

HANDBOOK OF INTERNATIONAL  
PUBLIC DATA NETWORKS

INPUT



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# HANDBOOK OF INTERNATIONAL PUBLIC DATA NETWORKS

**INPUT®**

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**Multiclient Study**

***Handbook of International  
Public Data Networks***

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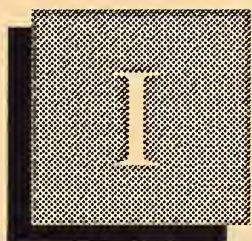
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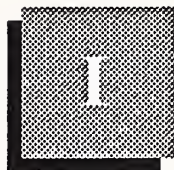
# Introduction





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## Introduction

### A

#### Purpose and Scope

The international telecommunications environment is complex and dynamic. Changes in United States domestic regulations have introduced an increasing number of organizations that can provide international services.

Expansion of corporate activities overseas has increased the need for the exchange of information between facilities located throughout the world. At the same time, changes in regulations of some countries have led to more requirements to use national and international public data (packet) networks instead of leased circuits.

The *Handbook of International Public Data Networks* provides a single comprehensive source of information about access to international packet-switching services in more than 40 countries worldwide.

The handbook is a valuable reference for planning and operating international networks. It provides network managers and planners with the means to easily determine how to provide access to corporate or commercial databases from a remote location, provide access to worldwide electronic mail services, and assess the costs of international packet services as an alternative to private leased-line services.

### B

#### Methodology

Information in the handbook is derived from numerous sources around the world. To obtain the information for each country, major international common carriers were contacted to obtain their published tariffs. In addition, national authorities (PTTs) were contacted to obtain the latest information about changes in tariffs or regulations regarding the use of their national or international public data networks.

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C

## Organization

Besides the introduction, the handbook is organized into two major parts. The first part provides specific data about service availability, cost, operating requirements, and contacts for each country. The second part provides a summary of connect and traffic charges between the U.S. and selected frequently contacted countries.

Following the Introduction (Part I), Part II of the handbook provides comprehensive information about international public data network services for nearly 40 countries throughout the world. The information provided includes network name; access methods; transmission methods; installation, connect, and traffic information; and, where applicable, minimum charges. In addition, transborder data flow or privacy protection laws are identified, and specific contacts provided for each country.

Part III of the handbook provides a summary of connect and traffic charges between the U.S. and selected frequently contacted countries.

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DRelated INPUT  
Reports

Information in the *Handbook of International Public Data Networks* is derived from research and publications related to INPUT's Multinational Network Planning Program. Information in the handbook can also be found in INPUT's Country Profiles—a series of publications providing extensive information about the telecommunications services, regulations, and tariffs throughout the world.

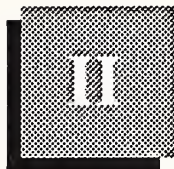




# Country Network Profiles







## Country Network Profiles

### A

#### Profile Content and Use

The *Handbook of International Public Data Networks* is a valuable resource for telecommunications and data processing managers, planners, and analysts.

Information in Parts II and III can contribute significantly to the successful planning, implementation, and operation of international networks.

Part I of the handbook provides information about international public data network services of nearly 40 countries. For each country, the following information is provided.

- *Country Name* - The familiar country name is the name most often used to identify the country, but is sometimes not the name required for contracts or for polite business conversation. The proper name is the formal name of the country and is the name required for contracts in some countries and the name used in polite business conversation.
- *Country Profile* - Provides information about the location of the country and the area in square miles and square kilometers. Frequently, square kilometers are used. The capital is also identified.
- *Principal City(ies)* - Identifies major business cities in the country. Cities are identified because the principal cities are frequently the only cities from which access to public data networks can be obtained.
- *Primary Language(s)* - Identifies the primary language of the country. In some countries this language is required for contracts and contract negotiations.

- *Telecommunications Authority* - Identifies the organization generally responsible for establishing regulations related to the use of telecommunications in the country. This organization may not be directly involved in providing the service, but has overall responsibility for rules, regulations, and tariffs.
- *Network Name* - Identifies the name of the international public data network. The name is necessary for obtaining information or ordering service. In some countries, the domestic network is the primary, if not the only, means for accessing international services. In these countries, the domestic network is identified.
- *Gateway City(ies)* - Identifies the city or cities from which dial (public and private) access can generally be obtained. Leased-line access can frequently be obtained from outside these areas, but there are additional charges.
- *Access Method(s)* - Identifies the common methods of accessing data network services. The common access methods are public dial, private dial, and leased line. One or all of the access methods may be available in the country.
  - *Public Dial* - Generally refers to the ability to access the network through a public switched telephone network (PSTN) from an asynchronous terminal.
  - *Private Dial* - Is generally the same type as public dial; however, a port is dedicated for use by the subscriber. A leased line may or may not be required for this type of service. In some countries, private dial may be referred to as leased line services.
  - *Leased Line* - Service generally implies network access through a dedicated synchronous terminal. In developed countries, this type of service is most commonly used for host-to-host connections using X.25 protocol. In some countries, leased-line service may be available for asynchronous service.
- *Transmission Method(s)* - Methods of transmission vary from country to country, but can be generally classified as: asynchronous, synchronous, or X.25. Where X.25 is available, CITT Recommendations are generally used as the standard.
- *Rates and Charges* - Rates and charges vary by country and sometimes by the international carrier providing the service. Rates and charges included in the handbook are representative of tariffs and costs applicable in the country. They are intended to indicate charges that could be incurred.



- Rates and charges in this issue of the *Handbook of International Public Data Networks* are for common forms worldwide—dial access through domestic PSTN (Public Switched Telephone Network) services and through direct leased-line connections.
- Unless otherwise noted, rates and charges are shown in the currency of the country. Charges for access in a country are normally payable in the country, in the currency of the country. Some charges are shown in U.S. dollars or gold francs. When shown with these values, actual charges are payable in the currency of the country at the equivalent value of the country's currency at the time the invoice is paid.
- Although there is frequently an access charge, the costs are typically based on costs for local telephone service and vary by country and distance from the access point.
- *Contact(s)* - For each country, contacts are provided to make inquiries or initiate service. The information includes: organization, address, telephone and telex numbers when available.

Part II of the handbook provides a summary of connect and traffic charges between the U.S. and the countries. When Part II is combined with the data in Part I, planning estimates can be obtained for communications between the U.S. and foreign countries or between foreign countries.

## B

### Country Profiles

*The Handbook of International Public Data Networks* provides profiles of the public data network services for approximately forty countries throughout the world.

#### 1. Argentina

**Country Name** - The proper name of the country is the Republic of Argentina.

**Country Profile** - The country is located on the southern tip of South America. The approximate size is 1,084,235 square miles (2,780,082 square kilometers). The capital is Buenos Aires.

**Principal Cities** - The principal cities are Bahia, Buenos Aires, Cordoba, and La Plata.

**Primary Language(s)** - The primary language is Spanish.

Telecommunications Authority - The telecommunications authority in Argentina is Empresa Nacional de Telecommunications (ENTEL).

Network Name - The name of the international network is ENTEL.

Gateway City(ies) - The gateway city is Buenos Aires.

Access methods - Access methods include Public Dial (300 bps), Private Dial (100-300, 1200 bps), and Leased Line (2400-9600 bps).

Transmission Methods - Transmission methods include Asynchronous. X.25 is available for intracountry transmission only.

Currency(ies) - The national currency is the Austral.

Rates and Charges - Rates and charges are shown in Exhibit II-1. For Argentina, rates are stated in Gold Francs unless U.S. dollars are indicated.

EXHIBIT II-1

Installation	One-Time Charge 125.00 U.S. 3,000 (Leased Line)
Subscription	Charge per Month 30% surcharge for basic telephone 30.00 U.S. (2400 bps leased line) 44.76 U.S. (4800 bps leased line)
Connection	Charge per Hour 30.00
Traffic	Charge per Kilosegment 30.00
Minimum	None Specified

Contact(s)            Empresa Nacional de Telecomunicaciones  
Gerencia de Servicios Internacionales  
Av de Mayo 761, 1st Floor  
(1002) Buenos Aires  
Argentina  
Telephone: 541-499-0913  
Telex: 390-18372 or 390-2251

Notes and Comments - Rates and charges change frequently. Direct contact should be made for specific, current information as required.

## 2. Australia

Country Name - The proper name of the country is the Commonwealth of Australia.

Country Profile - The country is a continent southeast of Asia. The approximate size is 2,967,870 square miles (square kilometers 7,686,848). The capital is Canberra.

Principal City(ies) - The principal cities are Brisbane, Canberra, Melbourne, and Sydney.

Primary Language - The primary language is English.

Telecommunications Authority - The telecommunications authority of international public data network services is the Overseas Telecommunications Authority (OTC).

Network Name - The name of the international network is MIDAS.

Gateway City(ies) - Sydney is the gateway city of international public data network services.

Access Method(s) - Access methods include Public Dial (110-300, 1200 bps), Private Dial (300, 1200 bps), Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous and X.25.

Currency(ies) - The currency is the Australian dollar.

Rates and Charges - Rates and charges are shown in Exhibit II-2. Unless otherwise noted, the charges are in the currency of the country.

## EXHIBIT II-2

Installation	One-Time Charge
Public Dial	None Specified
Private Dial	420.00
Leased Line	900.00 (2400-9600 bps) 1800 (48 Kbps)
Subscription	Charge per Month
Public Dial	None Specified
Private Dial	200.00
Leased Line	250.00 (2400 bps) 370.00 (4800 bps) 550.00 (9600 bps) 1250 (48 Kbps)
Connection	Charge per Hour
Dial	22.00 (MIDAS) 10.80 (AUSTPAC)
Leased Line	0.13 (per Minute)
Traffic	Charge per Kilosegment
Dial	12.00 (MIDAS and AUSTPAC)
Leased Line	11.00 (First 50 Kilosegments) 9.00 (Next 100 Kilosegments) 7.00 (Over 150 Kilosegments)
Minimum	6 Seconds and 10 Segments 0.13 per-call access fee for AUSTPAC

## Contact(s)

Overseas Telecommunications Commission  
P.O. BOX 7000 GPO  
Sydney 2001  
Australia  
Telephone: 612-230-5000  
Telex: 790-20591

## Notes and Comments

Rates shown are for direct connect to the Midas service. Lower rates apply for access through the domestic network (AUSTPAC).

