



Reference Offer of Telecom Italia

Wholesale International Roaming Access

21 December 2012

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1 INTRODUCTION

This document constitutes the Reference Offer of Telecom Italia for the service of Wholesale International Roaming Access to a visited network within the EU/EEA, as well as related services, in accordance with Regulation (EU) 531/2012 of the European Parliament and of the Council, taking into account of the BEREC Guidelines on the application of Article 3 of the Roaming Regulation - Wholesale Roaming Access and based on standard GSMA PRDs (Permanent Reference Documents).

The Reference Offer contains the general technical, economic and legal conditions relating to the above services.

Wholesale International Roaming Access comprises Wholesale Roaming Direct Access and Wholesale Roaming Resale Access.

“Direct Access” means that an MNO or a Full MVNO, EU/EEA retail provider, acting as home operator, wishes to be provided by Telecom Italia, acting as visited operator, with roaming services on the Italian territory.

“Resale Access” means that a Light MVNO or a Reseller, retail provider having obtained the related authorisations by the Italian authorities, bases its retail service on a commercial agreement with Telecom Italia regarding a complete range of mobile wholesale services which also include international roaming services in those countries where Telecom Italia has in force International Roaming Agreements with foreign EU/EEA MNOs.

This Reference Offer deals with “regulated” roaming services (call, SMS and data), as defined in Regulation (EU) 531/2012 of the European Parliament and of the Council, *i.e.* services where the roaming customer is roaming within the EU/EEA.

This Reference Offer enables MNOs, Full MVNOs, Light MVNOs and Resellers to provide to their customers roaming access to a visited network within the EU/EEA.

Telecom Italia can provide to either Wholesale Roaming Direct access seeker and Wholesale Roaming Resale access seeker both prepaid and postpaid services with the same limitations, if any, to which Telecom Italia customers are subject to.

The publication of the present Reference Offer should not prevent commercial negotiations between the access seeker and Telecom Italia which will be reflected in the final wholesale agreements. Furthermore, the present Reference Offer shall not grant access seekers with further or greater rights than those mandatorily enjoyed by access seekers under the applicable EU law.

Economic conditions related to the services referred to in this Reference Offer are exclusive of Value Added Tax (VAT).

2 NORMATIVE REFERENCES

- Directive 2002/19/EC of the European Parliament and of the Council, of 7 March 2002, on access to, and interconnection of, electronic communications networks and associated facilities (Access Directive);
- Directive 2002/20/EC of the European Parliament and of the Council, of 7 March 2002, on the authorisation of electronic communications networks and services (Authorisation Directive);
- Directive 2002/21/EC of the European Parliament and of the Council, of 7 March 2002, on a common regulatory framework for electronic communications networks and services (Framework Directive);
- Directive 2002/22/EC of the European Parliament and of the Council, of 7 March 2002, on universal service and users' rights relating to electronic communications networks and services (Universal Service Directive);
- Directive 2002/58/EC of the European Parliament and of the Council, of 12 July 2002, concerning the processing of personal data and the protection of privacy in the

electronic communications sector (Directive on privacy and electronic communications);

- Decision 243/2012/EU of the European Parliament and of the Council, of 14 March 2012, establishing a multiannual radio spectrum policy program;
- Regulation (EU) 531/2012 of the European Parliament and of the Council, of 13 June 2012, on roaming on public mobile communications networks within the Union (Roaming Regulation), as amended by Regulation (EU) 2015/2120 and by Regulation (EU) 2017/920;
- Guidelines BoR (17) 114 of BEREC, of 9 June 2017, on Regulation (EU) 531/2012, as amended by Regulation (EU) 2015/2120 and by Regulation (EU) 2017/920 (Wholesale Roaming Guidelines).

3 DATE OF PUBLICATION AND VALIDITY

This Reference Offer, in accordance with Regulation (EU) 531/2012 of the European Parliament and of the Council and taking into account of the BEREC Guidelines on the application of Article 3 of the Roaming Regulation - Wholesale Roaming Access, was published on December 21st, 2012 and it shall remain in force until replaced by an updated version.

