Article 11 Annex: Questionnaire to Mobile Operators
Case n° 37.639 – Sector inquiry / Roaming

Please note that, in the interest of facilitating the processing and analysis of the relevant data, you are kindly requested to provide:

- all relevant financial information in Ecus/Euros
- the completed tables, where requested, in Excel spreadsheets (preferably using the attached spreadsheets, where provided)
- the electronic version of your reply by e-mail and/or on diskette.

If you require further information on the contents of this questionnaire, please contact one of the case-handlers responsible for this inquiry:
Mr Wolf SAUTER tel: +32.2.2991184; fax: 2950624; e-mail: wolf.sauter@cec.eu.int
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For any questions regarding the timing of your response, and the presentation of data, please refer to:
Mrs Martine LANGEROCK tel: +32.2.2958316 ; fax: 2950624; e-mail: martine.langerock@cec.eu.int

0. Contact details for clarification

Please indicate the name, title, telephone and fax numbers as well as the email address of the person responsible for drafting your reply, and for answering possible request for clarification.

[please insert answer here]

1. Questions concerning general company information

1.1. Please provide a brief description/overview of your company and its business activities, as well as a copy of your most recent annual report.

[please insert answer here]

1.2. Does your company form part of a corporate group? If so, please provide the name and address of your parent company. Whether or not your company forms part of a corporate group, please set out briefly the ownership structure of your company.

[please insert answer here]


[please insert answer here]

1.4. Please provide the financial (in ECU/EUR) and the general information related to your digital mobile activities only (GSM900/DCS1800) in the Excel Spreadsheet attached as Table 1.

[please complete and attach Table 1]

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1 The official exchange rates both for the ECU (past 5 years) and the Euro can be found on: http://europa.eu.int/comm/dg02/xecua.htm.
2 Activities other than GSM900/DCS1800 related activities – such as analogue mobile services, paging business, fixed services (if any) should not be included in these figures.
2. Market data

Relevant Market definition
Below the provisional assumptions concerning relevant market definition for the purposes of this questionnaire are set out as background information to the questions on market definition themselves, which follow.

As general background, the following definition of roaming provided in the Mobile Green Paper may be useful:

“Facility, supported by commercial arrangements between operators and/or service providers, which enables a subscriber to use his/her radio telephone equipment on any other network which has entered into a roaming agreement in the same or another country for both outgoing and incoming calls.”

Services involved
For this questionnaire, the following types of services are considered relevant:

(i) Retail services:
- Provision of access and national mobile telecommunications services to end-users
- Provision of cross-border mobile telecommunications services to end-users
- Provision of roaming telecommunication services to end-users

(ii) Wholesale services:
- Provision of wholesale capacity/airtime to service providers
- Provision of wholesale access to national roaming partners
- Provision of wholesale access to foreign roaming partners

(iii) Interconnect services:
- Provision of call termination on your mobile network to other operators
- Provision of call origination on your mobile network to other operators (indirect access).

Product markets
In the context of this sector inquiry, the activities listed below may each be considered as constituting a separate product market. They may however, on the basis of the information received, also be considered to constitute part of the same product market.

(i) Retail markets:

a) retail market for the provision of digital mobile telephony services to end-users
   - possibly subdivided between residential/business customers
   - possibly subdivided between access/domestic/international calls

b) retail market for the provision of digital mobile telephony services to national and international roaming customers/end-users
   - possibly subdivided between national/international roaming
   - international roaming subdivided by country-pairs

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3 Green paper on a common approach in the field of mobile and personal communications in the EU, COM(94)145 final, p 225.
4 “Wholesale” is used to describe the provision of any kind of service by a mobile network operator to another party who incorporates this wholesale service into its own retail services.
(ii) Wholesale markets:

a) wholesale market for the provision of access to digital mobile networks to service providers in the form of wholesale airtime/capacity on a mobile network
   - possibly subdivided by national/international wholesale access

b) market for the provision of access to digital mobile networks to mobile network operators through roaming agreements
   - possibly subdivided by national/international wholesale access

(iii) Interconnect markets:

a) market for the provision of termination of domestic and cross-border calls
b) market for the provision of origination of domestic calls (indirect access).

