

**SET OF ITEMS TO BE INCLUDED IN THE REFERENCE INTERCONNECTION  
OFFER FOR THE YEAR 2001**

**I. Geographical points of interconnection**

**A. Generic Description**

The following information must be provided:

1. Identification of the points of interconnection (POI) (geographical location, address, actual state) along with the indication of the type of switch with regards to the network hierarchy (including international switches)
2. Any occurrences which may restrict the service.

**B. Specific Details**

1. The list of POI and other related information should:
  - 1.1. Include information regarding the numbering groups associated to each POI.
  - 1.2. Include information about the network for the purpose of interconnection namely the type of equipment, equipment location, architecture, etc.
  - 1.3. Explicitly mention any restrictions to the provision.
2. The SMP operator must be able to guarantee that the interconnection service provided will not be interrupted. Any foreseen alteration that might cause a localised and temporary interruption of the service, must be notified. This notification must be justified with fundament and

with enough warning so that it does not affect the service provided by other operators and service providers.

- 2.1. The operator, responsible for the temporary interruption of the interconnection service, must give guarantee of viable alternatives, namely through alternative routing through another POI.
3. The provision of national PIs shall take into account the specific characteristics of the Autonomous Regions of the Azores and Madeira.

## **II. Technical options of interconnection**

### **A. General description**

With regards to the rental of infrastructures and spaces (e.g. use of ducts to place interconnection circuits, co-installation of equipment) should be specified, with regards to prices, space available, electricity, security, provision times, access conditions, requisites governing applications for co-location and the respective technical specifications.

### **B. Specific detail**

1. The following aspects shall be detailed for each PI:
  - 1.1 Types of co-location available (e.g., with cages or cage less, physical, virtual, remote).
  - 1.2 Availability of alternatives should co-location no be provided, particularly for reasons of lack of space.
  - 1.3 Provision of the ancillary infrastructures/services associated to co-location (e.g. electricity, air-

conditioning, backup power systems) required for its proper working.

- 1.4 Space available for the co-location of equipment.
- 1.5 Average response time for applications to access the infrastructures.
- 1.6 Any possible duly-founded restrictions regarding the equipment to be installed.
- 1.7 Conditions of access for the technicians of the Other Licensed Entity (OEL) to the facilities of the SPM operator, particularly to install, maintain and repair equipment..
- 1.8 Security issues, including the measures put into practice by the SPM operator to ensure the integrity of the network.
- 1.9 Price for each of the elements, offers and functions provided.
- 1.10 Procedures involving requests for access for co-location.

### **III. INTERCONNECTION CIRCUITS**

#### **A. Generic description**

1. Detailed descriptions of the supply of circuits rented entirely by the operator with SMP for interconnection purposes, such as prices, service quality parameters, and ordering procedures, which must not be below the prices currently practised by this operator in the Leased Line and Fixed Telephone Service (where applicable).
2. Given that the circuits used for interconnection contain several different components, added technological

capacities and elements, these distinctive characteristics must be detailed and shown adequately in the supplying of these circuits.

3. The conditions for setting up and use of primary ISDN accesses shall be specified, particularly on terms of prices and installation times.
4. If the interconnection have been partially or totally supplied by another licensed operator, (with the infrastructures of the operator with SMP) the following conditions must be detailed by the SMP operator:
  - 4.1. The terms of interconnection so that inter-operability of the telecommunications services can be guaranteed (e.g. deadlines for the installation to the POI from the SMP operator and availability for end-to-end testing, etc.).
  - 4.2. The technical conditions for the interconnection circuits in locations outside the SMP operators' premises.
  - 4.3. The technical conditions for the interconnection circuits in locations inside the SMP operators' premises.
  - 4.4. The responsibility of each operator with regards to the operation, maintenance and repairing of the circuits.
5. The conditions of the offer applicable to the interconnection of the circuits of the SMP operator, especially the local stretches, with the circuits of the other operators shall be specified, particularly in terms of prices, quality of service, usable interfaces and principles underlying the colocation.
6. .

## **B. Specific Details**

The following must be identified:

1. The technical specifications of the interconnection circuit:
  - 1.1. Physical transmission media and technical transmission interface.
  - 1.2. Available capacity including high capacity circuits in keeping with the provision of a minimum number of leased circuits defined pursuant to the terms of Article 23 of Decree-Law 190-A/99, and minimum number of circuits.
  - 1.3. Types of circuit available (e.g., bi-directional or uni-directional).
  - 1.4. Supporting Technology (including PDH and SDH technology).
2. The delivery period for the implementation of the installation of a circuit, and for on-going alterations.
3. The components of the prices asked for, for the supplying of circuits including:
  - 3.1. Fixed and variable prices in the connection of the circuits.
  - 3.2. Prices applied in accordance with the different levels of quality of the service.
  - 3.3. Types of discount applied.
  - 3.4. Terms of service, for the jointly provisioning of the interconnection circuits.