4 ACRONYMS

- 3GPP:** 3rd Generation Partnership Project;
- CAMEL:** Customized Applications for Mobile networks using Enhanced Logic;
- CDR:** Call Data Record;
- DWRAA:** Direct Wholesale Roaming Access Agreement;
- EEA:** European Economic Area;

ETSI:	European Telecommunication Standard Institute;
EU:	European Union;
GSMA:	GSM Association;
HLR:	Home Location Register;
IMSI:	International Mobile Subscriber Identity;
IR:	International Roaming;
IRA:	International Roaming Agreement;
IREG:	International Roaming Expert Group;
MMS:	Multimedia Messaging Service;
MNO:	Mobile Network Operator;
MVNO:	Mobile Virtual Network Operator;
PDP:	Packet Data Protocol;
PRD:	Permanent Reference Document;
PMN:	Public Mobile Network;
PSMC:	Public Service Management Code;
SIM:	Subscriber Identification Module;
SLA:	Service Level Agreement;
TAP:	Transferred Account Procedure;
UMTS:	Universal Mobile Telecommunications System;
U-SIM:	UTRAN SIM;
UTRAN:	UMTS Terrestrial Radio Access Network.

5 DEFINITIONS

For the purposes of this Reference Offer, the following definitions shall apply:

- a. **'access seeker'**: an undertaking that requires wholesale international roaming services (direct or resale);

- b. **‘roaming provider’**: an undertaking that provides a roaming customer with regulated retail roaming services;
- c. **‘domestic provider’**: an undertaking that provides a roaming customer with domestic mobile communications services;
- d. **‘home network’**: a public communications network located within a Member State and used by the roaming provider for the provision of regulated retail roaming services to a roaming customer;
- e. **‘home operator’**: the operator owner of the customer which roams on a visited network;
- f. **‘Insufficient Remuneration Event’**: when a roaming customer of the home operator, or a relevant part of its own customers, roaming in the visited network are not generating any chargeable events (or minimal presence of chargeable event) during for the all the period of presence in roaming;
- g. **‘visited network’**: a terrestrial public mobile communications network situated in a Member State other than that of the roaming customer’s domestic provider that permits a roaming customer to make or receive calls, to send or receive SMS messages or to use packet switched data communications, by means of arrangements with the home network operator;
- h. **‘visited operator’**: the operator owner of the visited network;
- i. **‘Union-wide roaming’**: the use of a mobile device by a roaming customer to make or receive intra-Union calls, to send or receive intra-Union SMS messages, or to use packet switched data communications, while in a Member State other than that in which the network of the domestic provider is located, by means of arrangements between the home network operator and the visited network operator;
- j. **‘roaming customer’**: a customer of a roaming provider of regulated roaming services, by means of a terrestrial public mobile communications network situated in the Union, whose contract or arrangement with his roaming provider permits Union-wide roaming; it is identified by EU numbering resources assigned to the mobile service.

- k. **'regulated roaming call'**: a mobile voice telephony call made by a roaming customer, originating on a visited network and terminating on a public communications network within the Union or received by a roaming customer, originating on a public communications network within the Union and terminating on a visited network;
- l. **'regulated roaming SMS message'**: an SMS message sent by a roaming customer, originating on a visited network and terminating on a public communications network within the Union or received by a roaming customer, originating on a public communications network within the Union and terminating on a visited network;
- m. **'regulated data roaming service'**: a roaming service enabling the use of packet switched data communications by a roaming customer by means of his mobile device while it is connected to a visited network. A regulated data roaming service does not include the transmission or receipt of regulated roaming calls or SMS messages, but does include the transmission and receipt of MMS messages;
- n. **'wholesale roaming direct access'**: the making available of facilities and/or services by a mobile network operator to another undertaking, under defined conditions, for the purpose of that the other undertaking providing regulated roaming services to roaming customers;
- o. **'wholesale roaming resale access'**: the provision of roaming services on a wholesale basis by a mobile network operator different from the visited network operator to another undertaking (access seeker) for the purpose of that the other undertaking (access seeker) providing regulated roaming services to its roaming customers;
- p. **'MNO'**: an undertaking authorised to provide electronic communications services and to install its own mobile network infrastructure and that has its own frequency resources;
- q. **'Full MVNO'**: an undertaking that provides mobile telecommunications services to the public using its own facilities switching mobile network and HLR, its own IMSI and issuing its own SIM cards. It has not allocated frequency resources and it uses,

for mobile network access, the frequency resources of the hosting MNO on a basis of an appropriate commercial agreement;

