

**TECHNICAL REQUIRMENTS AND TESTING**

**1. Responsibilities**

- 1.1 The Wholesale Roaming Access Services as described in Annex 2 will be facilitated via the below mentioned network elements and services. Minor deviation from Table 1 may occur.
- 1.2 Table 1 below, lists the separate responsibilities of Tele2 and Access Seeker in order to provide the Wholesale Roaming Access Services of this Agreement to Access Seeker Roaming Customers.
- 1.3 Network Architecture overview is shown in Figure 1 below

<u>Responsibility Tele2</u>	<u>Full Responsibility Access Seeker</u>
Customer Service: second level escalation point towards roaming partners	HPLMN elements VAS platforms Provisioning Customer Service: first level escalation point
IMSI (International Mobile Customer Identity)	Complaint and Fraud handling End-user billing and collection Customer Service SIM (Customer Identity Module) Mobile Network Code (MNC)
Lawful interception (LI)	MSISDN (Mobile Station ISDN) Interconnection Connection between the Parties Announcements Lawful interception (LI)
International Roaming tests and agreements	Implementation of Mobile Number Portability

**Table 1: responsibilities**

**NETWORK ARCHITECTURE**

This picture gives a high level overview about the network architecture.

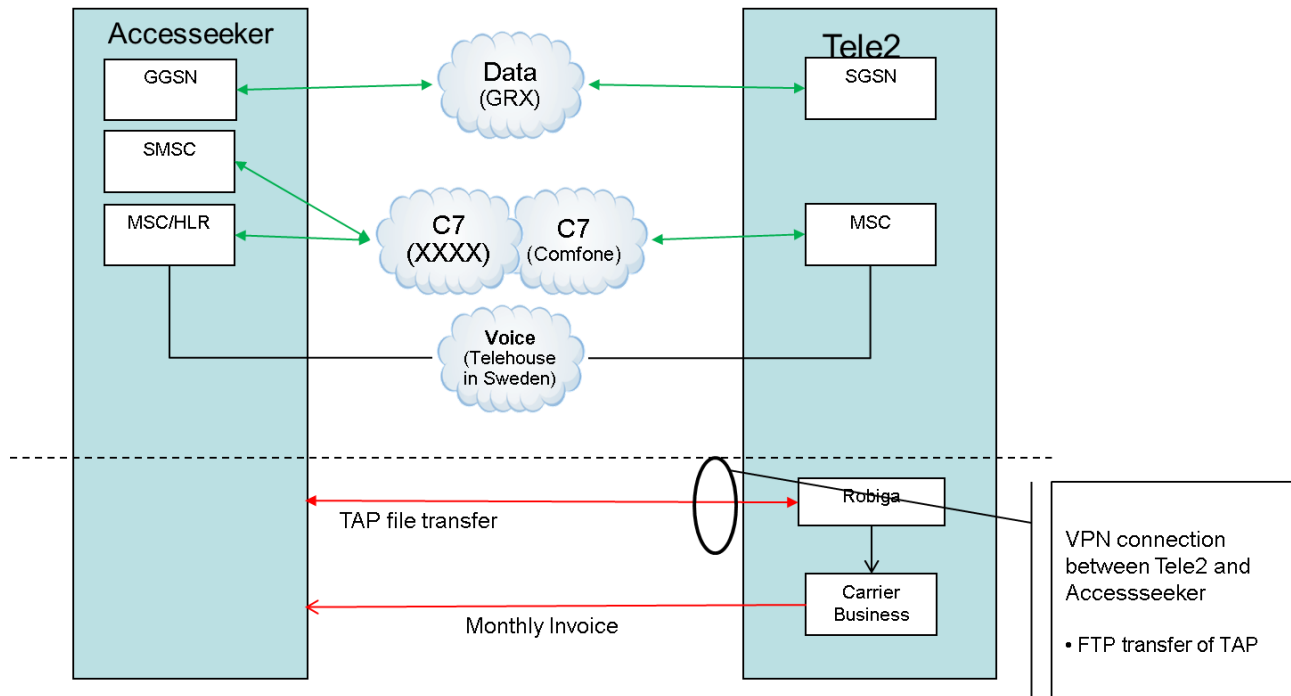


Figure 1. Network Architecture Overview

**2. NETWORK SETTINGS**

- 2.1 Tele2 will assign two (2) global Titles for Access Seekers use.
- 2.2 Access Seeker will need to employ an APN name space containing part that is specific to Access Seeker and not generic in nature.
- 2.3 Tele2 will update Tele2's IR21 with relevant information in order to support Access Seeker providing Wholesale Roaming Access Services to its Roaming Customers.

**3. Physical interconnect for Telecom**

- 3.1 The physical interconnect shall be over SIP-I and SIGTRAN. The Parties shall meet at a generally available telehousing facility in Sweden and each Party shall bear its own associated costs. The specifications of the physical interconnect shall be agreed in writing between the Parties prior to the Commercial Launch.

**4. Physical interconnect for administrative SERVICES**

- 4.1 Access Seeker will need to establish a VPN tunnel to Tele2 for FTP file transfer of TAP files and access to Trouble ticketing system.

## **5. General Aspects of Testing Execution**

- 5.1 Testing will be executed in cooperation between Tele2 and Access Seeker. Tele2 and Access Seeker will in writing agree on a test specification before Commercial Launch. All test cases will be executed together by both Parties. If it is necessary to extend the testing period, both Parties have to agree this in writing. Both Parties will create a detailed joint test schedule after setting up test cases. This time schedule is not part of this Annex. Both Parties have to ensure that experienced personal is available during testing.
- 5.2 Results of executed test cases will be exchanged as soon as possible after completion. A test case is successful, if all expected test results are fulfilled. Executed test cases will be marked as successful / not successful with the date of execution. Testing is successfully finalized when all major test cases are tested without major failures.
- 5.3 After end of testing one common detailed test report will be created and provided to the Parties. This report contains a short description of every test case including test result and the execution date.
- 5.4 Both Parties will endeavour to perform the testing according to the test plan and schedule. Tele2 is allowed to interrupt tests, if there is a need for tests to solve major problems in the Tele2 Networks.

## **6. SIM- cards, mobiles and other test equipment**

- 6.1 Access Seeker is responsible to provide at least 10 Access Seeker SIM cards (within Tele2s provided IMSI range), which are suitable for executing all test cases.

## **7. Test Configuration (Hard- and Software)**

- 7.1 Final test configuration will be clarified between both Parties, but Access Seeker has to ensure that Access Seeker hardware is already available for testing. Both Parties shall exchange necessary configuration data for establishing connection. Details have to be specified between both Parties and are not part of this Annex.