf* (Note 4)

NOTE 1: TUP or ISUP may be used in signalling between MSCs, depending on the network type between the MSCs. For further details on the TUP and ISUP procedures refer to the following ITU-T Recommendations and ETSI specification:
- Q.721-725 - Telephone User Part (TUP);
- ETS 300 356-1 - Integrated Services Digital Network (ISDN); Signalling System No.7; ISDN User Part (ISUP) version 2 for the international interface; Part 1: Basic services.

NOTE 2: This service may also be used by an ISDN exchange for obtaining routing information from the HLR.
NOTE 3: As a network operator option, the HLR sends MAP_PROVIDE_SUBSCRIBER_INFORMATION to the VLR. For further details on the CAMEL procedures refer to 3GPP TS 23.078 [98].
NOTE 4: Services printed in *italics* are optional.

Figure 21.2/1: Message flow for retrieval of routeing information (non-optimally routed call)



1) I_IAM (Note 1)
2) MAP_SEND_ROUTING_INFORMATION_req/ind
3) MAP_PROVIDE_SUBSCRIBER_INFO_req/ind (Note 2)
4) MAP_PROVIDE_SUBSCRIBER_INFO_rsp/cnf (Note 2)
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9) *MAP_RESTORE_DATA_req/ind* (Note 3)
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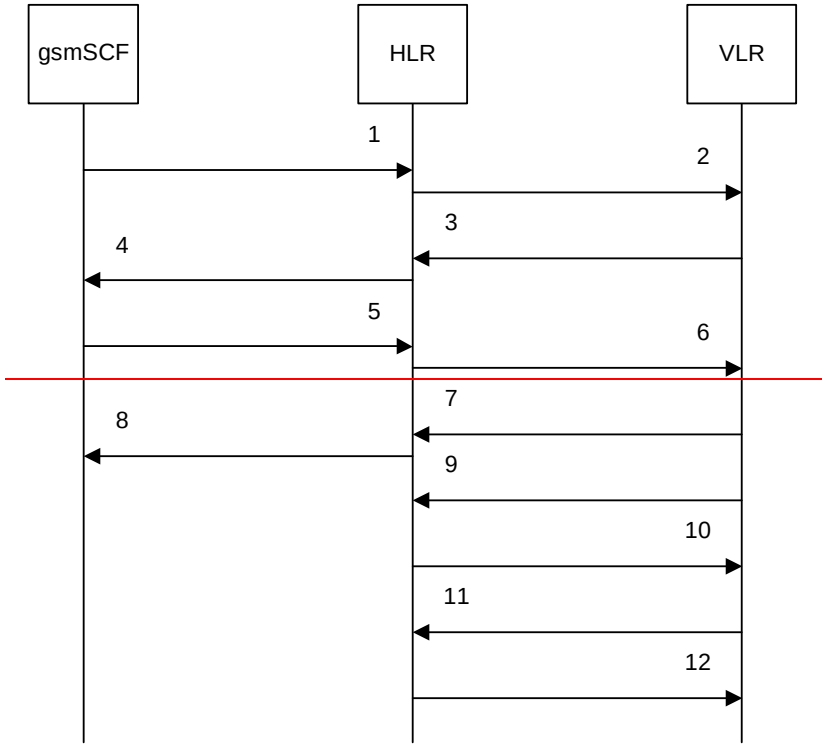
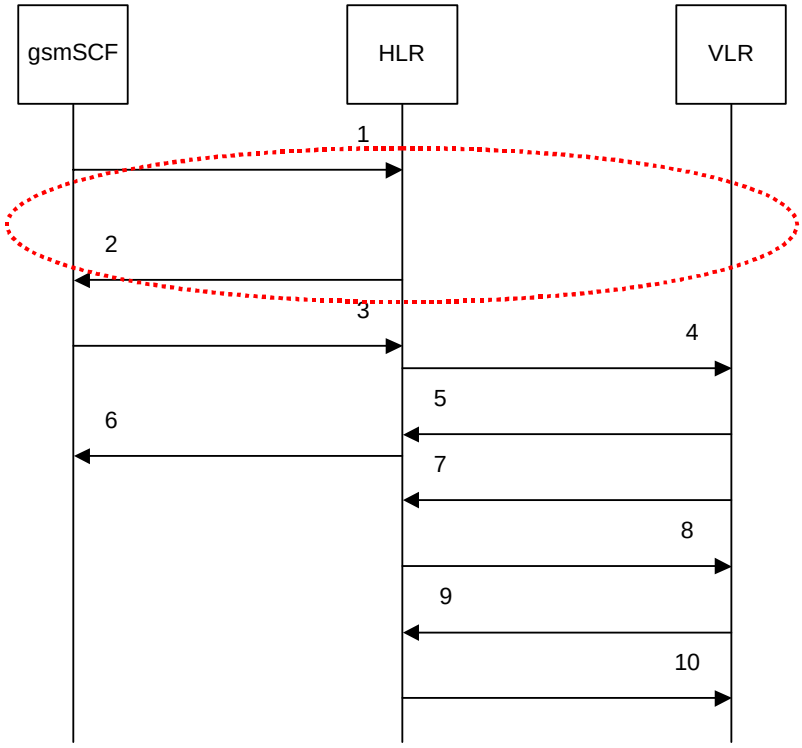
NOTE 2: For Optimal Routeing phase 1, only one of the information flows for Provide Subscriber Info and Provide Roaming Number is used.