- r. **‘Light MVNO’**: an undertaking that provides mobile telecommunications services to the public by using MNO’s network facilities (switching mobile network and HLR) and MNO’s IMSI and SIM cards. It has not allocated frequency resources and it uses, for mobile network access, the frequency resources of the hosting MNO on a basis of an appropriate commercial agreement;
- s. **‘Reseller’**: an undertaking that resells mobile telecommunications services acquired by an MNO;
- t. **‘GSM Association Permanent Reference Documents’**: means a document noted as such by the PSMC to the General Assembly and listed as such by Headquarters on the list of Permanent Reference Documents;
- u. **‘International Roaming’** or **‘IR’**: means the provision of mobile telecommunications services between Public Mobile Networks in order that roaming customers may make use of the services offered by the roaming provider;
- v. **‘Session’**: means the time between PDP Context activation until PDP Context deactivation;
- w. **‘TAP’**: means Transfer Account Procedure as defined and described in GSM Association Permanent Reference Documents;
- x. **‘Technical Specifications’**: means the technical specifications defined and adopted by 3GPP (3rd Generation Partnership Project), including the ETSI technical specifications defined and adopted by 3GPP.

6 TERMS AND CONDITIONS

Telecom Italia provides wholesale international roaming access to the access seeker, including access to networks elements and associated facilities, relevant services,

software information and information systems, which are necessary for the provision of regulated roaming services to roaming customers, as specified in this Reference Offer.

The technical conditions of the services provided with this Reference Offer are equivalent to those relevant for the provision of services to Telecom Italia itself.

Requests for access to provide services which are not regulated roaming services are not covered by this Reference Offer. Any such requests fall to be negotiated on commercial terms.

Roaming access request can be refused by Telecom Italia on the basis of objective criteria such as commercial requirements (such as the paragraph 11 of this reference offer), technical feasibility and the need to maintain network integrity.

Any request for wholesale roaming access for purposes other than the provision of regulated roaming services to roaming providers' customers while these latter are temporarily travelling within the European Union, under Article 3, paragraph 6, of Regulation (EU) 531/2012 - as amended by Regulation (EU) 2015/2120 - shall be evaluated on a case by case basis, and the relevant tariffs to be applied shall be based on the particular characteristics of the roaming service specifically offered by the access seeker entity.

This Reference Offer includes conditions to prevent *permanent roaming or anomalous or abusive use of wholesale roaming access* for purposes other than the provision of regulated roaming services to roaming providers' customers while the latter are temporarily travelling within the Union.

6.1 Direct Access

The provision of Wholesale International Roaming Direct Access is submitted to and regulated by a Direct Wholesale Roaming Access Agreement ("DWRAA") to be signed between Telecom Italia and the access seeker. The access seeker may request a template of such Agreement to the international commercial contact point of Telecom Italia.

The prioritization of the requests for access are based on a non-discriminatory principle.

Telecom Italia grants all reasonable requests for access which may be necessary to allow the access seeker to provide a roaming service (and relevant ancillary services) with a satisfactory level of quality.

6.2 Resale Access

The provision of Wholesale International Roaming Resale Access shall be submitted to and regulated by a commercial agreement between Telecom Italia and the retail provider (Light MVNO or Reseller). The commercial agreement enables the retail provider to offer a complete range of mobile services to its retail customers also including International Roaming Resale Access services in those EU/EEA countries where Telecom Italia has in force International Roaming Agreements.

7 IDENTITY OF ACCESS SEEKERS

Requests for Direct Access will be limited for technical reasons to MNOs and Full MVNOs.

For the Direct Access, this Reference Offer is intended for EU/EEA MNOs and EU/EEA Full MVNOs having obtained a License and/or Authorisation for offering mobile services by the authorities in their EU/EEA country of origin, excluding Italy.

For the Resale Access, this Reference Offer is intended for Light MVNOs and Resellers (retail providers), having obtained an authorisation for offering mobile services by the Italian authorities.

8 WHOLESALE INTERNATIONAL ROAMING ACCESS SERVICES

8.1 Direct Access

Telecom Italia's mobile network supports the following wholesale international roaming direct access services:

Network features

Service name	SIM	USIM	EAP-SIM	GSM	UTRAN	WLAN
HSCSD assymmetric	yes	yes	-	yes	yes	-
HSCSD symmetric	yes	yes	-	yes	yes	-
ECSD	no	no	-	no	no	-
EDGE	yes	yes	-	yes	no	-
UDI	yes	yes	-	yes	yes	-
HSDPA	yes	yes	-	no	yes	-
HSUPA	yes	yes	-	no	yes	-
LCS	no	no	-	no	no	-
VAS	no	no	no	no	no	no
Optimal routing	no	no	-	no	no	-
WLAN	-	-	-	-	-	no
LTE indicator	-	yes	-	-	yes	-
Voice over LTE	-	no	-	-	no	-
SMS over LTE	-	no	-	-	no	-
Data over LTE	-	yes	-	-	yes	-