Installation and subscription charges for leased-line services are for connection through AUSTPAC only.



### 3. Austria

Country Name - The proper name is the Republic of Austria.

Country Profile - The country is located in central Europe. The approximate size is 32,703 square miles (83,853 square kilometers).

Principal Cities - The principal cities are Graz, Linz, Salzburg, and Vienna.

Primary Language(s) - The primary language is German.

Telecommunications Authority - The telecommunications authority is the Bundesministerium vur Verkehr Generaldetention für die Post und Telegraphenverwaltung.

Network Name - The name of the international network is Radaus Data Service.

Gateway City(ies) - The gateway city is Vienna.

Access Method(s) - Access methods include Public and Private Dial (50-300, 1200 bps) and Leased Line (1200 bps).

Transmission Method(s) - Transmission methods include Asynchronous, X.25, and Telex.

Currency(ies) - The currency of the country is the schilling.

Rates and Charges - Rates and charges are shown in Exhibit II-3. Unless otherwise noted, charges are in the currency of the country.

Contact	Data Service
	Radio-Austria A.G.
	Renngasse 14
	A-1010 Wein
	Vienna, Austria
	Telephone: 43-222-636-651
	Telex: 847-114731

#### Notes and Comments

Direct-access leased line service is available to 1200 bps. Telex access to 50 bps and Datex-300 at 300 bps is also available.

## EXHIBIT II-3

Installation	One-Time Charge
Dial Access	600.00
Leased Line	2400
Subscription	Charge per Month
Public Dial	300.00 (300 bps)
	650.00 (1200 bps)
Private Dial	650 (300-1200 bps)
1300 (2500 bps)	
Leased Line	1,300 (2400 bps)
	2,200 (4800 bps)
	4,000 (9600 bps)
Connection	Charge per Minute
Public Dial	3.00
Private Dial	2.50
Leased Line	2.00
Traffic	Charge per Segment
Public Dial	0.12
Private Dial	0.12
Leased Line	0.12
Minimum	None Specified

**4. Bahrain**

Country Name - The proper name of the country is the State of Bahrain.

Country Profile - The country is in the Arabian Gulf, midway between the Qatar peninsula and the east coast of Saudi Arabia. The approximate size is 258 square miles (662 square kilometers). The capital is Manama.

Principal City(ies) - The principal cities are Awali, Isa, Manama, and Sitra.

Primary Language(s) - The primary languages are Arabic and English.

**Telecommunications Authority** - The telecommunications authority is the Ministry of Transportation and Telecommunications.

**Network Name** - The name of the international network is IDAS (International Database Access Service).

**Gateway City(ies)** - Gateway cities are Hong Kong and New York.

**Access Method(s)** - Access methods include Public and Private Dial (300-1200 bps) and Leased Line (2400-9600 bps).

**Transmission Method(s)** - Transmission methods include Asynchronous and X.25.

**Currency(ies)** - The currency is the Bahrain dinar.

**Rates and Charges** - Rates and charges are shown in Exhibit II-4. Unless otherwise noted, charges are in the currency of the country.

#### EXHIBIT II-4

Installation	One-Time Charge 50.00
Subscription	Charge per Month* 10.00-20.00 (300-1200 bps) 20.00-30.00 (2400 bps)
Connection	Charge per Minute 0.075
Traffic	Charge per Kilocharacter 0.23
Minimum	0.305 per Session

**Contact(s)**                      Commercial International  
    Bahrain Telecommunications Company  
    P.O. Box 14  
    Manama, Bahrain  
    Arabian Gulf  
    Telephone:    973-248-312  
    Telex:            995-8790

## Notes and Comments

Terminals may be rented from BTC or provided by the subscriber.

The monthly subscription charge varies, based on the number of NUI. The minimum and maximum are shown.

## 5. Belgium

Country Name - The proper name is the Kingdom of Belgium.

Country Profile - The country is located north of France in western Europe, on the North Sea. The size is approximately 11,903 square miles (30,521 square kilometers). The capital is Brussels.

Principal City(ies) - Principal cities include Antwerp, Brussels, Liège, and Malines.

Primary Language(s) - The primary languages are French, German, and Dutch.

Telecommunications Authority - The telecommunications authority for international public data network services is the Regie des Telegraphs et des Telephones.

Network Name - The name of the international network is DCS.

Gateway City(ies) - The gateway city for international public data network services is Brussels.

Access Method(s) - Access methods include Public and Private Dial (300-1200 bps) and Leased Line (2400-9600 bps and 48 Kbps).

Transmission Method(s) - Transmission methods include Asynchronous and X.25.

Currency(ies) - The currency of the country is the Belgian franc.

Rates and Charges - Rates and charges are shown in Exhibit II-5. Unless otherwise noted, the charges are in the currency of the country.



## EXHIBIT II-5

Installation	
Modem	5,000
Leased Line	9,000
NUI	1,000
Subscription	Charges Bimonthly
Asynchronous:	9,000 (300 bps)
	1,000 (1200 bps)
Synchronous	12,000 (2400 bps)
	15,400 (48000bps)
	16,900 (9600 bps)
	50,000 (48 Kbps)
Connection	Charge per Minute
	4.00
Traffic	Charge per 10 Segments
	Dial 2.50
	Leased 2.20
Minimum	0.15 per Call

Contact(s)      Departmente Transmission de Donnes  
 Regie Des Telegraphs et des Telephones  
 Tour RTT (17 eme Etage)  
 Boulevard Emile Jacquemain, 164  
 B1000 Bruxelles  
 Belgium  
 Telephone:    32-2-213-3008  
 Telex:        846-29257

## Notes and Comments

PSTN connections are at standard telephone or telex rates. Connections between customers (virtual or permanent virtual) are billed at 30-second increments, rounded to the next highest increment).

Rates are exclusive of 19% VAT.

## 6. Brazil

Country Name - The proper name is the Federal Republic of Brazil.

Country Profile - The country is located on the Atlantic Coast of South America. The size is approximately 3,286,470 square miles (8,511,965 square kilometers). The capital is Brasilia.

Principal City(ies) - Principal cities are Belo Horizonte, Brasilia, Rio de Janeiro, and Sao Paulo.

Primary Language(s) - The primary language is Portuguese.

Telecommunications Authority - The telecommunications authority for international public data network services is the Ministerio de Comunicacoes.

Network Name - The name of the international network is Interdata.

Gateway City(ies) - The gateway for international public data network services is Rio de Janeiro.

Access Method(s) - Access methods include Public and Private Dial (300-1200 bps) and Leased-line Service (300 bps).

Transmission Method(s) - Transmission methods are Asynchronous.

Currency(ies) - The currency of the country is the Cruzeiro.

Rates and charges - Rates and charges are shown in Exhibit II-6. In Brazil, charges are shown in gold francs.

Contact	Empresa Brasileria Telecomunicacoes Av. Presidente Vargas, 1012 Sala 637 20071-Rio de Janeiro Brazil Telephone: 55-21-216-8328
---------	---

### Notes and Comments

A surcharge of 5% is added to all rates and charges shown.

Leased-line traffic and connection charges are applied after the minimum has been satisfied.

Terminals and modems must be obtained locally and cannot be imported. Dial terminal modems can be rented for approximately 30.00 per month.

## EXHIBIT II-6

Installation	None Specified
Subscription	Charge per Month 11,400 (300 bps, leased-line service) 14,490 (300 bps, leased-line service)
Connection	Charge per Minute 2.30 (Dial) 0.06 (Leased)
Traffic	Charge per Kilocharacter 3.80
Minimum	None Specified

**7. Canada**

**Country Name** - The proper name is the Commonwealth of Canada.

**Country Profile** - The country is located in North America. The approximate size is 3,851,787 square miles (9,976,139 square kilometers). The capital is Ottawa.

**Principal City(ies)** - Principal cities are Montreal, Ottawa, Quebec, Toronto, and Winnipeg.

**Primary Language(s)** - The primary languages are English and French.

**Telecommunications Authority** - The telecommunications authority is the Department of Communications.

**Network Name** - The name of the international network is DATAPAC.

**Gateway City(ies)** - There are gateways for international public data network services in most major cities.

**Access Method(s)** - Access methods include Public and Private Dial (110-300, 1200, and 2400 bps), Asynchronous Leased Line (110-30, 1200, and 2400 bps), and Synchronous Leased-line Service (2400-9600 bps and 19.2 Kbps).

Transmission Method(s) - Transmission methods include Asynchronous, Synchronous, X.25, and SDLC.

Currency(ies) - The currency is the Canadian dollar.

Rates and Charges - Rates and charges are shown in Exhibit II-7. Rates and charges for Canada are in Canadian dollars.

EXHIBIT II-7

Installation	One-Time Charge
Public Dial	65.00
Private Dial	125.00
Leased Line	200.00
Subscription	Charge per Month
Public Dial	30.25 (Initial) 2.40 (Each Additional)
Private Dial	111.00 (110-300 bps) 164.00 (600-1200 bps) 184.00 (2400 bps)
Leased Line	157.00 (1200 bps) 193.00 (2400 bps) 315.00 (4800 bps) 456.00 (9600 bps) 760.00 (19.2 Kbps)
Connection	Charge per Hour
Public Dial	2.40
Private Dial	0.60
Leased Line	0.60
Traffic	Charge per Kilopacket
Public Dial	5.10
Private Dial	5.10
Leased Line	2.75
Minimum	None Specified

Contact(s)

Datapac International  
Telecom Canada  
1890-160 Elgin Street  
Ottawa, Ontario K1G 3J4  
Canada  
Telephone: 613-567-7558



## Notes and Comments

There are numerous alternatives available to meet a wide variety of customer needs. Included in the alternatives is the option to have all charges billed collect to a U.S. subscriber. The DATAPAC charges for collect connections are slightly less than those shown.