NOTE 3: Services printed in *italics* are optional.

Figure 21.2/2: Message flow for retrieval of routeing information (optimally routed call)

*** First Modification ***





1) MAP_SEND_ROUTING_INFORMATION_req/ind

~~2) *MAP_PROVIDE_SUBSCRIBER_INFO_req/ind* (Note 1, Note 2)~~

~~3) *MAP_PROVIDE_SUBSCRIBER_INFO_rsp/cnf* (Note 2)~~

24) *MAP_SEND_ROUTING_INFORMATION_rsp/cnf* (Note 12)
35) *MAP_SEND_ROUTING_INFORMATION_req/ind* (Note 12)
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79) *MAP_RESTORE_DATA_req/ind* (Note 12)
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NOTE 12: Services printed in *italics* are optional.

Figure 21.2/3: Message flow for retrieval of routeing information for a gsmSCF initiated call

The following MAP services are used to retrieve routing information:

MAP_SEND_ROUTING_INFORMATION	see subclause 10.1;
MAP_PROVIDE_ROAMING_NUMBER	see subclause 10.2;
MAP_PROVIDE_SUBSCRIBER_INFO	see subclause 8.11.2;
MAP_RESTORE_DATA	see subclause 8.10.3.

****** End of Modification ******

3GPP TSG CN WG4 Meeting #21 **N4-031338**
Bangkok, THAILAND, 27th – 31st October 2003

CR-Form-v7

CHANGE REQUEST

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Date:	⌘	30/10/2003
Category:	⌘	**A**
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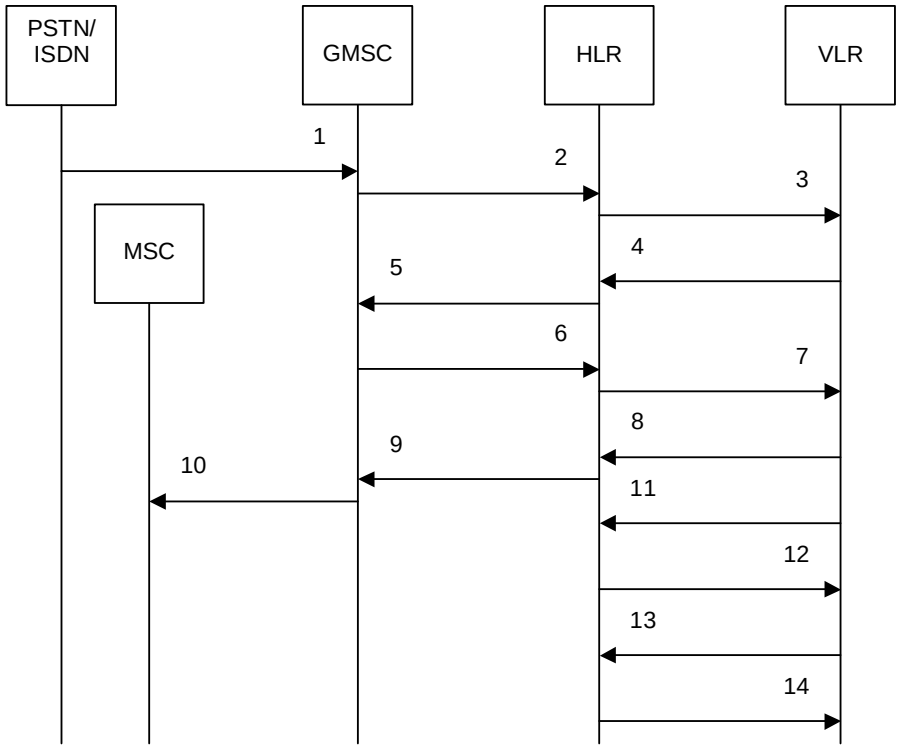