Supported technology frequencies

Supported GSM frequencies

Frequencies: GSM 900, GSM 1800

Supported UTRAN frequencies

Frequencies: UTRAN 2100

Supported frequencies for custom defined technologies

Technology: LTE Technology

Frequencies: 800, 1800, 2600

Circuit and packet switched services

Service name	SIM	USIM	EAP-SIM	GSM	UTRAN	WLAN
Telephony	yes	yes	-	yes	yes	-
Emergency calls	yes	yes	no	yes	yes	no
SMS MO	yes	yes	-	yes	yes	-
SMS MT	yes	yes	-	yes	yes	-
Voice messaging	yes	yes	-	yes	yes	-
Alternate speech and facsimile gr. 3	yes	yes	-	yes	no	-
Automatic facsimile gr. 3	no	no	-	no	no	-
Automatic facsimile gr. 4	no	no	-	no	no	-
Voice group call	no	no	-	no	no	-
Asynchronous data	yes	yes	-	no	yes	-
Synchronous data	no	yes	-	-	yes	-
Packet switched services	no	yes	no	yes	yes	no

CAMEL

Service name	SIM	USIM	EAP-SIM	GSM	UTRAN	WLAN
CAMEL phase 1	yes	yes	-	yes	yes	-
CAMEL phase 2	yes	yes	-	yes	yes	-
CAMEL phase 3	no	no	-	no	no	-
CAMEL phase 4	no	no	-	no	no	-

Supplementary services

Service name	SIM	USIM	EAP-SIM	GSM	UTRAN	WLAN
Calling line identification presentation	yes	yes	-	yes	yes	-
Calling line identification restriction	yes	yes	-	yes	yes	-
Connected line identification presentation	yes	yes	-	yes	yes	-
Connected line identification restriction	yes	yes	-	yes	yes	-
All name identification	no	no	-	no	no	-
Calling name presentation	yes	yes	-	yes	yes	-
Call forwarding unconditional	yes	yes	-	yes	yes	-
Call forwarding on mobile subscriber busy	yes	yes	-	yes	yes	-
Call forwarding on no reply	yes	yes	-	yes	yes	-
Call forwarding on mobile subscriber not reachable	yes	yes	-	yes	yes	-
Call waiting	yes	yes	-	yes	yes	-
Call hold	yes	yes	-	yes	yes	-
Multi party	yes	yes	-	yes	yes	-
Closed user group	yes	yes	-	yes	yes	-
Completion of call busy subscribers	no	no	-	no	no	-
Multicall	yes	yes	-	yes	yes	-
Call deflection	no	no	-	no	no	-
Explicit call transfer	yes	yes	-	yes	yes	-
Barring of all outgoing calls	yes	yes	-	yes	yes	-
Barring of all outgoing int calls	yes	yes	-	yes	yes	-
Barring of all outgoing int calls except	yes	yes	-	yes	yes	-
Barring of all incoming calls	yes	yes	-	yes	yes	-
Barring of all incoming calls when roaming outside HPMN operator	yes	yes	-	yes	yes	-
ODB of outgoing calls	yes	yes	-	yes	yes	-
ODB of outgoing int calls	yes	yes	-	yes	yes	-
ODB of outgoing int calls ex to HPMN country	yes	yes	-	yes	yes	-
ODB of outgoing calls when roaming outside HPMN country	yes	yes	-	yes	yes	-
ODB of outgoing interzonal calls	yes	yes	-	yes	yes	-
ODB of outgoing interzonal calls ex to HPMN country	yes	yes	-	yes	yes	-
ODB of outgoing int calls ex to HPMN country and barring outgoing interzonal calls	yes	yes	-	yes	yes	-
ODB of incoming calls	yes	yes	-	yes	yes	-
ODB of incoming calls when roaming outside HPMN country	yes	yes	-	yes	yes	-
ODB of incoming calls when roaming outside zone of HPMN country	yes	yes	-	yes	yes	-
ODB of roaming outside HPMN operator	yes	yes	-	yes	yes	-
ODB of roaming outside HPMN country	yes	yes	-	yes	yes	-
ODB of outgoing prem rate calls info	yes	yes	-	yes	yes	-
ODB of outgoing prem rate calls ent	yes	yes	-	yes	yes	-
ODB of outgoing prem rate calls info when roaming outside HPMN country	yes	yes	-	yes	yes	-
ODB of outgoing prem rate calls ent when roaming outside HPMN country	yes	yes	-	yes	yes	-
User to user signalling	no	no	-	no	no	-
USSD MO	yes	yes	-	yes	yes	-
USSD MT	yes	yes	-	yes	yes	-
EMLPP	no	no	-	no	no	-