## 8. Chile

Country Name - The proper name is the Republic of Chile.

Country Profile - The country is located on the west coast of South America. The approximate size is 292,256 square miles (756,945 square kilometers). The capital is Santiago.

Principal City(ies) - Principal cities are Concepcion, Santiago, Valparaiso, and Vina del Mar.

Primary Language - The primary language is Spanish.

Telecommunications Authority - The telecommunications authority is the Subsecretaria de Telecomunicaciones.

Network Name - The name of the international network is ECOM.

Gateway City(ies) - The gateway city for international public data network services is Santiago.

Access Method(s) - Access methods include Public Dial (110-300 and 1200 bps) and Leased Line (100-300, 1200-9600 bps).

Transmission Method(s) - The transmission method is Asynchronous.

Currency(ies) - The currency of the country is the escudo.

Rates and Charges - Rates and charges are shown in Exhibit II-8. Rates and charges for Chile are shown in U.S. dollars.

Contact(s)	ENTEL
	Casilla 4254
	Santiago
	Chile
	Telephone: 56-2-696-2606
	Telex: 5-240683

## Notes and Comments

Two competitive services are offered. WUI is the first and ITT is the second.



## EXHIBIT II-8

Installation	One-Time Charge 146.00
Subscription	None Specified
Connection	Charge per Hour 12.00
Traffic	Charge per Kilosegment 12.00
Minimum	570.00 per Month 3 Minutes per Connection

## 9. Colombia

Country Name - The proper name is the Republic of Colombia.

Country Profile - The country is located on the northwest corner of South America. The approximate size is 439,734 square miles (1,138,914 square kilometers). The capital is Bogotá.

Principal City(ies) - Principal cities include Barranquilla, Bogotá, Cali, and Medellín.

Primary Language(s) - The primary language is Spanish.

Telecommunications Authority - The telecommunications authority for international public data network services is the Ministerio de Comunicaciones.

Network Name - None specified.

Gateway City(ies) - The gateway for international public data network services is New York.

Access Method(s) - Access methods include Public Dial (300-1200 bps) and Leased Line (1200 bps).

Transmission Method(s) - Transmission methods include BSC, SDLC, X.25, and SNA.

Currency(ies) - The currency of the country is the Peso.

Rates and Charges - Rates and Charges are shown in Exhibit II-9. Unless otherwise noted, the charges are in the currency of the country.

## EXHIBIT II-9

Installation	One-Time Charge 250.00 (Individual) 1,000 (Company)
Subscription	Charge per User Name 1,000
Connection	Charge per Minute 73.70
Traffic	Charge per Kilocharacter 55.30
Minimum	1 Minute 1 Kilocharacter

Contact(s) Chief, Division of Telegraph Operation and Data  
Transmission (ENTEL)  
Calle 23, No. 13-49, Piso 8  
Bogotá  
Colombia  
Telephone: 57-1-241-2187 or 284-4621  
Telex: 396-44288

## Notes and Comments

In addition to the rates and charges shown, a guarantee deposit is required. The amount is 4750 (individual) or 19000 (company).

A new network, EDXP, is scheduled for operation in September 1988. Protocols shown are for the new network.

## 10. Denmark

Country Name - The proper name of the country is the Kingdom of Denmark.

Country Profile - The country is located north of Germany in northern Europe. The size is approximately 16,631 square miles (43,075 square kilometers). The capital is Copenhagen.

Principal City(ies) - The principal cities are Alborg, Arhus, Copenhagen, and Odense.

Primary Language(s) - The primary language is Danish.

Telecommunications Authority - The telecommunications authority for international public data networks is the General Directorate of Posts and Telegraph.

Network Name - None specified.

Gateway City(ies) - The gateway for international public data network services is Amsterdam (The Netherlands).

Access Method(s) - Access methods include Public and Private Dial (300, 1200 bps) and Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include: X.28 (PAD) and X.25.

Currency(ies) - The currency of the country is the kroner.

Rates and Charges: Rates and charges are shown in Exhibit II-10. Unless otherwise noted, the charges are in the currency of the country.

Contact(s)	Datel Section
	General Directorate of Posts and Telegraphs
	Farvergade 17
	DK 1007 Copenhagen
	Denmark
	Telephone: 45-2-529111
	Telex: 855-22999

### Notes and Comments

Rates and charges shown include 20.25 percent value-added tax.

## EXHIBIT II-10

Installation	One-Time Charge
Dial	500.00 per User ID
Leased	6,000 (2400 bps)
	8,000 (4800 bps)
	10,000 (9600 bps)
Subscription	Charge per Quarter
	200.00
Connection	Charge per Minute
Dial	1.32
Leased	0.80
Traffic	Charge per Segment
	0.45
Minimum	0.10 per Call

**11. Finland**

**Country Name** - The proper name of the country is the Republic of Finland.

**Country Profile** - The country is located in northern Europe, east of Sweden. The size is approximately 130,128 square miles (337,032 square kilometers). The capital is Helsinki.

**Principal City(ies)** - The principal cities are Helsinki, Tampere, and Turku.

**Primary Language(s)** - The primary languages are Finnish and Swedish.

**Telecommunications Authority** - The telecommunications authority for international public data network services is the General Directorate of Posts and Telegraph.

**Network Name** - The name of the international public data network is DATAPAK.

**Gateway City(ies)** - The gateway city for international public data network services is Stockholm.

Access Method(s) - Access methods include Asynchronous Dial-Up (110-300, 1200 bps), Synchronous Dial-Up (2400, 4800 bps), Asynchronous Leased Line (100-300, 1200 bps), and Synchronous Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous, Synchronous, and X.25.

Currency(ies) - The currency of the country is the finmark.

Rates and Charges - Rates and charges are shown in Exhibit II-11. Unless otherwise noted, charges are in the currency of the country.

## EXHIBIT II-11

Installation	One-Time Charge
Dial	500.00
Leased	3,360 (2400 bps)
	4,460 (4800 bps)
	5,520 (9600 bps)
	17,150 (48 Kbps)
Subscription	Charge per Month
Dial	50.00
Leased	505 (2400 bps)
	575 (4800 bps)
	760 (9600 bps)
	1,680 (48 Kbps)
Connection	Charge per Minute
	0.70
Traffic	Charge per 10 Segments
	0.42
Minimum	None Specified

## Contact(s)

Telecommunications Division  
 General Directorate of Posts and  
 Telecommunications  
 Post Box 526  
 SF-00101 Helsinki  
 Finland  
 Telephone: 358-0-195-4838  
 Telex: 857-123434



## Notes and Comments

9600 bps Connections are available within 20 km of some large cities.

Sales tax of 16% is included in all rates.

## 12. France

Country Name - The proper name of the country is the French Republic.

Country Profile - The country is located in central Europe, bordered on the west by the Atlantic and on the south by the Mediterranean. The size is approximately 211,207 square miles (595,970 square kilometers). The capital is Paris.

Principal City(ies) - The principal cities are Lyon, Marseille, and Paris.

Primary Language(s) - The primary language is French.

Telecommunications Authority - The telecommunications authority for international public data networks is the Director des Telecommunications des Reseaux.

Network Name - The name of the public data network is TRANSPAC.

Gateway City(ies) - The gateway city for international public data network services is Paris.

Access Method(s) - Access methods include Public Dial (300, 1200, and 2400 bps) and Leased Line (300, 1200, 2400 bps and 48 Kbps). Telex access is also provided at 50 bps.

Transmission Method(s) - Transmission methods include Asynchronous, Synchronous (X.32 and X.25), and Telex.

Currency(ies) - The currency of the country is the French franc.

Rates and Charges - Rates and charges are shown in Exhibit II-12. Unless otherwise noted, the charges are in the currency of the country.

## EXHIBIT II-12

Installation	One-Time Charge
Public Dial	150.00
Leased Line	1,720 (300 bps) 3,400 (1200, 2400 bps, 48 Kbps)
Subscription	Charge per Month
Public Dial	75.00
Leased Line	730.00 (300 bps) 1,180 (1200 bps) 1,270 (2400 bps) 1,330 (4800 bps) 1,630 (9600 bps) 2,060 (19.2 Kbps) 7,650 (48 Kbps)
Connection	Charge per Minute
Public Dial	0.84 (300 bps) 1.35 (1200 bps) 1.69 (2400 bps)
Leased Line	0.84
Traffic	Charge per Kilosegment
Public Dial	38.00
Leased Line	38.00
Minimum	120 seconds connection for Public Dial 1 Kilosegment for Leased Circuit

Contact(s)  
(Public Dial)

Direction France Telecom des Reseaux Exterieurs

Intelcomfrance - NTI

Tour Franklin

Cedex 11

92081, Paris

France

Telephone: 33-1-476-27960

Telex: 842-610586

Fax: 33-1-477-62896

Direction Commerciale Transpac (Leased Circuit)  
Tour Maine Montparnasse  
33 Avenue de Maine  
Cedex 15  
75755 Paris  
France  
Telephone: 33-1-453-85211  
Telex: 842-260676

### 13. Germany (West)

**Country Name** - The proper name of the country is the Federal Republic of Germany.

**Country Profile** - The country is in central Europe, south of the North Sea. The size is approximately 95,790 square miles (248,097 square kilometers). The capital is Bonn.

