
Determination of 7.9.2006

DETERMINATION ON THE LEASED LINES REFERENCE OFFER

I. FRAMEWORK

In response to point (aa)¹ of the draft decision concerning the leased lines reference offer (LLRO), dated 16.03.2006², PT Comunicações (PTC) presented, on 21.04.2006³, a review of prices applicable to the remaining services and facilities of that offer as well the respective grounds.

On 26 May 2006, the Board of Directors of ICP-ANACOM approved a draft decision on the LLRO⁴, deciding to promote the prior hearing of interested parties, pursuant to articles 100 and 101 of the Code of Administrative Procedure, as regards both ceiling prices applicable to remaining services and facilities of the offer and issues concerning the interruption or suspension of services and compensation for non-compliance.

In reply to the prior hearing, comments were received from Vodafone Portugal – Comunicações Pessoais, S.A. (Vodafone)⁵, OniTelecom – Infocomunicações, S.A. (Oni)⁶, PT Comunicações, S.A. (PTC)⁷ and Sonaecom – SGPS, S.A. (Sonaecom)⁸, which were duly taken into consideration and assessed in the prior hearing report that is an integral part of this determination.

¹ “PT Comunicações shall include in the offer prices of alterations and of other services and facilities, namely prices applicable to interior and exterior changes and speed alterations, submitting to ICP-ANACOM detailed reasons thereto”.

² Hereinafter referred to as draft decision.

³ PTC fax with reference E-19638/2006.

⁴ Hereinafter referred to as draft decision.

⁵ Letter submitted by Vodafone dated 7 June 2006, with reference E29747/2006.

⁶ Letter submitted by Onitelecom dated 12 June 2006, with reference E30013/2006.

⁷ Letter submitted by PTC dated 14 June 2006, with reference E30582/2006.

⁸ Sonaecom fax, with comments from Optimus Telecomunicações, S.A. and Novis Telecom, S.A., companies in which Sonaecom has a shareholding, dated 16 June 2006, with reference E31063/2006.

II. ASSESSMENT

2.1 General analysis and assumptions

As regards base costs in man-hours (Mh) of internal personnel, PTC used, to define prices, the last available values (see **Table 1**).

Table 1. Base costs in man-hours (Mh) of PTC internal personnel (IP) (Euros/Mh, Peak hours)

[start confidential information – hereinafter referred to as SCI]

IP classes ⁹	2002	2006	Variation
PTE			9,1%
ATM			-
GAT			9,0%

[end confidential information – hereinafter referred to as ECI]

PTC considers a common costs factor (to be added to the internal personnel value) of [SCI] [ECI], “*achieved in the projected results for 2006*”. ICP-ANACOM does not deem it appropriate to use this estimate, adopting for the purpose of the analysis of prices now proposed, the common costs factor underlying the data of PTC’s cost accounting system for the 1st half of 2005, data which were considered also by ICP-ANACOM in the analysis of the LLRO prices in the scope of the above mentioned draft decision. That is, [SCI] [ECI], which include already the curtailment costs¹⁰.

PTC refers also that prices presented involve the performance of work during working hours, namely in working days from 9 a.m. to 12:30 a.m. and from 2 p.m. to 6 p.m., unless otherwise indicated. Nevertheless, PTC refers that, at the request of the OSP, overtime may take place, in order to avoid disruption of the smooth functioning of services provided, which shall be subject to a budget given on a case-by-case basis.

2.2 Specific analysis

2.2.1. Interior changes

2.2.1.1. Interior changes of local extensions

Considering that an interior change means the change in the termination location of a line, whose activities, according to PTC, do not differ significantly on the account of speed, the company proposes the definition of a single price for these changes, regardless of the line speed.

⁹ PTE - Principal Telecommunications Electrotechnician; ATM: Administrative Technician for Management support; GAT: Graduate Advanced Technician.

¹⁰ In case curtailment costs were removed from the analysis, the common costs factor would be [SCI] [ECI].

The price proposed by PTC for the interior change of a local extension is €175, substantiated as follows:

Table 2. Costs of interior changes - Local extension [SCI]

Interior changes - Local extension	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Installation of interior cable, installation and programming of terminal equipment, line configuration, trials and tests	6,00	PTE		
Travelling (costs connected with a vehicle)				
Total				

[ECI]

The value corrected by the common costs factor is lower than the one charged before for any type of lines, except for lines with a capacity not exceeding 64 Kbps (see **Table 3**). It is also significantly lower than the local extension installation price.