Geographic markets

The geographic market of the various product markets listed above appear likely to be national markets, with some exceptions (such as country pairs), to be established on a case by case basis. This is considered likely to be the case because in all EU Member States/EEA States, the operation of mobile networks is subject to national licensing obligations, as are mobile services in many EU Member States/EEA States. Moreover, it appears that tariffs for mobile retail calls placed from the network subscribed to are still too different from the tariffs applied to mobile calls placed from another network while using roaming facilities to define those markets on a wider geographic basis.

2. Questions concerning product markets

2.1. General

2.1.1. What factors do you consider relevant in determining the scope and definition of the market for roaming calls? Please discuss both these factors, and the assessment that you make of market or markets for roaming calls based on the factors that you have identified.

[please insert answer here]

2.1.2. Do you agree that the services listed above in paragraphs (i), (ii), (iii) at page two above belong to the product markets (i), (ii), (iii) listed there, as tentatively defined?

[please insert answer here]  
If not, please explain your reasons, identifying in particular categories/services which should be grouped together, or which are too broad and need to be segmented further.

[please insert answer here]

2.1.3. If prices rose permanently for one category of services as listed in paragraphs (i), (ii) (iii) at page two above, or for the categories you have defined for question 2.1.2. above, relative to the others by 5-10%, could customers substitute products in any other category or would they have to accept the increase? Please provide any available evidence for your views on this.

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5 “Service providers” is used here to describe organisations, either tied to or independent from mobile telecommunications network operators, that market and/or provide mobile telecommunications services, or services with a mobile telecommunications component, to third parties, whether these services are provided over their own mobile telecommunications network or otherwise.
2.2. Retail markets

2.2.1. Assuming that prices charged by another mobile operator/service provider to end-customers were raised by 5-10%, would the end-users of that operator be able to turn to your services (or to those of other mobile operators/service providers) as an alternative? Please distinguish, if considered relevant, according to whether the operator concerned is operating in the same country as you are, or not.

2.2.2. In the event that a price increase such as described under question 2.2.1. above were to occur, are there any technical, legal (e.g. duration of contracts), commercial or other constraints that would prevent customers for these services from switching from their current supplier to other suppliers of these services?

2.3. Wholesale markets

2.3.1. Assuming that prices charged by some other network operator with whom you have national/international roaming agreements were raised by 5-10%, what would be your commercial reaction?

In particular, would you be able to turn to another operator as an alternative, and/or have you done so in the past? Please specify any available evidence for your views on this.

2.3.2. Are there any technical, legal, commercial or other constraints which would prevent you from switching from your current supplier to another supplier of these roaming services (for legal constraints: e.g. restrictive clauses, minimum duration of agreements involved, requirements to give advance notice, penalty clauses)? Please specify.

2.4. Services offered and purchased

2.4.1. Please identify for the services listed at page two above as (i), (ii), (iii) those services which you supply, and provide for each such category the value of your total turnover (in ECU/EUR) in each service category, for the years 1997, 1998 and 1999.

2.4.2. Please for the services listed at page two above as (i), (ii), (iii) for those services which you supply, your best estimate of your market share in terms of in terms of (a) number of subscribers, and (b) volume of traffic handled, as well as (c) turnover, in each service category, for the years 1997, 1998 and 1999.
You may in addition choose to provide an estimate of your market share for these services for this same period based on another criterion, explaining why in your opinion this criterion is appropriate.

[please insert answer here]

2.4.3. Please provide a short description of every service listed and used for your calculations. (More specific questions on the services offered by your company are set out below in the questionnaire.)