**Principal City(ies)** - The principal cities are Bonn, Frankfurt, Hamburg, Munich, and West Berlin.

**Primary Language(s)** - The primary language is German.

**Telecommunications Authority** - The telecommunications authority for international public data network services is the Deutsch Bundespost.

**Network Name** - The name of the international public data network is Datex-P.

**Gateway City(ies)** - The gateway cities for international public data network services are Frankfurt and Düsseldorf.

**Access Method(s)** - Access methods include Public and Private Dial (100-300, 1200 bps) and Leased Line (2400-9600 bps).

**Transmission Method(s)** - Transmission methods include Asynchronous, Synchronous, and X.25.

**Currency(ies)** - The currency of the country is the Deutsche mark.

**Rates and Charges** - Rates and charges are shown in Exhibit II-13. Unless otherwise noted, the charges are in the currency of the country.

## EXHIBIT II-13

Installation	One-Time Charge
2-Wire	200.00 (300-1200 bps)
4-Wire	400.00 (2400-96000bps)
Subscription	Charge per Month
	15.00 First Name
	5.00 Each Additional Name
Datex P20H	140.00 (300 bps)
Datex P20H	180.00 (1200 bps)
Datex P10H	250.00 (2400 bps)
	350.00 (4800 bps)
	450.00 (9600 bps)
	2,500 (48 Kbps)
Connection	Charge per Minute
	0.25 (300 Dial)
	0.26 (1200 Dial)
	0.21 (1200 Leased Line)
	0.15 (2400 Leased Line)
Traffic	Charge per Kilosegment
	1.30
Minimum	0.05 per Call

Contact(s) Deutsche Bundespost  
Fernmeldetechnisches Zentralamt  
Kundenberatung für Dateldienste  
Post Box 5000  
61000 Darmstadt  
West Germany  
Telephone: 49-6151-83-5236  
Telex: 841-419511

## Notes and Comments

Charges for Datex-P services include DCE charges.

## 14. Hong Kong

Country Name - The proper name of the country is Hong Kong.

Country Profile - The country is located on the southern coast of the Peoples Republic of China. The approximate size is 404 square miles (1,046 square kilometers). The capital is Hong Kong.

Principal City(ies) - The principal cities are Hong Kong and Kowloon.

Primary Language(s) - The primary languages are Chinese and English.

Telecommunications Authority - The telecommunications authority for international public data network services is Cable and Wireless (HK), Ltd.

Network Name - The name of the international public data network is IDAS (International Database Access Service).

Gateway City(ies) - The gateway city for international public data network services is Hong Kong.

Access Method(s) - Access methods include Public and Private Dial (300, 1200-2400 bps) and Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include X.28, X.25, BSC, X780, 3270, and SNA.

Currency(ies) - The currency of the country is the Hong Kong dollar.

Rates and Charges - Rates and charges are shown in Exhibit II-14. Unless otherwise noted, charges are in the currency of the country.

Contact(s)	Cable and Wireless (HK), Ltd. New Mercury House P.O. Box 597 22 Fenwick Street Wanchai Hong Kong Telephone: 852-5-8622-1628 Telex: 780-83000 Fax: 852-5-861-2143
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## EXHIBIT II-14

Installation	One-Time Charge
	250.00 (Public Dial)
	95 .00 (Private Dial)
	1,500 (2400 bps Leased Line)
	2,500 (4800 bps Leased Line)
	2,880 (9600 bps Leased Line)
Subscription	Charge per Month
	25.00 (Public Dial)
	450.00 (Private Dial)
	750.00 (2400 bps Leased Line)
	1,250 (4800 bps Leased Line)
	2,000 (9600 bps Leased Line)
Connection	Charge per Minute
	0.10
Traffic	Charge per Segment
	1.00
Minimum	1 Minute
	10 Segments

**15. Ireland**

Country Name - The proper name of the country is the Irish Republic.

Country Profile - The country is located west of Great Britain, in the North Atlantic. The approximate size is 27,136 square miles (70,010 square kilometers). The capital is Dublin.

Principal City(ies) - The principal cities are Dublin and Limerick.

Primary Language(s) - The primary languages are English and Gaelic.

Telecommunications Authority - The telecommunications authority for international public data network services is the Department of Posts and Telegraphs.

**Network Name** - The name of the international public data network service is EIRPAC.

**Gateway City(ies)** - The gateway cities for international public data network services are Dublin, Galway, Limerick, and Cork.

**Access Method(s)** - Access methods include Public and Private Dial (110-300, 1200 bps) and Leased Line (2400-9600 bps, 19.2 Kbps).

**Transmission Method(s)** - Transmission methods include Asynchronous and X.25.

**Currency(ies)** - The currency of the country is the Irish pound.

**Rates and Charges** - Rates and charges are shown in Exhibit II-15. Unless otherwise noted, charges are in the currency of the country.

EXHIBIT II-15

Installation	One-Time Charge 40.00 (Dial) 330.00 (Leased Line)
Subscription	Charge per Month 7.50 (Dial) 275.00 (1200 bps) 425.00 (2400 bps) 715.00 (4800 bps) 965.00 (19.2 Kbps)
Connection	Charge per Minute 14.50 (Public Dial) 13.00 (Private Dial) 13.00 (Leased Line)
Traffic	Charge per Segment 0.60
Minimum	None Specified

Contact(s) Telecom Eirean  
6-8 College Green  
Dublin 2  
Ireland  
Telephone: 353-778-222 or 714-444  
Telex: 852-92389

## 16. Israel

Country Name - The proper name of the country is the State of Israel.

Country Profile - The country is located on the east coast of the Mediterranean in the Middle East. The approximate size is 7,846 square miles (20,245 square kilometers). The capital of the country is Jerusalem.

Principal City(ies) - The principal cities are Beersheba, Jerusalem, and Tel Aviv.

Primary Language(s) - The primary languages are Arabic, English, and Hebrew.

Telecommunications Authority - The telecommunications authority for international public data network services is the Ministry of Communications.

Network Name - The name of the international public data network is ISRANET.

Gateway City(ies) - The gateway city is Tel Aviv.

Access Method(s) - Access methods include Public Dial (110-300, 1200 bps) and Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous and Synchronous.

Currency(ies) - The currency of the country is the shekel.

Rates and Charges - Rates and charges are shown in Exhibit II-16. Unless otherwise noted, charges are in the currency of the country.

Contact(s) Marketing and Customer Service  
The Israel Telecom Corp.  
P.O. Box 23179  
61231 Tel-Aviv  
Israel  
Telephone: 9723-281-261  
Telex: 922-25269

## EXHIBIT II-16

Installation	One-Time Charge 33.50 (Dial) 335.00 (Leased Circuit)
Subscription	Charge per Month 13.40 (Base Charge) 16.80 (Each NUI)
Connection	Charge per Hour 13.80
Traffic	Charge per Kilosegment 13.80
Minimum	1.00 Minute Connect

## Notes and Comments

In addition to the charges shown, there is a value-added tax of 15%.

**17. Italy**

Country Name - The proper name of the country is the Italian Republic.

Country Profile - The country is located in southern Europe, on the Mediterranean Sea. The approximate size is 116,316 square miles (301,260 square kilometers). The capital is Rome.

Principal City(ies) - The principal cities are Milan, Naples, Rome, and Turin.

Primary Language(s) - The primary language of the country is Italian.

Telecommunications Authority - The telecommunications authority for international public data network services is Italcable.

Network Name - The name of the international public data network service is ITAPAC.

Gateway City(ies) - The gateway cities for international public data network services are Rome and Milan.

Access Method(s) - Access methods include Private Dial (110-300, 1200 bps) and Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include X.28 and X.25.

Currency(ies) - The currency of the country is the lira.

Rates and Charges - Rates and charges are shown in Exhibit II-17. Unless otherwise noted, charges are in the currency of the country.

EXHIBIT II-17

Installation	None Specified
Subscription	Charge per Month 7,200 (Per User Name) 108,000 (300 bps Leased Line) 139,500 (1200 bps Leased Line) 208,000 (2400 bps Leased Line) 275,000 (4800 bps Leased Line) 311,400 (9600 bps Leased Line)
Connection	Charge per Minute 191.33
Traffic	Charge per 10 Segments 114.80
Minimum	1 Minute 1,000 Characters

Contact(s)	Italcable Via Calabria, 46-48 00187 Rome Italy Telephone: 396-477-0366 or 477-0328 Telex: 843-611146
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## Notes and Comments

In addition to the charges shown, there is a data transmission tax of 10,000 per month.

## 18. Japan

Country Name - The proper name of the country is Japan.

Country Profile - The country is located in the North Pacific, off the coasts of China and the Soviet Union. The approximate size is 145,817 square miles (372,487 square kilometers). The capital is Tokyo.

Principal City(ies) - The principal cities are Nagoya, Osaka, Tokyo, and Yokohama.

Primary Language(s) - The primary language is Japanese.

Telecommunications Authority - The telecommunications authority for international public data network services is Kokusai Denshin Denwa (KDD).

Network Name - The name of the international network is ICAS (International Computer Access Service).

Gateway City(ies) - Osaka and Tokyo are the gateway cities for international public data network services.

Access Method(s) - Access methods include Public Dial (to 1200 bps), Leased Line (300-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous, Synchronous, X.25 (LAP-B), HDLC (IBM), and BSC (IBM 2780/3780).

Currency(ies) - The currency of the country is the yen.

Rates and Charges - Rates and charges are shown in Exhibit II-18. Unless otherwise noted, the charges are in the currency of the country.

