SECTION 4.7

COMPETITION IN LOCAL ACCESS

This section focuses on competition at the local access level. Some of the information reported here has already been presented in Section 2 (number of telecom operators) and in Section 4 (interconnection arrangements). However, in the interest of providing the fullest possible picture, it was felt that all information on availability of services and infrastructure at the local access level should be looked at together on a country-by-country basis.

For each country, two tables present market evidence concerning:

1. **competition in the local call market**, i.e. number of operators acting in the market, the proportion of national users affected by competition and the market shares gained by new entrants in the local call market.
2. **availability of local access infrastructure**, i.e. commercial and technical means available to new entrants in terms of roll-out or the upgrading of alternative infrastructure or in terms of interconnection arrangements such as carrier selection, carrier pre-selection and unbundling of local loop[39].

Note that the figures reported are often to be considered indicative estimates.

The type and meaning of the indicators used are presented as follows:

Table 18: COMPETITION IN THE LOCAL CALL MARKET

1. Choice of operators for local call services	This indicator refers to the percentage of population/territory/business customers who can actually access alternative local call operators. In countries allowing local carrier selection or pre-selection, the figure is obviously 100%.
2. Number of operators in the local market	This indicator presents the number of operators authorised to offer a local call service and specifies how many of them are actually offering the service, regardless of the means. The number includes incumbent operators.
3. Local call market share	This indicator provides an estimate of new entrants' share of the local market.
4. Geographic numbers allocated to new entrants	This indicator gives an idea of new entrants' medium/long-term estimate of their own potential market share.
5. Subscribers directly connected to alternative networks	This indicator provides an estimate of the number of subscribers to whom new entrants provide physical connection as opposed to indirect access. Estimates given are indicative only.

Table 19: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

6. Alternative local access infrastructure	**7. Interconnection arrangements**
This gives a tentative indication of alternative infrastructure available to new entrants (number of wireless local access licences, of cable TV networks being used for voice telephony services, any other wired local infrastructure connecting residential customers).	This gives an indication of interconnection arrangements available to new entrants for the provision of a local call service (local loop unbundling, carrier selection/pre-selection).

[39] An operator offering local call services may do so either:
a) by physically connecting the customers to their own network, or
b) by carrier (pre-)selection, or
c) through renting the incumbent's local access.

4.7.1 *BELGIUM*

Table 20: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	25%	30%	>50%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	23	7		
Local call market share (retail revenues, as of 31 December 1998)	*Incumbent*	*New entrants*		
	> 97%[40]	< 3%		
Geographic numbers allocated to operators (as of 31 July 1999)	85%	15%		
Subscribers directly connected to the incumbent and other operators' networks (as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbent	3,300,000	752,500	4,052,500
	Other operators[41]	< 11,500[42]	N/A	

Table 21: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	No licence awarded yet	*Unbundling of local loop (ULL)*:	No
		ULL agreements in place:	-
Cable TV networks ***being used for provision of voice telephony***:	1 (estimate)	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[40] This figure has been calculated for the local and long-distance call markets together. Market share for the local call market only is likely to be higher.
[41] Estimates.
[42] As of 31 December 1998.

4.7.2 DENMARK

Table 22: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	100%	100%	100%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	11	11		
Local call market share (retail revenues, as of 31 December 1998)	*Incumbent*	*New entrants*		
	94.5% (estimate)	5.5% (estimate)		
Geographic numbers allocated to operators (as of 31 July 1999)	96%	4%		
Subscribers directly connected to the incumbent and other operators' networks (fixed lines as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbent	2,496,200[43]	1,069,800	3,566,000
	Other operators[44]	None or not significant	N/A	

Table 23: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	None (but planned in early 2000)	*Unbundling of local loop (ULL)*:	Yes
		ULL agreements in place:	1 (Sept. 99)
Cable TV network ***being used for provision of voice telephony***:	None (estimate)	*Carrier selection for local calls:*	Yes
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	Yes
	At national level: none (estimate)		

[43] The division between residential and business subscribers is an estimate.
[44] Estimates.