[please insert answer here]

2.4.4. Please identify from the services listed at page two above in paragraphs (i), (ii) and (iii), those services which you purchase, and provide for each such category the value of your total purchases (in ECU/EUR) in each service category and per country of origin for the EU/EEA, for the years 1997, 1998 and 1999.

[please insert answer here]

2.4.5. Where applicable, are the quality of service, general terms and conditions obtained for the services you purchase generally comparable to those available to the network operator’ own service providers/customers/retail sales unit?

[please insert answer here]

2.4.6. Please specify any cases where you have attempted but failed to reach an agreement with a network operator concerning either (national or international) roaming or other forms of access to (elements of) the network of this operator.

[please insert answer here]

2.5. Competitors

2.5.1. With regard to the supply of the various categories of services listed at page two above in paragraphs (i), (ii), (iii), which undertakings would you consider to be your main competitors?

[please insert answer here]

2.5.2. Has the number of your competitors for these various categories of services increased or decreased in the last three years (1997-1999)? Please specify.

[please insert answer here]

2.5.3. Please indicate your best estimate of the market shares of your various competitors for each of these services for the last three years (1997-1999).

[please insert answer here]

2.5.4. Do potential new competitors exist for the provision of any of these services, and how much time would they need to be able to enter the market? Please specify why such potential competitors do, or do not, exist.
2.6. **International Roaming**

2.6.1. Please indicate which international roaming services you currently offer to other mobile network operators, including a description of:
- services provided, including network elements and network services given access to
- technology used
- quality of service provided (guaranteed QoS, measured QoS)
- any additional services provided in conjunction with the international roaming service.

2.6.2. Please indicate which international roaming services you offer your own customers/subscribers, including any additional or optional services provided in conjunction with your standard international roaming service, if applicable.

2.6.3. Please explain briefly how the international roaming services that you offer to other mobile network operators are implemented (use diagrams if useful).

2.6.4. Please explain briefly how the international roaming services that you offer to your end-users are implemented.

2.6.5. Do you have direct interconnection with any mobile networks abroad, or do you always pass through fixed operators? Please specify.

2.6.6. Are the terms and conditions for the handling of roaming traffic covered by your contracts concluded with fixed or mobile operators concerning international interconnection of networks in a manner distinct from other traffic generated on either network?

2.6.7. Do any of your interconnection agreements with fixed or mobile operators specify which fixed carriers should be used for incoming or outgoing roaming traffic, or do they assign preferential status to certain carriers in this regard?

2.6.8. Are the terms and conditions for interconnection of your other traffic with any fixed or mobile operator linked to your offering roaming traffic: for example would the applicable tariff conditions have to be renegotiated if you would decide to use other operators to terminate cross-border mobile-to-fixed calls?
2.6.9. Please provide a list of all operators worldwide (including EU/EEA) with which you have concluded international roaming agreements (both ways). In addition, please provide a separate list for all such operators in EU Member States/EEA States.

[please insert answer here]

2.6.10. For each international roaming agreement concerning operators in EU Member States/EEA States, please specify all deviations and amendments to the General Terms and Conditions for GSM International Roaming, Standard International Roaming Agreement, and the Annexes thereto (GSM MoU Permanent Reference Documents), covering at least:
  - List of services offered
  - Charging, billing and accounting terms and conditions
  - Prices and discounts
  - Preferential roaming.

[please insert answer here]

2.6.11. Please detail the level of access to elements of your network that you provide under these agreements to other operators/service providers (e.g. access to the Home Location Register/Authentification Center, to the Visitor Location Center).

[please insert answer here]

2.6.12. How do you select the operator(s) with which you enter into roaming agreements in a given country? Please indicate how you locate the relevant information, in particular on tariffs, and what are the main criteria or how you balance these (e.g. coverage, applicable tariffs, or quality and level of services offered).

[please insert answer here]

2.6.13. Do all your international roaming agreements provide for reciprocal roaming rights? Please provide specifics of any agreements that do not.