Table 3. Prices of interior changes

Type	Current price (Euros)	LE installation price (Euros)	Corrected proposal (Euros)	In view of current price	In view of installation price
4800 Bps to 19200 Bps	40,50	164,60		290%	-4%
64 Kbps	72,48	425,00		118%	-63%
128 Kbps to 384 Kbps	225,95	500,00	158,13	-30%	-68%
512 Kbps to 1536 Kbps	362,38	500,00		-56%	-68%
2 Mbps	490,27	750,00		-68%	-79%
34 Mbps	650,00	1 000,00		-76%	-84%

In the reply to the draft decision, Onitelecom deemed it was excessive, for example, to charge around 2/3 of the installation price for an interior change and Vodafone considered that these prices should be lower than the ones practised to date. For Sonaecom, prices applicable to interior changes should never be higher than 50% of a local extension installation, except in situations of speed alteration that imply the installation of a new circuit board.

2.2.1.2. Interior changes of part circuits' internal extensions or of interconnection internal extensions

In the case of part circuits' internal extensions or of interconnection internal extensions, where the internal change requires the installation of new connections, PTC proposes the application of the installation price of such services. In case this change does not require the installation of a new connection, PTC proposes the application of a single price of €95, regardless of the speed.

That value is substantiated, according to PTC, on the following assumptions:

Table 4. Costs of interior changes - part circuits' internal extensions or interconnection internal extensions
[SCI]

Interior Changes - part circuits' internal extensions or interconnection internal extensions	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Alteration of guarantors, connection of plugs, line configuration, trials and tests ¹¹	3,00	PTE		
Travelling (costs connected with a vehicle)				
Total				

[ECI]

It should be noted that the price now proposed, even after being corrected by the appropriate common costs factor, is higher than the installation price of part circuits' internal extensions or of interconnection internal extensions, namely for speeds at or above 2 Mbps, when the installation of cables is not required (€72,40), which is not reasonable.

Thus, it is considered that the ceiling price for interior changes of part circuits' internal extensions or of interconnection internal extensions, where a new connection is not installed, should be €72,40.

2.2.1.3. Interior changes – Conclusion

Ceiling prices for interior changes should be as follows:

Table 5. Ceiling prices for interior changes

Type	IC of LE ¹²	IC of internal extension/ interconnection internal extension
With installation of new connection	€158,13	Installation price
Without installation of new connection		€72,4

2.2.2. Exterior changes

PTC proposes the maintenance of prices concerning the external changes of network terminal points (NTP) of end-to-end lines, part circuits, and interconnection lines, which are identical to the respective installation prices, having regard to the fact that, according to PTC, the involved tasks correspond to the installation of a new NTP and to the dismantling of the current one. According to PTC, as the dismantling work is not charged, the prices of the NTP exterior changes shall correspond to the respective installation prices of new NTP.

Specifically as regards 155 Mbps lines, PTC reiterates its view that, given the decision of ICP-ANACOM to suppress the minimum retention period following the exterior change of this type of line, the investment made may not be recovered by means of monthly payments, in case dismantling work takes place in a short period of time.

¹¹ Includes roundtrip travel time.

¹² Internal change of local extension.

PTC declares also that the costs connected to the installation (the exterior change is equivalent) of this type of line are very varied, and depend on the possible need to construct a new infrastructure or to install optic fibre cables, thus not being able to determine a typical case, to quantify the associated costs or to establish an average price. In this line, this entity reiterates the need for prices of exterior changes of 155 Mbps lines to be defined on a case-by-case basis.

As PTC itself states that the tasks involved in exterior changes correspond to the installation of a new NTP and to the dismantling of the current one, ICP-ANACOM maintains its view that the price of an exterior change of a line at 155 Mbps should not exceed that of a new installation, thus ensuring the compliance with the principle of cost orientation. It should be taken into account that the dismantling of lines is not usually charged.

Relatively to PTC's claim of defining prices of exterior changes of 155 Mbps lines on a case-by-case basis, the average margin of PTC concerning the installation of lines with a capacity above 34 Mbps, which is globally positive, enables that company to accommodate specific situations where the price is lower than the cost of the service provision (for example, when the need to construct a new infrastructure or to install optic fibre cables arises).

ICP-ANACOM thus rejects the proposal of PTC that the price of exterior changes of 155 Mbps lines be defined on a case-by-case basis, maintaining the decision to impose the review of the proposal for the price of an external change of a 155 Mbps line, which must not exceed that of a new installation.