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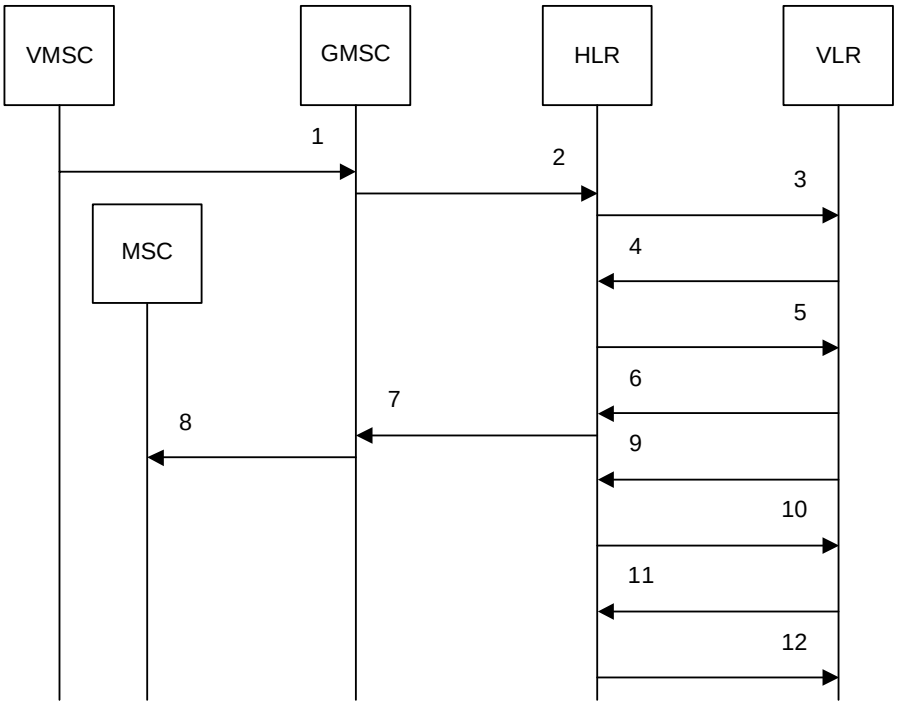