[please insert answer here]

2.6.14. In the event that you have roaming agreements with more than one mobile network operator in certain countries, please explain why.

[please insert answer here]

2.6.15. In countries where you have a roaming agreement with more than one operator, how is the network upon which your subscribers actually roam determined, e.g.:
  - by you (e.g. based on preferred roaming partners)
  - based on customer choice (e.g. manually)
  - based on handset characteristics
  - at random.

Please describe how the various methods by which a mobile network roamed upon is selected work, and specify how the various possibilities, if applicable, are interrelated. If available, please provide data on how roamed calls are spread by type of selection. Please specify any differences between countries, type of handsets, or types of subscription.
2.6.16. If (certain categories of) your subscribers/users of pre-paid cards do not in all countries where you have a roaming agreement with more than one operator in place have the possibility to choose on which network to roam, explain why this is the case. Please identify the categories of users, the countries, and the operators involved.

2.7. Domestic roaming
2.7.1. Please state whether your company supplies national roaming services on a wholesale basis to other mobile network operators and/or service providers active in the Member State where your company is licensed as a mobile network operator, or purchases such services from such other mobile operators. If so, please supply full details of all arrangements pursuant to which your company supplies or purchases national roaming services, indicating:
- which other undertakings are involved, and for which services (both ways)
- whether your company is obliged to supply such services either under the terms of its licence or pursuant to national regulatory arrangements, or to any other arrangements
- the tariff structure and levels of tariff on the basis of which such services have been provided over the last three years (1997-1999), including all changes thereto
- whether the said tariff structure and/or levels of tariff are determined, controlled or influenced by national regulatory arrangements (including those based on notification of your company as enjoying significant market power (SMP) under ONP), and, if so, how.

2.7.2. If applicable, please explain briefly how the national roaming that you offer is implemented.

2.7.3. Do you have direct interconnection with any other (national) mobile networks, or do you always pass through fixed operators?

2.8. Marketing
2.8.1. Do you use SIM-locking? If so, please provide details of the duration and the applicable conditions, including those under which a SIM-lock can be lifted at the request of an individual consumer (where applicable).

2.8.2. Do you subsidise handsets? Please specify.

2.8.3. Do you allow your system to be used by providers of mobile services who:
- issue their own SIM cards (based on their own Mobile Network Code)
- use SIM cards to brand their services (e.g. with the handset identifying the service provider rather than your network)
- use SIM cards to supply their own value added services in addition to your services.
Please specify your answer for each of these categories.

[please insert answer here]

2.8.4. Do you presently sell, are you planning to sell, or have you in the past sold, SIM-cards linked to your mobile network to network operators or service providers operating in other EU countries or have you allowed such network operators or service providers to market your SIM cards abroad?

[please insert answer here]

Please provide figures for your mobile subscribers or users of your pre-paid cards who are not residents of the EU Member State/EEA State in which you are licensed as a mobile network operator, but reside in other EU Member States/EEA States.

[please insert answer here]

2.8.5. Please provide data for 1997-1999 on:
- your cost of acquisition of subscribers
- the ratio of pre-paid cards to subscriptions on your network
- the percentage of new users of your network based on pre-paid cards
- your churn rate.

[please insert answer here]

2.8.6. Do any of your pre-paid cards allow international roaming? If so, are there any restrictions on such roaming compared to that available to users with subscriptions? Please specify.

[please insert answer here]

2.8.7. Aside from a direct sales force, do you use tied and/or independent, service providers that:
- market services to customers
- brand and package your services
- bill customers and provide customer services directly.

[please insert answer here]

2.8.8. Is your company required to use service providers and/or to provide them with wholesale subscription and airtime services either under the terms of its licence or pursuant to national regulatory arrangements, or to any other arrangements?