4.7.3 GERMANY

Table 24: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	< 5%	ca. 5%	ca. 5%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	147	22		
Local call market share (traffic minutes, as of 30 June 1999)	*Incumbent*	*New entrants*		
	98%	2%		
Geographic numbers allocated to operators (as of 31 July 1999)	99.9%	0.01%		
Subscribers directly connected to the incumbent and other operators' networks (fixed lines as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbent	37,500,000	9,700,000	47,200,000
	Other operators[45]	N/A	N/A	< 300,000

Table 25: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	992 frequency blocks granted to 18 operators[46]	*Unbundling of local loop (ULL)*:	Yes
		ULL agreements in place:	49 (18.08.99)
Cable TV network ***being used for provision of voice telephony*** :	None (estimate)	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers: 23[47]	At local level: 16	*Carrier pre-selection for local calls:*	No
	At national level: 7		

[45] Estimates.
[46] Each frequency block can be used over a specific "local area". For this purpose, Germany has been divided into 262 local areas covering the whole national territory.
[47] Total number provided by RegTP. The split between local and national is an estimate.

4.7.4 GREECE

Table 26: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	0%	0%	0%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	1 (OTE)	1 (OTE)		
Local call market share (retail revenues, as of 30 June 1999)	*Incumbent*	*New entrants*		
	100%	-		
Geographic numbers allocated to operators (as of 31 July 1999)	Not applicable	Not applicable		
Subscribers directly connected to the incumbent and other operators' networks (as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbent	3,780,000	1,820,000	5,600,000
	Other operators	None	None	None

Table 27: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	None	*Unbundling of local loop (ULL)*:	No
		ULL agreements in place:	-
*Cable TV networks **being used for provision of voice telephony***:	None	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers:	At local level: none	*Carrier pre-selection for local calls:*	No
	At national level: none		

4.7.5 SPAIN

Table 28: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	0.01%	0.01%	N/A	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	63	26		
Local call market shares (retail revenues, as of 31 December 1998)	*Incumbent*	*New entrants*		
	99.9%	0.1%		
Geographic numbers allocated to operators (as of 31 July 1999)	85%	15%		
Subscribers directly connected to the incumbent and other operators' networks (as of 31 December 1998)		*Residential*	*Business*	*Total*
	Incumbent	12,870,000	3,430,000	16,300,000
	Other operators[48]	N/A	N/A	11,932

Table 29: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	2 licences granted to new entrants. The grant of 6 additional lots of frequencies is ongoing.	*Unbundling of local loop (ULL)*:	Bitstream access for ADSL
		ULL agreements in place:	N/A
Cable TV networks ***being used for provision of voice telephony***:	6 local (estimate)	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[48] Estimates.

4.7.6 FRANCE

Table 30: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	N/A	N/A	N/A	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	59	8		
Local call market share (as of 31 December 1998)	*Incumbent*	*New entrants*		
	98.1%[49]	1.9%		
Geographic numbers allocated to operators (as of 31 July 1999)	92%	8%		
Subscribers directly connected to the incumbent and other operators' networks (as of 31 December 1998)		*Residential*	*Business*	*Total*
	Incumbent	23,653,000[50]	10,137,000	33,790,000
	Other operators[51]	2,800	29,480	

Table 31: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	Experimental licences granted	*Unbundling of local loop (ULL)*:	Under consultation
		ULL agreements in place:	-
Cable TV networks ***being used for provision of voice telephony***:	1 local (estimate)	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[49] This figure has been calculated for the local and long-distance call markets together. Market share for the local call market only is likely to be higher.
[50] The division between residential and business subscribers is an estimate.
[51] Estimates.

4.7.7 *IRELAND*

Table 32: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	100%	100%	100%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	32	5		
Local call market share (traffic minutes, as of 31 December 1998)	*Incumbent*	*New entrants*		
	100%	0%		
Geographic numbers allocated to operators (as of 31 July 1999)	88%	12%		
Subscribers directly connected to the incumbent and other operators' networks (as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbent	1,046,000	490,000	1,536,000
	Other operators[52]	N/A	7,500[53]	

Table 33: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	4 narrowband and 4 broadband national licences granted to 8 operators (21.9.99)	*Unbundling of local loop (ULL)*:	Under consultation
		ULL agreements in place:	-
Cable TV networks ***being used for provision of voice telephony***:	None (estimate)	*Carrier selection for local calls:*	Yes
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[52] Estimates.
[53] As of 31 March 1999.