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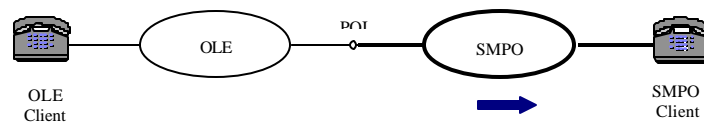
#### **IV. Interconnection Traffic**

##### **A. Generic description**

1. The following services must be provided on the fixed network (analogue or ISDN) by the SMP operator:

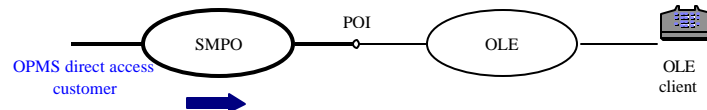
### 1.1. Call Termination.

The SMP operator (SMPO) conveys the call, originating from other licensed entity (OLE), from a chosen POI to one of their clients.



### 1.2. Call origination

The SMP operator transports the call, originating from one of their clients to a chosen POI, from which another entity will terminate the call in one of their clients.



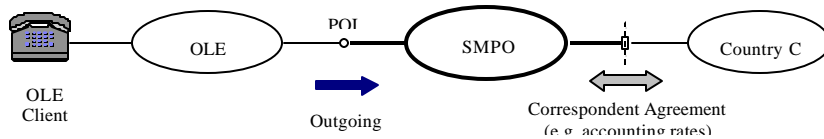
### 1.3. National Transit

A three party agreement involving operators on national territory, in which the SMP operator transports a call originating from a client of a licensed entity A and destined to a client of another licensed entity B between two POI.



### 1.4. Conveyance of international traffic

Two or three party agreement in which the SMP operator transports to a chosen POI a call originating in Portugal by a client from another licensed operator who's final destination is abroad.



2. The entities owning the traffic and responsible for the definition of the prices to be paid by the end user and for the respective billing shall be defined.

## **B. Specific details**

1. The following points must be considered:
  - 1.1. The definition of the entity to whom the traffic belongs, and who is responsible for defining the prices paid by the end user and for the respective.
 

The most economic and efficient form of traffic conveyance must be privileged between the operators.
  - 1.2. Detailed descriptions of services provided in each POI.
  - 1.3. Indication of interconnection traffic prices with regards to each level of interconnection (e.g. "Local", "Single Transit", "Double Transit" and those proceeding from International operators, in which for the latter, must be indicated the origin and destination of traffic).
  - 1.4. Traffic prices of interconnection for 2001 must evolve in a manner compatible with the cost orientation principle and the current practices within the European Union, the best practices in the Europe Union to constitute, in this connection, an important benchmark.

Indication of the price of other types of traffic, namely those established as a consequence of structural

alterations of the network or tariff structure, depending on the relevant costs identified in the network structure

- 1.5. The charge method used including the components of the calls (call; time unit; etc.)Variações horárias e diárias na tarifação (e.g. Período Normal e Económico).
- 1.6. Hourly and daily variations in the prices (e.g. peak and off peak rate)
- 1.7. The geographical reference point for access when charges for call conveyance are distance based.
- 1.8 Specification of the mechanisms applicable to the formation of discounts and other special conditions .

## **V. TECHNICAL INTERFACE SPECIFICATIONS**

### **A. Generic description**

Description of the interfaces offered at the POI including reference to the relevant technical standards (e.g. ETSI standards and/or ITU recommendations) defining the interface:

1. Electrical and physical.
2. Transmission.
3. Signalling.
4. Reference to the network synchronisation system.
5. Reference to the functions that are being offered via the interface (calling line identification, call forwarding, etc.).

### **B. Specific details**



1. The technical specifications relevant to the access interfaces must be made public, without any confidentiality mechanism.

## **VI. QUALITY OF SERVICE**

### **A. Generic description**

The quality of service offered to entities with which the operator with SMP interconnects should not be inferior than those offered by the SMP operator in its own network. In particular, the quality of service indicators to be observed in the interconnection and the levels established shall be identical to those established for the SMP operator in the Leased Line and Fixed Telephone Service

### **B. Specific details**

The minimum parameters and quality levels guaranteed for:

1. Interconnection circuits and POI (e.g. availability, fixing times, quality of transmission, provisioning times, etc.).
2. Origin network or call termination (e.g. unsuccessful calls, etc.).
3. Primary ISDN accesses (installation times, repair times, etc.).