Contact(s)	Commercial Department Kokusai Denshin Denwa Co. Ltd. 8-1, Otemachi, 1-Chome Chiyoda-Ku, Tokyo 100 Japan Telephone: 81-3-270-5060 Telex: 781-24700
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## EXHIBIT II-18

Installation	One-Time Charge 300.00
Subscription	Charge per Month 270.00
Connection	Charge per Minute 40.00
Traffic	Charge per Segment 2.40
Minimum	None Specified

## Notes and Comments

Public dial access is provided through the domestic packet-switched telephone network. Using an acoustic coupler is not permitted.

Leased-line service is available only in the metropolitan areas of Osaka and Tokyo.

**19. Korea (South)**

Country Name - Korea is the most commonly used name for the country of South Korea. The proper name is the Republic of South Korea.

Country Profile - The country is located on a northeast Asian peninsula on the coast of the Peoples Republic of China. The approximate area is 38,025 square miles (98,484 square kilometers). The capital is Seoul.

Principal City(ies) - The principal cities in Korea are Inchon, Pusan, Seoul, and Taegu.

Primary Language(s) - The primary language is Korean. However, English is widely spoken. Korean is required for contracts. Users may want to have contracts translated prior to execution to ensure understanding.

Telecommunications Authority - The telecommunications authority of the country is the Ministry of Communications.

**Network Name** - The name of Korea's public data network is DACOM-NET.

**Gateway City(ies)** - Seoul is the only gateway city for the country.

**Access Method(s)** - Access methods include Public Dial (300 bps), Private Dial (1200 bps), and Leased Line (2400-9600 bps).

**Transmission Method(s)** - Methods of transmission include Asynchronous and X.25.

**Currency(ies)** - The currency of the country is the won.

**Rates and Charges** - Rates and charges are shown in Exhibit II-19. Unless otherwise noted, the charges are in the currency of the country.

EXHIBIT II-19

Installation	One-Time Charge
	80,000 (300, 1200 bps Public Dial)
	106,000 (300, 1200 bps Private Dial)
	256,000 (2400 bps Leased Line)
	756,000 (4800 bps Leased Line)
	1,056,000 (9600 bps Leased Line)
Subscription	Charge per Month
	5,000 (300, 1200 bps Public Dial)
	64,000 (300 bps Private Dial)
	98,000 (1200 bps Private Dial)
	132,000 (2400 bps Leased Line)
	166,000 (4800 bps Leased Line)
	200,000 (9600 bps Leased Line)
Connection	Charge per Minute
	Domestic
	19.00 (Dial-Up)
	5.36 (Leased Line)
	International
	0 (Asia)
	174 (U.S.A.)
	202 (Other)
Traffic	Charge per Segment
	0.30 (Domestic)
	13 (International)
Minimum	1 Minute
	1 Segment

Contact(s) International Marketing Section  
Data Communications Corporation of Korea  
Sam-Ick Bldg.  
65-228, 3KA, Hankang-Ro, Yongsan-Ku  
Seoul  
Korea  
Telephone: 82-2-783-3991  
Telex: 787-28311

#### Notes and Comments

In addition to the charges shown, there is a 10% value-added tax (VAT).

### 20. Kuwait

Country Name - The proper name of the country is the State of Kuwait.

Country Profile - The country is located at the northern end of the Persian Gulf, south of Iraq. The approximate size is 6,880 square miles (17,818 square kilometers). The capital is Kuwait City.

Principal City(ies) - The principal cities are Huwalli and Kuwait City.

Primary Language(s) - The primary languages are Arabic and English.

Telecommunications Authority - The telecommunications authority for international public data network services is the Ministry of Communications.

Network Name - No name is specified for the international public data network.

Gateway City(ies) - No gateway city is specified.

Access Method(s) - Access methods include Public Dial (300-1200 bps).

Transmission Method(s) - Transmission methods are Asynchronous.

Currency(ies) - The currency of the country is the dinar.

Rates and Charges - Rates and charges are shown in Exhibit II-20. Unless otherwise noted, charges are in the currency of the country.



## EXHIBIT II-20

Installation	None Specified
Subscription	Charge per Year 70.00 (300 bps) 240.00 (1200 bps)
Connection	Charge per Minute 0.09
Traffic	Charge per Segment 0.007
Minimum	1 Minute 10 Segments

Contact(s) Ministry of Communications  
Kuwait  
Telephone: 965-84844  
Telex: 955-22313

**21. Luxembourg**

Country Name - The proper name of the country is the Grand Duchy of Luxembourg.

Country Profile - The country is in western Europe, east of Belgium. The approximate size is 998 square miles (2,586 square kilometers). The capital is Luxembourg.

Principal City(ies) - The principal city is Luxembourg.

Primary Language(s) - The primary languages are French, German, and Luxembourgish (Letzeburgisch).

Telecommunications Authority - The telecommunications authority for international public data network services is the Administration Des Posts and Telegraphs.

Network Name - The name of the international network is LUXPAC.



Gateway City(ies) - The gateway cities are Gare and Kirchberg.

Access Method(s) - Access methods include Public Dial (300,1200 bps), Private Dial (300, 1200 bps), Leased Line (2400-9600 bps, 48 Kbps).

Transmission Method(s) - Transmission methods include Asynchronous and X.25.

Currency(ies) - The currency of the country is the Luxembourg franc.

Rates and Charges - Rates and charges are shown in Exhibit II-21.  
Unless otherwise noted, charges are in the currency of the country.

EXHIBIT II-21

Installation	One-Time Charge 2,000 (Dial) 5,000 (110-1200 bps, Leased Line) 7,500 (2400-9600 bps, Leased Line)
Subscription	Charge per Month
Dial	500 (NUI) 100 (Modem) 150 (300 bps) 1,200 (1200 bps)
Leased	3,600 (110-300 bps) 5,200 (1200 bps) 6,500 (2400 bps) 7,500 (4800 bps) 10,000 (9600 bps) 30,000 (48 Kbps)
Connection	Charge per Minute 0.40 (Belgium) 1.20 (Other CEPT Countries) 4.00 (U.S.A., Canada, Gabon, Australia) 6.00 (Other)
Traffic	Charge per Segment 0.087 (Belgium) 0.090 (Other CEPT Countries) 0.25 (U.S.A., Canada, Gabon, Australia)
Minimum	None Specified

Contact(s)                      Administration Des Posts and Telegraphs  
   Post Box 999  
   2999 Luxembourg  
   Telephone:    352-499-1427 or 352-476-5218  
   Telex:            848-3410 or 848-3589

## 22. Mexico

Country Name - The proper name of the country is the United States of Mexico.

Country Profile - The country is in southern North America. The approximate size is 761,598 square miles (1,972,543 square kilometers). The capital is Mexico City.

Principal City(ies) - The principal cities are Guadalajara, Juarez, Mexico City, and Monterrey.

Primary Language(s) - The primary language is Spanish.

Telecommunications Authority - The telecommunications authority for the international public data network is the Direccion General de Telecomunicaciones.

Network Name - The name of the international network is TELPAC.

Gateway City(ies) - Sydney is the gateway city for international public data network services.

Access Method(s) - Access methods include Public Dial (110-300, 1200 bps), and Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous and Synchronous.

Currency(ies) - The currency of the country is the peso.

Rates and Charges - Rates and charges are shown in Exhibit II-22. Rates and charges are shown in U.S. dollars.

## EXHIBIT II-22

Installation	One-Time Charge 53.30
Subscription	Charge per Month 13.30 (Public Dial) 53.30 (Leased Line)
Connection	Charge per Minute 6.50
Traffic	Charge per Kilosegment 5.00
Minimum	None Specified

Contact(s)                      Secretaria de Comunicaciones y Transportes  
    Eje Lazaro Cardenas #567  
    P.O. Anexo, Col Narvarte  
    03020 Mexico, D.F.  
    Mexico  
    Telephone:    52-5-530-2099  
    Telex:            383-170-932

**23. Netherlands**

Country Name - The proper name of the country is the Kingdom of the Netherlands.

Country Profile - The country is located in western Europe, bordering on the North Sea. The size is approximately 15,891 square miles (41,160 square kilometers). The capital is The Hague.

Principal City(ies) - Principal cities include Amsterdam, The Hague, Rotterdam, and Utrecht.

Primary Language(s) - The primary language is Dutch.

Telecommunications Authority - The telecommunications authority for international public data network services is Netherland Postal and Telecommunications Services.

**Network Name** - The name of the international network is DABAS.

**Gateway City(ies)** - The gateway city for international public data network services is Amsterdam.

**Access Method(s)** - Access methods include Public Dial (300,1200 bps) and Leased Line (2400-9600 bps, 48 Kbps).

**Transmission Method(s)** - Transmission methods include Asynchronous and X.25.

**Currency(ies)** - The currency of the country is the florin.

**Rates and Charges** - Rates and charges are shown in Exhibit II-23. Unless otherwise noted, the charges are in the currency of the country.

#### EXHIBIT II-23

Installation	One-Time Charge 500.00 (2400-9600 bps) 2,000 (48 Kbps)
Subscription	Charge per Month
Dial	10.00 (Each User Name)
Leased	400.00 (2400 bps) 650.00 (4800 bps) 850.00 (9600 bps) 3300 (48 Kbps)
Connection	Charge per Minute 0.10 (Europe) 0.42 (U.S.A., Canada)
Traffic	Charge per 10 Segments 0.05 (Europe) 0.30 (USA, Canada)
Minimum	0.15 per Call



Contact(s) Department of Posts and Telegraphs  
Telecommunications Commercial Affairs  
DCT Data  
P.O. Box 30000  
2500 GA The Hague  
The Netherlands  
Telephone: 31-70-758-611  
Telex: 844-31111

## 24. New Zealand

Country Name - The proper name of the country is the Dominion of New Zealand.

Country Profile - The country is located in the southern Pacific Ocean. The size is approximately 103,736 square miles (268,675 square kilometers). The capital is Wellington.

Principal City(ies) - Principal cities include Auckland, Christchurch, and Wellington.

Primary Language(s) - The primary language is English.