8.2 Resale Access

International Roaming Resale Access is a mobile wholesale service offered by Telecom Italia to a Light MVNO or Reseller (retail provider) hosted on its mobile network on the basis of a commercial agreement. The agreement, to be negotiated by the parties from time to time, will fix the commercial conditions, technologies, the general technical architecture and operating processes enabling the retail provider to offer mobile services to its retail customers by using its own systems for handling all the retail functions necessary to provide mobile services. Considering that International Roaming Resale Access service is an integral part of the agreement, its implementation will be strictly dependent on the general technical architecture agreed.

This Reference Offer does not foresee that Telecom Italia manages directly the retail functionalities, but foresees that Telecom Italia provides to the Light MVNO the technical solutions and/or information elements (e.g. CDR, TAP files) in order to allow the Light MVNO to manage and provide independently the retail functionalities/services to its end retail customers. In defining the general technical architecture during contract negotiation the Light MVNO could require to Telecom Italia to provide some of the retail services and functionalities. Telecom Italia will evaluate the possibility to offer the required services on the basis of a feasibility study and a commercial negotiation.

The main services offered by Telecom Italia are reported below:

- Access to the wholesale roaming call originating services provided by visited network operators with which Telecom Italia has an IRA in force;
- Access to the wholesale roaming SMS originating services provided by visited network operators with which Telecom Italia has a wholesale roaming access agreement;
- Access to the wholesale roaming data services provided by visited network operators with which Telecom Italia has a wholesale roaming access agreement;
- Access to transit services, if used by Telecom Italia for its own roaming business;
- Access to basic information on end-user usage;

- Access to wholesale functions and facilities useful for the access seeker to supply its own retail roaming business;
- Access to technical interfaces, protocols or other core technologies which are required for the interoperability of the services necessary for the access seeker to carry out for itself necessary retail functions (e.g. billing, control of pre-pay credit, control of bill shock, transparency obligations);
- Access to basic software systems which are necessary to implement resale of roaming services;
- Other wholesale services, including resale of termination of incoming voice calls and outgoing SMS messages.

Where a new IRA is executed and the relevant IR is commercially launched by Telecom Italia, existing Resale Access agreements will be extended to cover access to the new visited network. Similarly, if an IRA is varied or terminated, the relevant changes shall apply to existing Resale Access agreements.

9 ECONOMIC CONDITIONS FOR DIRECT ACCESS

Charging for regulated roaming services, as for Regulation (EU) 531/2012 are reported below. Both parties to the wholesale roaming agreement can explicitly agree that any average wholesale roaming charge resulting from the application of the agreement is not subject to the maximum regulated wholesale roaming charge for the period of validity of the agreement.

9.1 Wholesale charges for the making of regulated roaming calls

The maximum average wholesale charge that Telecom Italia applies to the access seeker for the provision of a regulated roaming call originating on Telecom Italia visited network is the following, as established by Regulation (EU) 531/2012 - as amended by Regulation (EU) 2017/920:

Maximum average wholesale charge (Euro/minute)	
<i>until</i> 14 June 2017	<i>from</i> 15 June 2017
0,05	0,032

Telecom Italia may apply an initial minimum charging period not exceeding 30 seconds.

9.2 Wholesale charges for regulated roaming SMS messages

The maximum average wholesale charge that Telecom Italia applies to the access seeker for the provision of a regulated roaming SMS message originating on Telecom Italia visited network is the following, as established by Regulation (EU) 531/2012 - as amended by Regulation (EU) 2017/920:

Maximum average wholesale charge (Euro/SMS)	
<i>until</i> 14 June 2017	<i>from</i> 15 June 2017
0,02	0,01

9.3 Wholesale charges for regulated data roaming services

The maximum average wholesale charge that Telecom Italia applies to the access seeker for the provision of regulated data roaming services by means of Telecom Italia visited network is the following, as established by Regulation (EU) 531/2012 - as amended by Regulation (EU) 2017/920:

Maximum average wholesale charge (Eurocent/Mbyte of data transmitted)						
<i>until</i> 14 June 2017	<i>from</i> 15 June 2017	<i>from</i> 1 January 2018	<i>from</i> 1 January 2019	<i>from</i> 1 January 2020	<i>from</i> 1 January 2021	<i>from</i> 1 January 2022
5,00	0,77	0,60	0,45	0,35	0,30	0,25

9.4 Wholesale charges for not standard roaming services

Where the access seeker reasonably requests a service to be configured in a different manner from the standard configuration set out in the Reference Offer, fair and reasonable charges may be levied to cover any additional costs.