[please insert answer here]

Are the terms of your agreements with service providers subject to any form of price regulation? Please specify, including the method used (e.g. retail-minus).

[please insert answer here]

2.8.9. If you use tied service providers (owned or commonly owned by your company), please indicate how your relationship with them is structured.

[please insert answer here]
2.8.10. If you use independent service providers, please indicate how your relationship with them is structured.

[please insert answer here]

In particular address the following issues:
- do your independent service providers also resell services of other mobile network operators, and, if they do not, why not?
- are your independent service providers free to transfer their customer data base/subscriber records/subscriptions to other undertakings, or is this subject to contractual limitations?
Please specify.

[please insert answer here]

2.9. **Volume of sales and Revenues structure**

2.9.1. Please indicate your volume and value of sales; operating revenues; profit and loss account, for the last three years (1997-1999) for:
- national roaming services: wholesale and retail separately
- national roaming services: wholesale and retail combined
- international roaming services: wholesale and retail separately
- international roaming services: wholesale and retail combined
- all roaming services combined
- retail mobile services to end-users excluding revenues from roaming
- retail mobile services to end-users including roaming revenues
- retail revenues based on prepaid cards and on subscriptions separately
- wholesale airtime provision to service providers (non-roaming).
- interconnection revenues.

[please insert answer here]

Please provide separate figures for a network units and retail distribution units (including tied service providers) as applicable.

[please insert answer here]

2.9.2. Please provide data for the last three years (1997-1999) on volume of traffic:
- roaming traffic and total traffic separately
- for your own network subscribers and that of service providers separately
- traffic based on subscriptions and on pre-paid cards separately
- national and international traffic separately.

[please insert answer here]

2.9.3. **In addition**, please provide the information concerning customer segmentation in the Excel Spreadsheet attached as Table 2.

[please complete and attach Table 2]

2.9.4. **In addition**, please provide the information concerning interconnection/termination revenues and retail customer revenues in the Excel Spreadsheet attached as Table 3.
3. Roaming price structure information

3.1. General

3.1.1 Are your retail and/or wholesale roaming tariffs published, or available on request to third parties? Please specify sources if applicable.

[please insert answer here]

3.1.2 Are your retail and/or wholesale prices for roaming services regulated in any way or subject to any price control mechanism?

[please insert answer here]

3.1.3 Is your wholesale tariff structure based on a retail-minus or on a cost-plus structure?

[please insert answer here]

3.2. Retail roaming prices

3.2.1 For each type of roaming service that you supply to your own customers/subscribers please indicate your standard roaming rates for the last three years (1997-1999) on a quarterly basis for:
- all EU Member States/EEA States
- the three non-EU Member States/EEA States that generate most roaming traffic by your customers
- the three non-EU Member States/EEA States that generate most roaming revenue by your customers.

[please insert answer here]

3.2.2 For each type of roaming service that you supply to your own customers/subscribers, please describe how you price these services in relation to their underlying costs, and indicate whether your company:
- adopts a unitised tariff with a constant unit value
- applies a fixed charge for the initial establishment of a call
- varies the unit or initial charge value according to the nature of the call, time of day, day of week, and, if so, how.

[please insert answer here]

Please indicate relevant variations that may apply to different types of customers/subscriptions.

[please insert answer here]

3.2.3 If your company has changed the tariff structure which it applies to the international roaming services you supply to your own customers/subscribers over the last three years (1997-1999), please provide details of each of the tariff structures applied during that period.

[please insert answer here]
3.2.4. Do your offer your own mobile customers/subscribers specific packages of roaming services, whether national or international?

[please insert answer here]

3.3. Wholesale roaming tariffs

3.3.1. Please state the tariff structure applied by your company to other operators for wholesale international roaming services over the last three years (1997-1999), indicating:
- the pricing structure including connection charges
- fixed and variable elements.

