

# ETSI TS 122 079 V14.0.0 (2017-03)



**Digital cellular telecommunications system (Phase 2+) (GSM);  
Universal Mobile Telecommunications System (UMTS);  
Support of Optimal Routing (SOR);  
Service definition;  
Stage 1  
(3GPP TS 22.079 version 14.0.0 Release 14)**



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Reference

RTS/TSGS-0122079ve00

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Keywords

GSM,UMTS

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# Foreword

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# 1 Scope

This Stage 1 description of the first phase of Support of Optimal Routing (SOR):

- compiles the basic service requirements for SOR;
- describes the interactions for Supplementary Services (SS) in order to cater for SOR;
- refers to modifications to network features required by SOR.

This specification does not address the following:

- There is no need for optimisation of the routing of calls originally directed to a fixed network subscriber, because the physical address of a fixed network terminating line cannot differ from its logical address.
- SOR in non-PLMNs is not a subject of this TS, but might be possible by bilateral arrangement between PLMN operators and those non-PLMN operators.

The purpose of SOR is to reduce the number of unnecessary inter-PLMN call legs.

The first phase of SOR applies to:

- OR for the benefit of the B party i.e. Mobile terminated calls with late call forwarding to the home or visited country (scenarios 1 and 2),
- and optionally;
- OR for the benefit of the A party, e.g. Mobile to mobile calls where both mobile subscribers are in the same country (scenarios 3 to 10).

The complete set of scenarios included in the phase 1 of OR is presented in the paragraph for normal procedures. All other scenarios are excluded from Phase 1 of OR.

Note that Optimal Routing is applicable to national roaming situations, that is to calls directed to a mobile subscriber roaming in her home country, but registered in a PLMN different from her HPLMN.

All further call scenarios, including multiple call forwarding, are left to subsequent phases of SOR. Subsequent phases of SOR shall be backwards compatible with this first phase.

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# 2 References

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- References are either specific (identified by date of publication, edition number, version number, etc.) or non-specific.
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[1] 3GPP TR 21.905: "Vocabulary for 3GPP Specifications".

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# 3 Definitions and abbreviations

**Administrative PLMN:** The complete set of all functional entities normally regarded as a single PLMN.

**Basic OR :** Routing of a call by the direct route when no forwarding occurs.