## **ASSISTANCE SERVICES**

#### **A. Generic description**

In particular access to the following services must be guaranteed:

1. Operator assistance service.
2. Emergency services.
3. National directory and information services and international information service.

#### **B. Specific details**

The following aspects must be specified:

1. Access conditions to the information services to be established between operators.
2. Pricing conditions to access assistance services including emergency services.
3. A detailed list must be made available of all services available, which must be regularly updated.

### **VIII. ADDITIONAL SERVICES**

#### **A. Generic description**

The following services must be guaranteed as a minimum:

1. The calling line identification and the restriction of the identification, whenever technically feasible. The information regarding the calling line identification (including the information necessary for its restriction) should be made available to the interconnected parties,

under the terms of the applicable legislation regarding the protection of personal details and privacy.

2. *"Call Forwarding"*;
3. User to user signalling.
4. Access to special telephone services necessary so that the remaining operators and service providers may offer competitive services same as the SMP operator (e.g. freephone numbers and reduce rate numbers), customer support and information services provided, respectively, in 16xy.z and 18xy number range and the virtual phone card service provided in the 882 number range, bearing in mind the prevailing legal framework.

#### **B. Specific details**

The terms of the remaining operators and service providers accessing the SMP operators' special telephone services must be detailed, (namely, free-phone numbers, blue numbers [shared cost], customer support and information services provided via the 16xy.z and 18xy number range and the virtual phone card service provided in the 882 number range), as well as the terms of the SMP's subscribers accessing the special telephone services of the remaining operators and service.

#### **IX. CARRIER SELECTION**

1. Taking into consideration that when the selection functions are used, the traffic originates from the entity

that provides the selected service (indirect service provider), unless otherwise agreed:

- 1.1 The ownership of the traffic belongs to the provider selected.
- 1.2 The provider selected determines the price paid by the final user.
- 1.3 The selected provider will bill directly the final user.
2. Must be detailed the conditions of supplying of interconnection service provided (call origination and/or termination), involving the use of the SMP operator's network to access the switched services (e.g., local, regional, national and international) of the selected carrier, as from 01/01/2001.
3. Fixed telephone service providers with direct access are exempt from implementing for their subscribers the access code for calls eligible for carrier selection provided the operator in question carries them.
2. Where applicable, conditions shall be established governing carrier selection on a call-by-call basis for pay-phones operated by the SMP operator, in respect of the eligible calls.

## **X. OPERATOR PRE-SELECTION**

With regard to pre-selection, the general principles and specific rules established by ICP shall apply, without prejudice to such rules as may come to be established within the scope of the working groups set up specifically for carrier pre-selection (particularly the rules arising from the code of conduct), and the notified operator shall detail the prices applicable to this service.

## **XI. PORTABILITY**

**The technical options, the prices, and prices formation criteria in relation to which the operators' portability** in the fixed telephone network and on the integrated services digital network (ISDN), which shall be introduced by 30/06/2001.

## **XII. General Conditions**

**The following points must be specified:**

1. Procedures applied when there is a proposal for the alteration regarding the normal terms and conditions of interconnection. Indication of quickly and simplified proceedings applied to the renegotiation of specific issues of interconnection agreements, namely those which are related to prices.
2. The altering of the terms and conditions of interconnection must be minimised. Notwithstanding that when these alterations are justified, the SMP operator should, with a reasonable amount of time, formally present the alterations of the said terms and conditions.
3. Procedures relevant to in-operability tests. Description of the different procedural steps of the standard tests, carried out. These include their duration, which must be reasonable. The tests should include the verifying of the integrity of the network, and the in-operability of the functional characteristics and the services agreed in the interconnection agreement.
4. Procedures for proposed alterations of networks or services provided by one of the parts, which should

include procedures for accessing the new or altered service.

5. Procedures for the reconfiguration of the POI. Details of all the financial conditions, in cases where there is a need to work on the commutation of the SMP operator. Thus permitting the forwarding of calls from the interconnected entity. A previewed analysis of costs and deadlines necessary for this must be provided.
6. Billing conditions between operators and accounting requirements e.g. file formats and control of the account register.
7. Conditions of the client billing service, when the SMP operator bills through another, this should be detailed.
8. Resolution processes of litigious occurrences.
9. General conditions for the revision, suspension or resolution of contracts, also including liability and unforeseen situations.
10. Specific details with regards to confidentiality.