Telecommunications Authority - The telecommunications authority for international public data network services is the Telecom Department.

Network Name - The name of the international network is IPSS.

Gateway City(ies) - The gateway city for international public data network services is Auckland.

Access Method(s) - Access methods include Public Dial (110-300, 1200 bps), Private Dial (300, 1200 bps), Leased Lines (2400-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous and X.25

Currency(ies) - The currency of the country is the New Zealand dollar.

Rates and Charges - Rates and charges are shown in Exhibit II-24. Unless otherwise noted, the charges are in the currency of the country.

Contact(s) Telecommunications Division  
Post Office Headquarters  
Waterloo Key  
Wellington 1  
New Zealand  
Telephone: 64-4-738-444  
Telex: 7910-3381



## EXHIBIT II-24

Installation	One-Time Charge
Public Dial	105.00
Private Dial	240.00 (300 bps)
	410.00 (1200 bps)
Leased Line	315.00 (2400 bps)
	460.00 (4800 bps)
	585.00 (9600 bps)
Subscription	Charge per Month
Public Dial	15.00 Per NUI
Private Dial	190.00 (300 bps)
	255.00 (1200 bps)
Leased Line	315.00 (2400 bps)
	460.00 (4800 bps)
	585.00 (9600 bps)
Connection	Charge per Hour
	12.00
Traffic	Charge per Kilosegment
	12.00
Minimum	6 Segments for Successful Call
	2 Segments for Unsuccessful Call

**25. Norway**

**Country Name** - The proper name of the country is the Kingdom of Norway.

**Country Profile** - The country is in western Scandinavia (northern Europe). The size is approximately 125,000 square miles (323,920 square kilometers). The capital is Oslo.

**Principal City(ies)** - Principal cities include Bergen, Oslo, Stavanger, and Trondheim.

**Primary Language(s)** - The primary language is Norwegian.

Telecommunications Authority - The telecommunications authority for international public data network services is Teledirektoratet.

Network Name - The name of the international network is DATAPAK.

Gateway City(ies) - The gateway city for international public data network services is Amsterdam (The Netherlands).

Access Method(s) - Access methods include Public and Private Dial (300, 1200 bps) and Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous and X.25.

Currency(ies) - The currency of the country is the krone.

Rates and Charges - Rates and charges are shown in Exhibit II-25. Unless otherwise noted, the charges are in the currency of the country.

EXHIBIT II-25

Installation	One-Time Charge
Private Dial	5,700 (300 bps)
	7,350 (1200 bps)
Leased Line	7,350 (2400 bps)
	9,150 (4800 bps)
	11,400 (9600 bps)
Subscription	Charge per Month
Public Dial	480.00
Private Dial	4,430 (300 bps)
	5,000 (1200 bps)
Leased Line	3,000 (2400 bps)
	3,585 (4800 bps)
	4,320 (9600 bps)
Connection	Charge per Minute
Dial	0.90
Leased	0.70
Traffic	Charge per Segment
Dial	40.00
Leased	40.00
Minimum	0.13 per Call
	0.53 per Minute

Contact(s)                      Steledirektorater, Datelkontorel  
Postboks 6701  
St. Olaus P1  
Oslo 1  
Norway  
Telephone:      47-2-488-990 or 488-724  
Telex:              856-71203

#### Notes and Comments

Rates and charges include a 20% value-added tax.

### 26. Panama

Country Name - The proper name of the country is the Republic of Panamá.

Country Profile - The country is located in Central America, between Colombia and Costa Rica. The size is approximately 29,205 square miles (75,650 square kilometers). The capital is Panamá City.

Principal City(ies) - Principal cities include Colón, David, and Panamá City.

Primary Language(s) - The primary language is Spanish.

Telecommunications Authority - The telecommunications authority for international public data network services is Ministerio de Gobierno y Justicia.

Network Name - The name of the international network is INTEL.

Gateway City(ies) - The gateway city for international public data network services is Panama City.

Access Method(s) - Access methods include Public Dial (110-300, 1200 bps) and Leased Line (2400-9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous and X.25.

Currency(ies) - The currencies of the country are the balboa and the U.S. dollar.

Rates and Charges - Rates and charges are shown in Exhibit II-26. Unless otherwise noted, the charges are in balboas.

## EXHIBIT II-26

Installation	One-Time Charge 25.00
Subscription	Charge per Month 25.00
Connection	Charge per Minute 0.20
Traffic	Charge per Kilocharacter 0.48
Minimum	1.50 per Call

Contact(s) Instituto Nacional de Telecomunicaciones  
Gerencia Ejecutiva Internacional  
Apartado 9A-659  
Panama 9A  
Telephone: 507-23-0329  
Telex: 368-2660 or 2920

**27. Philippines**

Country Name - The proper name of the country is the Republic of the Philippines.

Country Profile - The country is an archipelago of 7,000 islands located in Southeast Asia. The size is approximately 114,831 square miles (297,413 square kilometers). The capital is Quezon.

Principal City(ies) - Principal cities include Cebu, Luzon, Makati, Manila, and Quezon.

Primary Language(s) - The primary languages include Pilipino (Tagalog) and English.

Telecommunications Authority - The telecommunications authority for international public data network services is the National Telecommunications Commission.

**Network Name** - The name of the international network is UDTs.

**Gateway City(ies)** - The gateway city for international public data network services is Manila.

**Access Method(s)** - Access methods include Public and Private Dial (110-300, 1200 bps).

**Transmission Method(s)** - Transmission methods include Asynchronous.

**Currency(ies)** - The currency of the country is the peso.

**Rates and Charges** - Rates and charges are shown in Exhibit II-27. Unless otherwise noted, the charges are in the currency of the country.

#### EXHIBIT II-27

Installation	None Specified
Subscription	None Specified
Connection	Charge per Hour 12.00
Traffic	Charge per Segment 0.12
Minimum	5 Minute Connection

**Contact(s)**                      Globe-McKay Cable and Radio Corp.  
    ITT Building, 699 United Nations Avenue  
    Manila RP2801  
    Philippines  
    Telephone:    63-2-506-081  
    Telex:            742-0005

#### Notes and Comments

Domestic U.S. user names are not permitted on local nodes. User names must be issued by local authorities.



## 28. Portugal

Country Name - The proper name of the country is the Republic of Portugal.

Country Profile - The country is located west of Spain, on the Atlantic. The size is approximately 35,378 square miles (91,631 square kilometers). The capital is Lisbon.

Principal City(ies) - Principal cities are Lisbon and Porto.

Primary Language(s) - The primary language is Portuguese.

Telecommunications Authority - The telecommunications authority for international public data network services is Direccao General de Telecommunicacoes.

Network Name - The name of the international network is TELPAC-P

Gateway City(ies) - The gateway city for international public data network services is Lisbon.

Access Method(s) - Access methods include Public and Private Dial (110-300, 1200 bps).

Transmission Method(s) - Transmission methods include Asynchronous and Synchronous.

Currency(ies) - The currency of the country is the escudo.

Rates and Charges - Rates and charges are shown in Exhibit II-28. Unless otherwise noted, the charges are in the currency of the country.

Contact(s)	Transdata
	Av. Fontes Pereira De Melo 38910
	1000 Lisboa
	Portugal
	Telephone: 351-540-021
	Telex: 832-64200

## EXHIBIT II-28

Installation	One-Time Charge 35,000
Subscription	Charge per Month 13,200 (1200 bps) 16,500 (2400 bps) 22,000 (4800 bps)
Connection	Charge per Minute 27.00
Traffic	Charge per Kilosegment 1,177
Minimum	5.40 per Session

**29. Puerto Rico**

**Country Name** - The proper name of the country is the Dominion of Puerto Rico.

**Country Profile** - The country is located in the Caribbean Sea, east of the Dominican Republic. The size is approximately 3,435 square miles (8,897 square kilometers). The capital is San Juan.

**Principal City(ies)** - The principal city is San Juan.

**Primary Language(s)** - The primary languages are English and Spanish.

**Telecommunications Authority** - The telecommunications authority for international public data network services is Puerto Rico Telephone Company.

**Network Name** - The names of the international network are PRTC and UDTs.

**Gateway City(ies)** - The gateway city for international public data network services is San Juan.

Access Method(s) - Access methods include Public and Private Dial (110-1200 bps) and Leased Line (2400-9600 bps)

Transmission Method(s) - Transmission methods include Asynchronous and Synchronous

Currency(ies) - The currency of the country is the U.S. dollar.

Rates and Charges - Rates and charges are shown in Exhibit II-29.  
Unless otherwise noted, the charges are in the currency of the country.

## EXHIBIT II-29

Installation	None Specified
Subscription	None Specified
Connection	Charge per Hour 6.00 (via PRTC) 10.00 (via UDTs)
Traffic	Charge per Kilocharacter 0.10 (via PRTC) 0.45 (via UDTs)
Minimum	None Specified

Contact(s)                      Puerto Rico Telephone Company  
    G.P.O. Box 998  
    San Juan 00936  
    Puerto Rico  
    Telephone:    809-7792-6262

ITT World Communications  
 901 Pocne De Leon Boulevard  
 San Juan 00905  
 Puerto Rico  
 Telephone:    809-721-2520  
 Telex:           345-0007

### 30. Saudi Arabia

**Country Name** - The proper name of the country is the Kingdom of Saudi Arabia.

**Country Profile** - The country is located on the Arabian Peninsula. The size is approximately 829,995 square miles (2,149,690 square kilometers). The capital is Riyadh.

**Principal City(ies)** - Principal cities include Jeddah, Jubail, Riyadh, Yanbu.

**Primary Language(s)** - The primary language is Arabic.

**Telecommunications Authority** - The telecommunications authority for international public data network services is the Telecommunications Authority of Saudi Arabia.