4.7.8 ITALY

Table 34: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	0%	0%	0%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	39	1		
Local call market share (retail revenues, as of 30 June 1999)	*Incumbent*	*New entrants*		
	100%	0%		
Geographic numbers allocated to operators (as of 31 July 1999)	90%	10%		
Subscribers directly connected to the incumbent and other operators' networks (as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbent	20,000,000	4,600,000	24,600,000
	Other operators[54]	None or not significant	N/A	

Table 35: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	2 DECT licences granted, one of which to Telecom Italia	*Unbundling of local loop (ULL)*:	Decision expected Nov. 99
		ULL agreements in place:	-
*Cable TV networks **being used for provision of voice telephony***:	None	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[54] Estimates.

4.7.9 LUXEMBOURG

Table 36: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	0%	0%	0%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	9	1		
Local call market share (retail revenues, as of 30 June 1999)	*Incumbent*	*New entrants*		
	100%	0%		
Geographic numbers allocated to operators (as of 31 July 1999)	98%	2%		
Subscribers directly connected to the incumbent and other operators' networks (as of 31 December 1998)		*Residential*	*Business*	*Total*
	Incumbent	205,170[55]	87,930	293,100[56]
	Other operators[57]	None or not significant	N/A	None

Table 37: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		Interconnection arrangements	
Wireless local access licences:	None	*Unbundling of local loop (ULL)*:	No
		ULL agreements in place:	-
Cable TV networks ***being used for provision of voice telephony***:	None (estimate)	*Carrier selection for local calls:*	Yes
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[55] The division between residential and business subscribers is an estimate.
[56] As of 31 December 1998.
[57] Estimates.

4.7.10 THE NETHERLANDS

Table 38: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	100%	100%	N/A	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	38	2		
Local call market share (retail revenues, as of 30 June 1999)	*Incumbent*	*New entrants*		
	99% (estimate)	1% (estimate)		
Geographic numbers allocated to operators (as of 31 July 1999)	93%	7%		
Subscribers directly connected to the incumbent and other operators' networks (as of 31 December 1998)		*Residential*	*Business*	*Total*
	Incumbent	6,510,000[58]	2,790,000	9,300,000
	Other operators[59]	20,000	N/A	

Table 39: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	None (but planned in early 2000)	*Unbundling of local loop (ULL)*:	Yes
		ULL agreements in place:	Test phase involves at least 4 operators as of Oct. 99
Cable TV networks ***being used for provision of voice telephony****:*	2 (estimate)	*Carrier selection for local calls:*	Yes
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[58] The division between residential and business subscribers is an estimate.
[59] Estimates.

4.7.11 AUSTRIA

Table 40: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	100%	100%	100%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	46	20		
Local call market share (retail revenues, as of 30 June 1999)	*Incumbent*	*New entrants*		
	approx.95%	approx. 5%		
Geographic numbers allocated to operators (as of 31 July 1999)	70%	30%		
Subscribers directly connected to the incumbent and other operators' networks (as of 31 December 1998)		*Residential*	*Business*	*Total*
	Incumbent	2,793,000[60]	1,197,000	3,990,000
	Other operators[61]	N/A	N/A	< 100

Table 41: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		Interconnection arrangements	
Wireless local access licences:	No (frequencies to be granted by end 99)	*Unbundling of local loop (ULL)*:	Yes
		ULL agreements in place:	Test phase ongoing
*Cable TV networks **being used for provision of voice telephony***:	1 local	*Carrier selection for local calls:*	Yes
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: none (estimate)		

[60] The division between residential and business subscribers is an estimate.
[61] Estimates.