Any request for wholesale roaming access for purposes other than the provision of regulated roaming services to roaming providers' customers while these latter are temporarily travelling within the European Union, under Article 3, paragraph 6, of Regulation (EU) 531/2012 - as amended by Regulation (EU) 2015/2120 - shall be evaluated on a case by case basis, and the relevant tariffs to be applied shall be based on the particular characteristics of the roaming service specifically offered by the access seeker entity.

9.5 Wholesale charges for unregulated roaming services

Any additional unregulated service required to Telecom Italia which is not included on the provision of Regulation (EU) 531/2012 will be subject to commercial negotiation.

10 ECONOMIC CONDITIONS FOR RESALE ACCESS

Charging for regulated roaming services, as for Regulation (EU) 531/2012, are reported below. Both parties to the wholesale roaming agreement can explicitly agree that any average wholesale roaming charge resulting from the application of the agreement is not subject to the maximum regulated wholesale roaming charge for the period of validity of the agreement.

10.1 Wholesale charges for the making of regulated roaming calls

The maximum average wholesale charge that Telecom Italia applies to the access seeker for the provision of a regulated roaming call originating on EU/EEA (excluding Italy) visited

network is the following, as established by Regulation (EU) 531/2012 - as amended by Regulation (EU) 2017/920:

Maximum average wholesale charge (Euro/minute)	
<i>until</i> 14 June 2017	<i>from</i> 15 June 2017
0,05	0,032

Telecom Italia may apply an initial minimum charging period not exceeding 30 seconds.

10.2 Wholesale charges for regulated roaming SMS messages

The maximum average wholesale charge that Telecom Italia applies to the access seeker for the provision of a regulated roaming SMS message originating on EU/EEA (excluding Italy) visited network is the following, as established by Regulation (EU) 531/2012 - as amended by Regulation (EU) 2017/920:

Maximum average wholesale charge (Euro/SMS)	
<i>until</i> 14 June 2017	<i>from</i> 15 June 2017
0,02	0,01

10.3 Wholesale charges for regulated data roaming services

The maximum average wholesale charge that Telecom Italia applies to the access seeker for the provision of regulated data roaming services by means of EU/EEA (excluding Italy) visited network is the following, as established by Regulation (EU) 531/2012 - as amended by Regulation (EU) 2017/920:

Maximum average wholesale charge (Eurocent/Mbyte of data transmitted)						
<i>until</i> 14 June 2017	<i>from</i> 15 June 2017	<i>from</i> 1 January 2018	<i>from</i> 1 January 2019	<i>from</i> 1 January 2020	<i>from</i> 1 January 2021	<i>from</i> 1 January 2022
5,00	0,77	0,60	0,45	0,35	0,30	0,25

10.4 Wholesale charges for unregulated roaming services

Any additional service required to Telecom Italia which is not included on the provision of Regulation (EU) 531/2012 will be subject to a specific feasibility study.

In particular:

- the access seeker may require unregulated roaming services (e.g. resale of termination of outgoing SMS), whose economic conditions will be subject to fair and reasonable conditions;
- the access seeker may also require unregulated roaming services (e.g. outsourcing of retail services/functionalities), whose economic conditions will be subject to commercial negotiation.

11 REQUEST OF A BANK GUARANTEE

Telecom Italia may impose reasonable safeguards to assure payment for services provided or to assure recovery of investments undertaken specifically to provide access.

Prior to the launch, Telecom Italia can request a bank guarantee. The bank guarantee has to be issued by an Italian bank or by an international bank having a branch in Italy.

Telecom Italia may request the bank guarantee to be changed.

Advanced payment can be asked by Telecom Italia before the end of invoicing period, when the monthly traffic originated by the access seeker raises unexpected volume of traffic.

In case the access seeker refuses the advanced payment requested by Telecom Italia or refuses to cover the bank guarantee, Telecom Italia has the right to suspend service giving notice to the access seeker. The bank guarantee has to be provided to Telecom Italia before the signature of the Agreements.

12 INFORMATION REQUIRED

The access seeker provides all the information requested by Telecom Italia and needed to make an adequate specified access request (including necessary facilities).

Telecom Italia requires to access seeker information limited to the minimum necessary to allow Telecom Italia to provide an efficient access service, together with any evidence which may be necessary to establish that the access seeker is entitled to seek access under Regulation (EU) 531/2012.