**Network Name** - The name of the international network is IDAS.

**Gateway City(ies)** - The gateway city for international public data network services is Manama, Bahrain.

**Access Method(s)** - Access methods include Public and Private Dial (300-2400 bps) and Leased Line (2400-9600 bps).

**Transmission Method(s)** - Transmission methods include Asynchronous and X.25.

**Currency(ies)** - The currency of the country is the reales.

**Rates and Charges** - Rates and charges are shown in Exhibit II-30. Unless otherwise noted, the charges are in the currency of the country.

<b>Contact(s)</b>	Bahrain Telecommunications Company
	P.O. Box 14
	Manama
	Bahrain
	Telephone: 966-1-465-7092
	Telex: 928-401-691

## EXHIBIT II-30

Installation	None Specified
Subscription	Charge per Month 30.00 (Maximum charge for 10 NUIs)
Connection	Charge per Minute 0.075
Traffic	Charge per Kilocharacter 0.230
Minimum	0.305

**31. Singapore**

**Country Name** - The proper name of the country is the Republic of Singapore.

**Country Profile** - The country is located in Southeast Asia, off the tip of Malaysia. The size is approximately 230 square miles (597 square kilometers). The capital is Singapore.

**Principal City(ies)** - Principal city is Singapore.

**Primary Language(s)** - The primary languages are Chinese, English, Malaysian, and Tamil.

**Telecommunications Authority** - The telecommunications authority for international public data network services is the Telecommunications Authority of Singapore.

**Network Name** - The name of the international network is TELEPAC.

**Gateway City(ies)** - The gateway city for international public data network services is Singapore.

**Access Method(s)** - Access methods include Telex (50 Baud), Private and Public Dial (300-1200 bps), and Leased Circuit (2400-9600 bps).



**Transmission Method(s)** - Transmission methods include Asynchronous, Synchronous, X.25, and Telex.

**Currency(ies)** - The currency of the country is the Singapore dollar.

**Rates and Charges** - Rates and charges are shown in Exhibit II-31. Unless otherwise noted, the charges are in the currency of the country.

#### EXHIBIT II-31

Installation	None Specified
Subscription	Charge per Month
Telex	30.00 per NUI
Public Dial	50.00 per NUI
Private Dial	150.00
Leased Circuit	150.00 (300-1200 bps)
	300.00 (2400 bps)
	450.00 (4800 bps)
	600.00 (9600 bps)
Connection	Charge per Minute
	0.25
Traffic	Charge per Kilocharacter
	0.18
Minimum	None Specified

**Contact(s)**      Business Sales Department  
 Telecommunications Authority of Singapore  
 31 Exeter Road  
 Singapore 0923  
 Telephone: 65-734-3344  
 Telex: 786-33311

## 32. South Africa

Country Name - The proper name of the country is the Republic of South Africa.

Country Profile - The country is located at the southern tip of Africa. The size is approximately 471,423 square miles (1,221,037 square kilometers). The capital is Pretoria.

Principal City(ies) - Principal cities include Cape Town, Durban, Johannesburg, and Pretoria.

Primary Language(s) - The primary languages are English and Afrikaans.

Telecommunications Authority - The telecommunications authority for international public data network services is the Department of Posts and Telegraphs.

Network Name - The name of the international network is SAPONET.

Gateway City(ies) - None Specified

Access Method(s) - Access methods include Public Dial (110-300, 600, 1200 bps) and Leased Line (to 9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous and X.25.

Currency(ies) - The currency of the country is the rand.

Rates and Charges - Rates and charges are shown in Exhibit II-32. Unless otherwise noted, the charges are in the currency of the country.

Contact(s)	The Postmaster General
	Telecommunications
	Private Bag 74
	0001 Pretoria
	Republic of South Africa
	Telephone: 27-12-293-1156
	Telex: 960-30338

## EXHIBIT II-32

Installation	None Specified
Subscription	Charge per Month 150.00 per User Name
Connection	Charge per Minute 0.20
Traffic	Charge per 10 Segments 0.12
Minimum	None Specified

**33. Spain**

**Country Name** - The proper name of the country is the Spanish State.

**Country Profile** - The country is located in southwest Europe. The size is approximately 194,896 square miles (504,783 square kilometers). The capital is Madrid.

**Principal City(ies)** - Principal cities include Barcelona, Madrid, Sevilla, and Valencia.

**Primary Language(s)** - The primary language is Spanish.

**Telecommunications Authority** - The telecommunications authority for international public data network services is the Compania Telefonica Nacional de Espana.

**Network Name** - The name of the international network is CTNE.

**Gateway City(ies)** - The gateway cities for international public data network services are Madrid and Barcelona.

**Access Method(s)** - Access methods include Public Dial (to 1200) and Leased Line.

**Transmission Method(s)** - Transmission methods include Asynchronous and X.25.

Currency(ies) - The currency of the country is the peseta.

Rates and Charges - Rates and charges are shown in Exhibit II-33.  
Unless otherwise noted, the charges are in the currency of the country.

## EXHIBIT II-33

Installation	One-Time Charge
Public Dial	24,892
Leased Line	20,788(2400 bps)
	47,960(48 bps)
	69,962(9600 bps)
Subscription	Charge per Month
	280.00
Connection	Charge per Minute
	8.00 (Europe)
	16.00 (Other)
Traffic	Charge per Kilocharacter
	6.00 (Europe)
	14.00 (Other)
Minimum	6 Minutes
	1 Kilocharacter

## Contact(s)

Compania Telefonica Nacional de Espana  
 Departamento Internacional  
 Plaza de Espana  
 Madrid 13  
 Spain  
 Telephone: 341-248-8120 or 248-8531  
 Telex: 831-277-774

### 34. Sweden

**Country Name** - The proper name of the country is the Kingdom of Sweden.

**Country Profile** - The country is located in northwest Europe, northwest of the Baltic Sea. The size is approximately 173,731 square miles (449,095 square kilometers). The capital is Stockholm.

**Principal City(ies)** - Principal cities include Goteborg, Malmo, Stockholm, and Uppsala.

**Primary Language(s)** - The primary language is Swedish.

**Telecommunications Authority** - The telecommunications authority for international public data network services is Central Administration of Telecommunications.

**Network Name** - The name of the international network is DATAPAK.

**Gateway City(ies)** - The gateway city for international public data network services is Stockholm.

**Access Method(s)** - Access methods include Public and Private Dial (300, 1200 bps), Leased Line (2400-9600 bps).

**Transmission Method(s)** - Transmission methods include Asynchronous and Synchronous.

**Currency(ies)** - The currency of the country is the krona.

**Rates and Charges** - Rates and charges are shown in Exhibit II-34. Unless otherwise noted, the charges are in the currency of the country.

<b>Contact(s)</b>	Stockholm Telecommunications Administration Data Sales Division Jakobsbergsgatan 17 S-103 90 Stockholm Sweden Telephone: 46-8-780-8750 Telex: 854-12020
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## EXHIBIT II-34

Installation	One-Time Charge 500.00
Subscription	Charge per Month 180.00
Connection	Charge per Minute 0.65 (Nordic) 0.80 (European) 1.20 (North American) 1.90 (Other)
Traffic	Charge per Segment 0.02 (Nordic) 0.0925 (European) 0.05 (North American) 0.08 (Other)
Minimum	0.20 per Call

**35. Switzerland**

**Country Name** - The proper name of the country is the Swiss Confederation.

**Country Profile** - The country is located in central Europe, on the eastern border of France. The size is approximately 15,941 square miles (41,127 square kilometers). The capital is Berne.

**Principal City(ies)** - Principal cities include Basel, Berne, Geneva, and Zurich.

**Primary Language(s)** - The primary languages are: German, French, and Italian.

**Telecommunications Authority** - The telecommunications authority for international public data network services is Direction General des Postes, Telegraphes et Telephones.

**Network Name** - The name of the international network is TELEPAC.

**Gateway City(ies)** - The gateway city for international public data network services is Berne.

**Access Method(s)** - Access methods include Public and Private Dial (300-1200 bps) and Leased Line (2400-9600 bps, 48 Kbps).

**Transmission Method(s)** - Transmission methods include Asynchronous and X.25.

**Currency(ies)** - The currency of the country is the Swiss franc.

**Rates and Charges** - Rates and charges are shown in Exhibit II-35. Unless otherwise noted, the charges are in the currency of the country.

#### EXHIBIT II-35

Installation	One-Time Charge 120.00
Subscription	Charge per Month 250.00 (300 bps) 300.00 (1200 bps) 350.00 (2400 bps) 400.00 (4800 bps) 500.00 (9600 bps) 2,500 (48 Kbps)
Connection	Charge per Minute 0.25
Traffic	Charge per Segment 0.015
Minimum	0.10 per Call

**Contact(s)** Direction Generale des PTT  
Teleinformatique  
Victoriastrasse 21  
CH 3000 Berne  
Switzerland  
Telephone: 41-31-624-374  
Telex: 845-32011

## Notes and Comments

Additional charges for terminal installation apply.

### 36. Taiwan

Country Name - The proper name of the country is the Republic of China.

Country Profile - The country is located approximately 100 miles east of the Peoples Republic of China. The size is approximately 13,892 square miles (35,981 square kilometers). The capital is Taipei.

Principal City(ies) - Principal cities include Taichung, Taipei, Tainan, and Kaohsiung.

Primary Language(s) - The primary language is Chinese.

Telecommunications Authority - The telecommunications authority for international public data network services is the Directorate General of Telecommunications.

Network Name - The name of the international network is UDAS.

Gateway City(ies) - The gateway city for international public data network services is Taipei.

Access Method(s) - Access methods include Public Dial (300, 1200 bps), Leased Line (to 9600 bps).

Transmission Method(s) - Transmission methods include Asynchronous.

Currency(ies) - The currency of the country is the New Taiwan dollar.