[please insert answer here]

3.3.2. What is the roaming charge that you apply to your correspondent mobile network operators for his customer roaming on your network, for:
- incoming national traffic
- incoming international traffic
- outgoing national traffic
- outgoing international traffic

[please insert answer here]

3.3.3. What costs are covered by the roaming charge in all these cases? How is the roaming charge shared between different operators involved in handling a call?

[please insert answer here]

3.3.4. What costs are covered by the calling party (not roaming) for a call to one of your own mobile customers roaming on another mobile network based on an international roaming agreement – up to what point does the calling party pay?

[please insert answer here]

3.3.5. Does the calling party pay the same for a call to one of your own mobile customers roaming on another mobile network based on an international roaming agreement as for a call that you terminated nationally on your own network? Do such calls involve lower costs than calls that are terminated nationally?

[please insert answer here]

3.3.5. Can you provide the ratio of your wholesale international roaming charges for calls roamed on your network to the international accounting rates that apply for traffic destined for traffic terminated on a mobile network in the EU Member States/EEA States where you are licensed (differentiated accounting rates for mobile termination where these exist)?

[please insert answer here]

3.3.6. What is the ratio of the international roaming charges you apply for customers of other mobile operators roaming on your network to your national termination rates for call termination on your network?

[please insert answer here]
3.3.7. Please provide:
- the termination/interconnection rates that you charge for terminating a call on your mobile network
- the termination/interconnection rates that you are charged for a call that is originated on your network
- information on the manner in which you physically interconnect with or hand over traffic to other networks

For this purpose, please use the Excel Spreadsheet attached as Table 4.

[please complete and attach Table 4]

3.3.8. Please provide full details of the level of the wholesale tariff(s) charged by your company for international roaming services over the last three years (1997-1999), indicating clearly:
- how the level of tariff relates to the tariff structure described in response to question 3.3.1. above
- each and every variation in the level of tariffs applied.

[please insert answer here]

3.3.9. Please indicate whether and, if so, which of the levels of tariff indicated in response to question 3.2.2 were calculated in accordance with the Normal Network Tariff Scheme (NNT), as laid down by the GSM Association, in its Permanent Reference Document BA.07 (and its successor documents). In relation to the NNT tariffs, please indicate from time to time:
- at what level your company fixed its NNT
- by reference to which group of its own subscribers, and on the basis of which of its national tariffs, your company fixed its NNT
- what multiplier it selected to apply thereto.

[please insert answer here]

3.3.10. Please indicate whether and, if so, which of the levels of tariff indicated in response to question 2 were based on the Inter Operator Tariff Scheme (IOT), as laid down by the GSM Association, in its Permanent Reference Document BA.27 (or its successor documents).

[please insert answer here]

3.3.11. In relation to your IOT tariffs, please indicate the following:

Does your company currently offer discounts to any international roaming partners? If such discounts are offered, please specify to which of your company’s international roaming partners they are offered, at what level they are fixed, the average discount, and on which basis they are determined. Are discounts applicable to services that are offered in addition to standard roaming services? Please specify.

[please insert answer here]

3.3.12. In relation to each variation in the level of the IOT applied by your company, please briefly state your company’s reason for varying its tariff. Please specify this in detail in relation to the level of the first IOT applied that was no longer based on the NTT.
3.3.13. Please indicate whether your company collates information regarding the level of wholesale tariffs charged for international roaming services by other mobile network operators operating in the same and/or other EU Member States/EEA States. If so, please indicate all of the sources from which your company derives such information.

4. Costs

4.1. Cost structure
4.1.1. Please indicate the costs associated with providing the various types of services listed at page two above in paragraphs (i), (ii), (iii). These costs should be attributable to the provision of the relevant services and not to other services. If possible, these costs should be broken down, into the following components:
   - depreciation
   - interest
   - maintenance and engineering
   - technical general and administrative expenses
   - sales and marketing
   - customer services
   - billing
   - interconnection costs
   - general and administrative expenses.