Information can be required before signature of an access agreement or throughout the life of the access agreement.

Before signature, Telecom Italia can require, for example, interfaces and protocols used by the access seeker which is needed to assess compatibility with the services offered by Telecom Italia. In case of Direct Access for roaming services, the access seeker is required to give an initial estimate of traffic volumes to assess necessary connection capacities.

Throughout the life of any access agreement, Telecom Italia can require, for example, the regular supply and updating of forecasts by the access seeker of its future demand, where this is necessary to allow Telecom Italia to dimension its service efficiently or to provide the necessary resources.

13 SERVICE LEVEL AGREEMENT

13.1 *Direct Access*

The Service Level Agreement (“SLA”) concerns ordering, delivery, normal operation, maintenance and repairs.

Telecom Italia is committed to provide a Quality of Service to the access seeker compared to Quality of Service offered to the other roaming partners.

Unless otherwise agreed between the parties, no specific measurements of KPI quality are provided and no penalties are due by Telecom Italia.

13.2 Resale Access

In the case of Resale Access, for the Quality of Service Telecom Italia ensures to the retail customers of the access seeker equal treatment as provided to its own retail customers.

14 INFORMATION ON SIGNALLING INTERCONNECTION AND/OR IP CONNECTIVITY

The implementation of the Signaling Protocols and/or Inter-PMN backbone (as defined in IREG PRDs) shall be in accordance with the Technical Specifications and relevant GSM Association Permanent Reference Documents with the exception of Public Mobile Network specific deviations and/or chosen options agreed by both parties during the testing phase.

The technical information relevant for International Roaming shall be exchanged.

15 IMPLEMENTATION OF CAMEL PROTOCOL

Access seekers are granted, as a minimum, access to CAMEL phase I functionalities as for Regulation (EU) 531/2012, allowing access seekers a basic call management of prepaid calls.

16 TESTING

This paragraph describes the procedure adopted by Telecom Italia for basic testing.

Technical aspects of testing concerns both the pre-commercial and commercial phases of International Roaming and refers to relevant GSMA PRDs.

16.1 Testing of Service availability

Telecom Italia accepts basic tests for service availability, according to the IREG and TADIG Test Specifications.

Additional tests for service activation can be requested by the access seeker and they are not be included on regulated service provisions. These additional tests will be quoted apart.

The access seeker will provide the agreed number of test SIM and/or USIM-cards to Telecom Italia for testing procedure without any activation fee or any subscription fee.

TAP-data for traffic generated by these test SIM and/or USIM-cards shall be included in the normal billing and accounting procedures.

16.2 Certification of testing

Telecom Italia shall receive the completion certificates confirming the successful execution of basic IREG tests on its network which includes testing of the TAP procedures according to the Test Specifications of GSM Association Permanent Reference Documents.

17 SECURITY AND DATA PRIVACY

The parties are subject to terms of protection of personal data to the applicable legal provisions. For that it is necessary that both parties commit themselves to observe the secrecy rules and maintain the data secrecy according to the applicable law, as well as to cooperate to ensure the fulfillment of all specific requests coming from any competent judicial or other governmental authorities.

Each party's obligations will be discussed and agreed on and documented in the contract. These obligations will be within the regulations and commercial practice.

18 CONDITIONS TO PREVENT PERMANENT ROAMING OR ANOMALOUS OR ABUSIVE USE OF WHOLESALE ROAMING ACCESS

Telecom Italia, to prevent *permanent roaming* or *anomalous or abusive use of wholesale roaming access* for purposes other than the provision of regulated roaming services to access seeker's customers while the latter are periodically travelling within the Union, takes specific measures based on objective criteria. Such criteria refer to aggregate roaming traffic information.

Telecom Italia, where has reasonable grounds for considering that *permanent roaming* by a significant share of the access seeker's customers or *anomalous or abusive use of wholesale roaming access* is taking place, requires the access seeker to provide, without prejudice to Union and national data protection requirements, information allowing the determination of whether a significant share of its customers is in a situation of *permanent roaming* or whether there is *anomalous or abusive use of wholesale roaming access* on the network of Telecom Italia.

Telecom Italia and the access seeker acknowledge and agree with the principle according to which the usage of Telecom Italia's network by the access seeker's eligible customers shall be appropriately remunerated by the access seeker. The access seeker shall grant full transparency to Telecom Italia in regards to the services offered to its eligible customers, also in order to provide Telecom Italia with the relevant appropriate remuneration for each of the services.