Table 6. Prices of exterior changes

Type	Current		Reviewed prices	
	EC of LE ¹³	EC of IE	EC of LE	EC of IE
Analogue		N.A. ¹⁴		N.A.
Digital up to 34 MBps	Installation price	-	Installation price	Installation price
Digital up to 155 Mbps		-		Installation price

2.2.3. Other NTP changes

PTC refers that, similarly to exterior changes in a local extension or internal extensions, which require the installation of new components, the prices of NTP changes that determine the change from a local extension to an internal extension (and vice-versa), and of interconnection lines and internal extensions for interconnection traffic (and vice-versa) shall correspond to the installation prices of new components to be installed, as follows:

¹³ Exterior Change of LE.

¹⁴ Not applicable.

Table 7. Prices of other NTP changes

Type of alteration	Price
Change from an end-to-end line to a part circuit, maintaining one of the NTP	Price of an internal extension installation
Change from a part circuit to an end-to-end line, maintaining one of the NTP	Price of a local extension installation
Change from an interconnection line to an internal extension for traffic interconnection, in the same IP	Price of an internal extension installation for traffic interconnection
Change from an internal extension for traffic interconnection to an interconnection line, in the same IP	Price of a local extension installation

2.2.4. Speed alterations

PTC proposes the removal from the offer of speed alterations of, and to, 34 Mbps¹⁵, arguing that they are not meaningful, as the means of transmission used in lines are different (for example, fibre or copper), the installation of a new circuit with the new speed being required in all cases. Assuming that there are no lines with a capacity below 34 Mbps, supported in optic fibre, this proposal seems to be reasonable.

In the remaining cases, in the situations of an intra-group upgrade and downgrade of end-to-end lines, PTC proposes the application of a price of €225, based on the following assumptions:

Table 8. Costs of speed alteration – End-to-end lines [SCI]

Speed alteration – End-to-end line	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Alteration of the technical solution (example: change from 2 to 4 wires and vice versa), alteration of the support link where the current one does not have any available spectrum, configuration of new speed, trials and tests ¹⁶	8,00	PTE		
Travelling				
Total				

[ECI]

In case of a part circuit, PTC proposes that the application of a price of €135 for intra-group upgrades in lines at N×64 Kbps, relative to the half-circuit component, based on the following assumptions:

¹⁵ It is assumed that this concerns alterations from 2 Mbps to 34 Mbps, and vice-versa.

¹⁶ Includes roundtrip travel time.

Table 9. Costs of speed alteration – Part circuits [SCI]

Speed alteration - Part circuits	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Alteration of the technical solution (example: change from 2 to 4 wires and vice versa), alteration of the support link where the current one does not have any available spectrum, configuration of new speed, trials and tests ¹⁷	4,50	PTE		
Travelling				
Total				

[ECI]

Thus, proposed prices (corrected by the appropriate common costs factor) are as follows:

Table 10. Prices of speed alteration

Speed alteration	End-to-end line		Part circuits	
	Current	Reviewed Prices	Current	Reviewed Prices
<i>Downgrade</i>	€106,58	€205,09	-	€205,09
<i>Upgrade</i> from 64K to N×64K	New line installation price	Installation price ¹⁸ (2 LE)	-	Installation price LE + difference between the price of installation of new IE and the of current one
<i>Upgrade</i> from 64K to 2M	New line installation price	Installation price (2 LE)	-	Installation price (LE + IE)
<i>Upgrade</i> from N×64K to higher level	€106,58	€205,09	-	€122,92 + LE Installation price + difference between the price of installation of new IE and of the current one
<i>Upgrade</i> from N×64K to 2M	difference between the price of installation of new line and of current line	difference between the price of installation of new line and of current line (2 LE)	-	Difference between the price of installation of new LE and of current one + the price of installation of IE
<i>Upgrade</i> in the 2M group (1920 to 2048K)	€106,58	€205,09	-	€205,09

Based on **Table 10**, the following deviations from the installation price of an end-to-end line (with a speed equivalent to the “new speed”) may be presented:

Table 11. Deviation between the price of speed alterations and the price of installation of a line (end-to-end lines)