For this purpose, please use the Excel Spreadsheet attached as Table 5.

4.1.2. Please specify
   - additional costs incurred for your own subscribers/customers to have access to roaming services
   - additional costs incurred by the provision of roaming services to your own subscribers/customers as well as to roaming subscribers of other networks.

4.1.3. Please provide the corresponding volume of services provided and the average per unit cost, as well as the capital expenditure and operating expenditures allocated for the provision of those various services

4.1.4. Please indicate any costs related to/imposed under the regulatory/licensing terms including licence fees, network build out and roll out obligations, coverage obligations (population/territory), minimum investment obligations.

[please insert answer here]
4.1.5. Please provide information on any major technological developments that would reduce the costs of providing the services listed in paragraphs (i), (ii) and (iii) at page two of this questionnaire.

[please insert answer here]

4.2. Costs potentially saved

“Costs saved” are understood to be the costs incurred in undertaking those activities which must be carried out in order to serve your own retail customer that are not required in order to provide services to the retail customer (subscriber) of another network operator when roaming on your network.

4.2.1. Do you agree that the costs saved consist of:
- The cost to the service provider of subsidising the price of handsets paid by customers
- The cost to the network of acquisition bonuses paid to service providers
- The costs of equipment maintenance or replacement
- The costs of retail marketing and sales
- The costs of finance and retail billing, including bad debt
- Retail computing costs
- Customer service costs (back and front office)
- for bearer services, the costs of providing the content or other value added component.

[please insert answer here]

Please provide the corresponding figures.

[please insert answer here]

4.2.2. Additional costs incurred in providing a roaming service to another network operator may include:
- additional wholesale billing costs incurred as a result of providing roaming
- computing costs (including system upgrades) of servicing other network operators
- additional administrative or operational costs associated with the provision of roaming services
- additional investment costs demonstrably incurred solely to provide roaming services.

Please state your views on these categories, and provide the corresponding figures.

[please insert answer here]

4.2.3. Concerning the costs of indirect access in relation to retail, there appear to be two main categories of avoidable costs:
- retail costs of marketing these indirect access calls, customer service costs for the calls and billing
- costs of carrying the calls once they have left the mobile network and of delivering them to the called customer.

Additional costs related to indirect access in relation to retail appear to be limited to the administrative costs in setting up and running the indirect access system and billing costs of individual calls.

Please state your views on these categories, and provide the corresponding figures.
5. **Financial and profitability information**

5.1. **Profitability**

5.1.1. Please provide the following information (1997-1999) financial ratios for each type of service and customer:
- return on sale
- return on capital employed (ROCE)
- return on assets (ROA).

5.1.2. Please provide your rate of return on capital employed, including the distribution of margins between network unit and retail unit (tied service providers).

5.1.3. Do you keep/publish accounting data which allows a comparison between the terms on which wholesale airtime is supplied to tied service providers to the terms for independent service providers? Please specify where such data may be found.

5.1.4. Please provide for 1997-1999 the average monthly profitability of your subscriptions and the average length of such subscriptions.

5.1.5. Please provide for 1997-1999 the average monthly profits on your pre-paid cards.

5.2. **Customer profiles**

5.2.1. For each category of service (wholesale and retail), please indicate:
- number of subscribers/users/customers
- average value of a contract
- average revenues per subscriber/user/customer.

5.2.2. As tariff schemes and packages vary widely, you are asked to provide data using a limited number of broad customer profiles. Please fill out the table below distinguishing for three customer profiles, for example distinguishing between:
- pre-paid users
- residential subscriptions
- business subscriptions.

For this purpose, please use the Excel Spreadsheet attached as Table 6.

[please complete and attach Table 6]
6. **Any other information**

6.1. Please feel free to make any other additional comment that you may wish to make in relation to the area covered by the present sector inquiry. (The provisions of Article 11 of Regulation 17 would not normally cover such additional comments.)

[please insert answer here]