Rates and Charges - Rates and charges are shown in Exhibit II-36. Unless otherwise noted, the charges are in the currency of the country.

Contact(s)	Data Communications Institute
	42 Sec.1
	Jen-Ai Road
	Taipei
	Taiwan
	Telephone: 862-344-3117 or 344-3118
	Telex: 785-20685

## EXHIBIT II-36

Installation	One-Time Charge 3,000 (300, 600bps) 3,400 (1200 bps) 5,400 (2400 bps) 7,000 (4800 bps) 9,300 (9600 bps)
Subscription	Charge per Month 200.00 per User Name
Connection	Charge per Minute 8.80 (300 bps) 13.20 (1200 bps)
Traffic	Charge per Segment 0.60
Minimum	50.00 per Session (Public Dial)

## Notes and Comments

There is an additional charge of 2,000 for 300-1200 bps leased circuit service and 3,000 for 2400-9600 bps leased circuit service.

**37. Thailand**

Country Name - The proper name of the country is the Kingdom of Thailand.

Country Profile - The country is in Southeast Asia, bordering Kampuchea, Laos, Burma, and Malaysia. The approximate size is 198,502 square miles (514,121 square kilometers). Bangkok is the capital.

Principal City(ies) - The principal cities are Bangkok, Chiang Mai, Korat, and Phuket.

Primary Language(s) - The primary language is Thai. English is spoken in major areas.

Telecommunications Authority - The telecommunications authority for international public data network services is the Communications Authority of Thailand.

Network Name - The name of the international network is International Database Access and Remote Computing Service (IDAR).

Gateway City(ies) - Bangkok is the gateway city for international public data network services.

Access Method(s) - Access methods include Public Dial (110-300, 1200 bps) and Leased Line (110-300, 1200 bps).

Transmission Method(s) - The transmission method is asynchronous.

Currency(ies) - The currency of the country is the baht.

Rates and Charges - Rates and charges are shown in Exhibit II-37. Unless otherwise noted, the charges are in the currency of the country.

EXHIBIT II-37

Installation	None Specified
Subscription	None Specified
Connection	Charge per Hour 12.00
Traffic	Charge per Kilocharacter 0.60
Minimum	None Specified

Contact(s)                      Director of Telegraph Division  
   Communications Authority of Thailand  
   New Road  
   Bangkok 5  
   Thailand  
   Telephone: 66-2-573-5470  
   Telex: 86-80006



### 38. United Arab Emirates

Country Name - The proper name of the country is the United Arab Emirates.

Country Profile - The country is located on the southern shore of the Arabian Peninsula, southeast of the Qatar Peninsula. The size is approximately 32,277 square miles ( 83,600 square kilometers). The capital is Abu Dhabi.

Principal City(ies) - Principal cities include Abu Dhabi, Dubai, and Sharja.

Primary Language(s) - The primary language is Arabic.

Telecommunications Authority - The telecommunications authority for international public data network services is ITISALAT.

Network Name - The name of the international network is TEDAS (The Emirates Database Access Service).

Gateway City(ies) - The gateway city for international public data network services is Dubai.

Access Method(s) - Access methods include Public Dial (300, 1200 bps).

Transmission Method(s) - Transmission methods include Asynchronous.

Currency(ies) - The currency of the country is the dirham.

Rates and Charges - Rates and charges are shown in Exhibit II-38. Unless otherwise noted, the charges are in the currency of the country.

Contact(s)	ITISALAT
	P.O. Box 1150
	Dubai
	United Arab Emirates
	Telephone: 971-4-236-622
	Telex: 958-46007

#### Notes and Comments

Acoustic couplers are not permitted. Hard-wired connections are supplied by ITISALAT.

## EXHIBIT II-38

Installation	One-Time Charge 300.00 (300 bps) 350 (1200 bps)
Subscription	Charge per Month 750.00 (300 bps) 2,250 (1200 bps)
Connection	Charge per Minute 1.00
Traffic	Charge per Kilocharacter 2.50
Minimum	None Specified

**39. United Kingdom**

**Country Name** - The proper name of the country is the United Kingdom.

**Country Profile** - The country is located off the coast of Europe. The size is approximately 94,226 square miles (244,046 square kilometers). The capital is London.

**Principal City(ies)** - Principal cities include Birmingham, Glasgow, London, and Liverpool.

**Primary Language(s)** - The primary language is English.

**Telecommunications Authority** - The principal provider of international public data network services is British Telecom.

**Network Name** - The name of the international network is IPSS International Packet Switched Services.

**Gateway City(ies)** - The gateway city for international public data network services is London.

**Access Method(s)** - Access methods include Public and Private Dial (300-1200 bps) and Leased Line (2400-9600 bps, 48 Kbps).

**Transmission Method(s)** - Transmission methods include Asynchronous and X.25.

**Currency(ies)** - The currency of the country is the pound sterling.

**Rates and Charges** - Rates and charges are shown in Exhibit II-39. Unless otherwise noted, the charges are in the currency of the country.

#### EXHIBIT II-39

Installation	One-Time Charge
Public Dial	40.00
Private Dial	700.00
Leased Line	850.00 (2400-4800 bps) 950.00 (9600 bps)
Subscription	Charge per Quarter
Public Dial	10.00
Private Dial	350.00
Leased Line	525.00 (2400-4800 bps) 925.00 (9600 bps)
Connection	Charge per Minute 0.075
Traffic	Charge per Kilosegment 4.50
Minimum	30 seconds 5 Segments

**Contact(s)** British Telecom International  
Marketing Department  
Holborn Centre, Rm 501  
London EC1N 2TE  
England  
Telephone: 44-1-492-2750  
Telex: 851-21601

### Notes and Comments

Standard rates apply to the hours of 0800-1800, Monday-Friday. Christmas and New Years Day are excluded. Reduced rates apply to all other times.

Rates shown are exclusive of value-added tax of 15%.

Installation charges for 48 Kbps are distance dependent.

Usage of more than 500 hours and 500 kilosegments will be charged at 60% of the established rates.

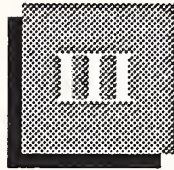


# U.S. Domestic to Foreign Services









## U.S. Domestic to Foreign Services

### A

#### Introduction

Access to public data networks from foreign countries involves the use of both foreign and U.S. domestic facilities and services. In addition to the rates and charges levied by the foreign services provider (Part II), U.S. domestic service providers levy a charge on use of the domestic portion of the network. Exhibit III-1 provides a summary of primary rates and charges levied by two major U.S. service providers.

EXHIBIT III-1

#### DOMESTIC TO FOREIGN SERVICES (U.S.\$ per Hour)

Country	CONNECT		VOLUME	
	Tymnet	Telenet	Tymnet	Telenet
Argentina	10.00	12.00	0.50/KC	12.00/KS
Australia	10.00	10.00	0.60/KC	12.00/KS
Austria	10.00	10.00		12.00/KS
Bahrain	10.00	12.00	0.60/KC	0.60/KC
Belgium	10.00	10.00	12.00/KS	12.00/KC
Brazil	10.00	10.00	0.50/KC	0.50/KC
Canada				
Chile	10.00	12.00	0.50/KC	12.00/KS

## EXHIBIT III-1 (Cont.)

**DOMESTIC TO FOREIGN SERVICES**  
**(U.S.\$ per Hour)**

Country	CONNECT		VOLUME	
	Tymnet	Telenet	Tymnet	Telenet
Colombia	10.00	10.00	0.50/KC	0.50/KC
Denmark	10.00	10.00	12.00/KS	12.00/KS
Finland	10.00	10.00	12.00/KS	12.00/KS
France	10.00	10.00	12.00/KS	12.00/KS
Germany (West)	8.00	8.00	10.00/KS	10.00/KS
Hong Kong	12.00	12.00	16.00/KS	16.00/KS
Ireland	10.00	10.00	12.00/KS	12.00/KS
Israel	12.00	12.00	16.00/KS	16.00/KS
Italy	10.00	10.00	0.45/KC	12.00/KS
Japan	12.00	12.00	16.00/KS	16.00/KS
Korea (South)	12.00	12.00	0.60/KC	0.60/KC
Kuwait	10.00	12.00	0.60/KC	0.60/KC
Luxembourg	10.00	10.00	12.00/KS	12.00/KS
Mexico	6.50	6.50	5.00/KS	7.00/KS
Netherlands	8.00	8.00	12.00/KS	10.00/KS
New Zealand	12.00	10.00	0.60/KS	12.00/KS
Norway	10.00	10.00	12.00/KS	12.00/KS
Panama	10.00	10.00	0.45/KC	0.45/KC
Philippines	12.00	12.00	0.60/KC	12.00/KC
Portugal	10.00	10.00	0.45/KC	0.45/KC
Puerto Rico		5.00		4.00/KP
Saudi Arabia	10.00	12.00	0.60/KC	0.60/KC
Singapore	12.00	12.00	16.00/KS	16.00/KS
South Africa	12.00	12.00	16.00/KS	16.00/KS

## EXHIBIT III-1 (Cont.)

### DOMESTIC TO FOREIGN SERVICES (U.S.\$ per Hour)

Country	CONNECT		VOLUME	
	Tymnet	Telenet	Tymnet	Telenet
Spain	10.00	10.00	12.00/KS	12.00/KS
Sweden	10.00	10.00	12.00/KS	12.00/KS
Switzerland	10.00	10.00	12.00/KS	12.00/KS
Taiwan	12.00	12.00	0.60/KC	0.60/KC
Thailand	12.00	12.00	0.60/KC	0.60/KC
United Arab Emirates	12.00	12.00	0.60/KC	0.60/KC
United Kingdom	10.00	10.00	12.00/KS	12.00/KS

KS=Kilosegment  
 KC=Kilocharacter  
 KP=Kilopacket