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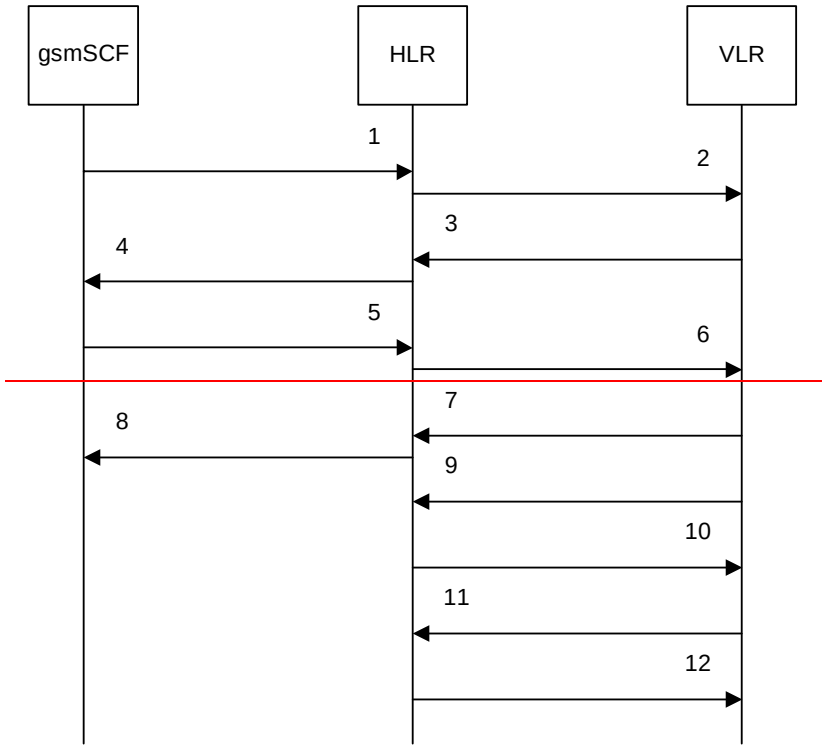
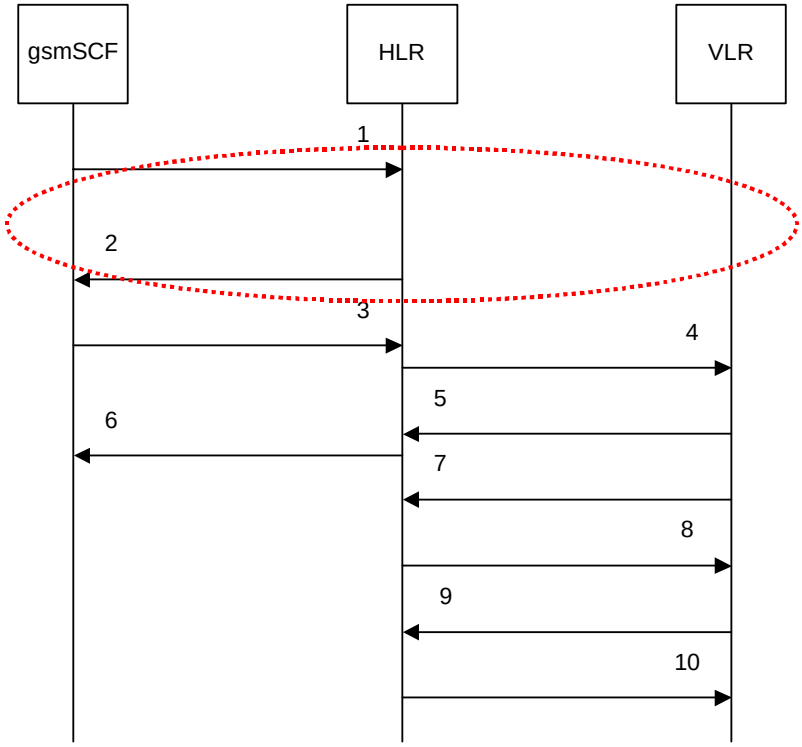
****** First Modification ******





1) MAP_SEND_ROUTING_INFORMATION_req/ind
~~2) *MAP_PROVIDE_SUBSCRIBER_INFO_req/ind* (Note 1, Note 2)~~
~~3) *MAP_PROVIDE_SUBSCRIBER_INFO_rsp/cnf* (Note 2)~~
2~~4~~) *MAP_SEND_ROUTING_INFORMATION_rsp/cnf* (Note 1~~2~~)
3~~5~~) *MAP_SEND_ROUTING_INFORMATION_req/ind* (Note 1~~2~~)
4~~6~~) MAP_PROVIDE_ROAMING_NUMBER_req/ind
5~~7~~) MAP_PROVIDE_ROAMING_NUMBER_rsp/cnf
6~~8~~) MAP_SEND_ROUTING_INFORMATION_rsp/cnf
7~~9~~) *MAP_RESTORE_DATA_req/ind* (Note 1~~2~~)
8~~10~~) *MAP_INSERT_SUBSCRIBER_DATA_req/ind* (Note 1~~2~~)

9~~11~~) *MAP_INSERT_SUBSCRIBER_DATA_rsp/cnf* (Note 1~~2~~)
10~~12~~) *MAP_RESTORE_DATA_rsp/cnf* (Note 1~~2~~)

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NOTE 1~~2~~: Services printed in *italics* are optional.

Figure 21.2/3: Message flow for retrieval of routeing information for a gsmSCF initiated call

The following MAP services are used to retrieve routing information:

MAP_SEND_ROUTING_INFORMATION	see subclause 10.1;
MAP_PROVIDE_ROAMING_NUMBER	see subclause 10.2;
MAP_PROVIDE_SUBSCRIBER_INFO	see subclause 8.11.2;
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****** End of Modification ******