Telecom Italia and the access seeker acknowledge and agree that the rates as defined in cap. 9 and cap. 10 are not applicable for *permanent roaming* scenarios; without prejudice to above, if Telecom Italia becomes aware that eligible customer/s of the access seeker is/are generating a permanent roaming situation, and/or a type of use that translates into

scarce/absent volumes of traffic, which cause or may reasonably cause the occurrence of one or more Insufficient Remuneration Event/s, then the parties shall start, upon written notice of Telecom Italia to the access seeker, a good faith negotiation aimed at agreeing in writing, within 30 (thirty) days from the receipt by the access seeker of the above mentioned notice, an appropriate compensation to be paid by the access seeker to Telecom Italia with respect to any Insufficient Remuneration Event.

As a last resort, where less stringent measures have failed to address the situation, Telecom Italia, where it has established that, based on objective criteria, *permanent roaming* by a significant share of the access seeker's customers or *anomalous or abusive use of wholesale roaming access* is taking place, and has informed the access seeker accordingly, terminates the wholesale roaming agreement unilaterally, upon prior authorisation of AGCom.

19 FRAUD PREVENTION PROCEDURE

Procedures to prevent fraud are imposed to the extent necessary to comply with obligations in accordance with GSMA PRDs and to avoid that any party profits from fraudulent traffic.

Both parties shall lay down and agree on fraud prevention procedures concerning fraudulent or unauthorised use by roaming customers.

Telecom Italia requires to the access seeker to implement Customer Identity Authentication for roaming customers on its network. The purpose and mechanism for authentication are described in GSM 02.09 and in GSMA PRD SG.15.

The fraud prevention procedures will be discussed and agreed on and documented in the contract.

20 CONTRACT DURATION INCLUDING ANY BREAK CLAUSES

The duration of the contract is set to suit both parties interests. However, neither party is entitled to insist (or to specify terms which have the same practical effect as insistence) on a contract which is either unduly short or long. Typically, the contract is negotiated on an annual basis and renewed automatically.

Unless otherwise agreed, the contract can be terminated for convenience by one or both parties giving 3 months written advanced notice.

Without prejudice to the foregoing, no party shall terminate an already allowed access service without objective justification, in which case a written notice must be given to the other party.

21 RESTRICTIONS ON CONDUCT OF BUSINESS

The contract shall not impose any restrictions on the access seeker except those which are fully described in the Reference Offer, those which are required by law or those which would be regarded as normal commercial practice. Technical restrictions may be imposed only where there is objective justification for the restriction or for prevention of fraud or unauthorised use or to avoid possible damages or liabilities. Where the access seeker imposes restrictions, it shall readily provide objective justification on request. Restrictions shall be applied by Telecom Italia if technically practicable and economical bearable and will be quoted apart.

22 MANAGEMENT AND IMPLEMENTATION OF NEW ROAMING AGREEMENTS

The contract shall be concluded in written agreement and include terms and conditions and all necessary specifications to enable both parties to fulfill their rights and obligations in compliance with GSMA PRDs and applicable laws and regulations. Any changes, amendments and/or additions that arise during time shall be agreed by the parties in written form.

The specifications shall include all processes, e.g. installation, configuration, running, testing and making necessary changes to ensure the implementation of wholesale roaming Direct Access or wholesale roaming Resale Access compliant to Regulation (EU) 531/2012.

23 TIMING ISSUES

The time limits set out in Regulation (EU) 531/2012 is regarded as maxima. Notwithstanding the time limits, Telecom Italia will make reasonable efforts to respond as soon as possible. Where Telecom Italia requires information from the access seeker in order to proceed and there is a delay in provision, the period of any such delay shall not count towards any relevant time limit.

24 RESPONSES TO REQUESTS FOR ACCESS AND FOR NEW OR MODIFIED SERVICES

Telecom Italia processes any request for wholesale roaming access (including new methods of roaming access, necessary facilities), and for additional or modified services in a timely and professional manner. If necessary, Telecom Italia will evaluate the possibility

to offer the required services on the basis of a feasibility study and the Reference Offer will be properly updated.

25 NEGOTIATION TIME

A draft contract will be made available to the access seeker for signature within 1 month from the positive reply of Telecom Italia to the access request.

26 IMPLEMENTATION TIME

International Roaming shall be implemented as soon as possible but in any case within 3 months of contract signature, except for any delays due to the access seeker or to other reasons not attributable to Telecom Italia.

27 DISPUTE RESOLUTION

In the event of a dispute between undertakings, the dispute resolution procedures laid down in the contract signed between the parties shall apply.