4.7.12 PORTUGAL

Table 42: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	0%	0%	-	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	1 (Telecom Portugal)	1 (Telecom Portugal)		
Local call market share (retail revenues, as of 30 June 1999)	*Incumbent*	*New entrants*		
	100%	0%		
Geographic numbers allocated to operators (as of 31 July 1999)	Not applicable	Not applicable		
Subscribers directly connected to the incumbent and other operators' networks (as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbent	3,175,000	993,000	4,168,000
	Other operators	None	None	

Table 43: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	The grant of licences is ongoing	*Unbundling of local loop (ULL)*:	No
		ULL agreements in place:	-
*Cable TV networks **being used for provision of voice telephony***	None	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers:	At local level: none	*Carrier pre-selection for local calls:*	No
	At national level: none		

4.7.13 FINLAND

Table 44: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	100%	100%	100%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	75[62]	61		
Local call market share (retail revenues, as of 31 Dec. 1998)	*Finnet group*	*Sonera*	*New entrants*	
	66.7%	32.2%	0.1%	
Geographic numbers allocated to operators (as of 31 July 1999)	93%	7%		
Subscribers directly connected to the incumbent and other operators' networks (as of 30 June 1999)		*Residential*	*Business*	*Total*
	Incumbents[63]	1,998,000	844,000	2,841,000
	Other operators[64]	N/A	N/A	13,000[65]

Table 45: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences:	8 licences granted to 4 operators	*Unbundling of local loop (ULL)*:	Yes
		ULL agreements in place:	Current practice
Cable TV networks ***being used for provision of voice telephony***	None (estimate)	*Carrier selection for local calls:*	No
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	No
	At national level: 1 (estimate)		

[62] 46 of which belong to the Finnet group.
[63] Finnet group and Sonera.
[64] Estimates.
[65] Estimate for residential and business subscribers.

4.7.14 SWEDEN

Table 46: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	100%	100%	100%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	6863	22[66]		
Local call market share (retail revenues, as of 31 December 1998)	*Incumbent*	*New entrants*		
	99%	1%		
Geographic numbers allocated to operators (as of 31 July 1998)	54%	46%		
Subscribers directly connected to the incumbent and other operators' networks (as of 31 December 98)		*Residential*	*Business*	*Total*
	Incumbent	4,500,000	1,500,000	6,000,000
	Other operators[67]	N/A	N/A	2,500

Table 47: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		Interconnection arrangements	
Wireless local access licences:	2 including Telia (Sept. 99)	*Unbundling of local loop (ULL)*:	Proposed
		ULL agreements in place:	-
Cable TV networks ***being used for provision of voice telephony***	None at the moment.	*Carrier selection for local calls:*	Yes from 11.9.99
Other wired local access infrastructure connecting residential customers:	At local level: none (estimate)	*Carrier pre-selection for local calls:*	Yes from 11.9.99
	At national level: none (estimate)		

[66] In Sweden, figures for operators actually providing voice telephony are estimated using the total number of interconnection agreements (in place and under negotiation).
[67] Estimates.

4.7.15 UNITED KINGDOM

Table 48: COMPETITION IN THE LOCAL CALL MARKET

Choice of operators for local call services (as of 31 July 1999)	*% territory*	*% population*	*% business customers*	
	100%	100%	100%	
No. of operators in the local call market	*Authorised*	*Actually offering*		
	293	36		
Local call market share (retail revenues, as of 31 December 1998)	*Incumbent*	*New entrants*		
	82%	18%		
Geographic numbers allocated to operators (as of 31 July 1999)	77%	23%		
Subscribers directly connected to the incumbent and other operators' networks (as of 31 July 1999)		*Residential*	*Business*	*Total*
	Incumbents[68]	20,231,000	6,265,000	26,496,000
	Other operators[69]	3,569,000	2,634,000	6,355,000[70]

Table 49: AVAILABILITY OF LOCAL ACCESS INFRASTRUCTURE

Alternative local access infrastructure		**Interconnection arrangements**	
Wireless local access licences (29.09.99):	5 regional licences granted to 4 operators[71], 2 national licences and 1 licence whose scope is not yet defined	*Unbundling of local loop (ULL)*:	Under consultation
		ULL agreements in place:	-
Cable TV networks ***being used for provision of voice telephony***	10 local (estimate)	*Carrier selection for local calls:*	Yes
Other wired local access infrastructure connecting residential customers:	At local level: N/A	*Carrier pre-selection for local calls:*	No
	At national: N/A		

[68] BT and Kingston Communications.
[69] Estimates.
[70] As of 31 December 1998.
[71] Including BT.