	New speed	64 K	128 K	192 K	256 K	384 K	512 K	768 K	1024 K	1536 K	2 M
Current speed	N	1	2	3	4	6	8	12	16	24	
64 K	1		0%	0%	0%	0%	0%	0%	0%	0%	0%
128 K	2	-76%		-79%	-79%	-79%	-79%	-79%	-79%	-79%	-67%
192 K	3	-76%	-79%		-79%	-79%	-79%	-79%	-79%	-79%	-67%
256 K	4	-76%	-79%	-79%		-79%	-79%	-79%	-79%	-79%	-67%
384 K	6	-76%	-79%	-79%	-79%		-79%	-79%	-79%	-79%	-67%
512 K	8	-76%	-79%	-79%	-79%	-79%		-79%	-79%	-79%	-67%
768 K	12	-76%	-79%	-79%	-79%	-79%	-79%		-79%	-79%	-67%
1024 K	16	-76%	-79%	-79%	-79%	-79%	-79%	-79%		-79%	-67%
1536 K	24	-76%	-79%	-79%	-79%	-79%	-79%	-79%	-79%		-67%
2 M		-76%	-79%	-79%	-79%	-79%	-79%	-79%	-79%	-79%	-86%

¹⁷ Idem.

¹⁸ Price of installation of the new local extension.

as well as deviations from the price of installation of a part circuit (installation of a new LE and an internal extension of a part circuit):

Table12. Deviation between the price of speed alterations and the installation price of a local extension and of a part circuit's internal extension

	New speed	64 K	128 K	192 K	256 K	384 K	512 K	768 K	1024 K	1536 K	2 M
Current speed	N	1	2	3	4	6	8	12	16	24	
64 K	1		-23%	-20%	-18%	-14%	-12%	-9%	-7%	-5%	0%
128 K	2	-67%		-73%	-64%	-52%	-43%	-32%	-26%	-19%	-59%
192 K	3	-67%	-75%		-77%	-61%	-51%	-39%	-31%	-22%	-59%
256 K	4	-67%	-75%	-79%		-71%	-60%	-45%	-36%	-26%	-59%
384 K	6	-67%	-75%	-79%	-81%		-76%	-57%	-46%	-33%	-59%
512 K	8	-67%	-75%	-79%	-81%	-85%		-70%	-56%	-40%	-59%
768 K	12	-67%	-75%	-79%	-81%	-85%	-88%		-76%	-54%	-59%
1024 K	16	-67%	-75%	-79%	-81%	-85%	-88%	-91%		-68%	-59%
1536 K	24	-67%	-75%	-79%	-81%	-85%	-88%	-91%	-92%		-59%
2 M		-67%	-75%	-79%	-81%	-85%	-88%	-91%	-92%	-95%	-76%

2.2.5. Other alterations associated to digital lines

PTC proposes also the following prices, not specifically provided for in the tariff:

Table 13. Prices of other alterations associated to digital lines

Type of alteration	Proposal
Interface alteration for lines not exceeding 2 Mbps ¹⁹	€95
Time-slot alteration ²⁰	€95
Alteration of support link ²¹	€95
Alteration of line termination plug ²²	€125
Alteration of CRC4 facility ²³	€125

¹⁹ According to PTC, this interface alteration enables the operator to synchronise with PTC network, which may imply also an alteration of the terminal equipment. In general, interface alterations concern changes from G.703/G.704 to V.35 or to X.21, and vice-versa.

²⁰ This corresponds, according to PTC, to the alteration from time slots occupied by a 64 Kbps or N×64 Kbps line supplied by a support link at 2 Mbps (G.703/G.704 interface), to other time slots, in the same support link.

²¹ According to PTC, this concerns the transfer of a 64 Kbps or N×64 line (with a G.703/G.704 interface), from a support link at 2 Mbps to another support link at 2 Mbps, in the same NTP (not including the installation of a new support link).

²² According to PTC, this correspond to the replacement of default line termination plugs installed by PTC by any other plug in PTC's supply chain, at the request of the operator, which may imply the installation of new cables, namely, the substitution of the micro-coaxial cable by a coaxial cable or UTP cable, as well as other possibilities.

²³ Alteration of the state (activated/deactivated) of the CRC4 error rate, which enables operators to monitor the error rate of lines with a speed at 64 Kbps or above.

According to PTC, the grounds for these prices are based on the following assumptions:

Table 14. Alteration costs of interface, time slots and support link [SCI]

Alteration of interface, time slots and support link	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Performance of tasks, including time spent in roundtrip travelling	3,00	PTE		
Travelling				
Total				

[ECI]

Table 15. Costs of termination alterations or CRC4 facility alteration [SCI]

Termination alteration or CRC4 facility alterations	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Performance of tasks, including time spent in roundtrip travelling	4,00	PTE		
Travelling				
Total				

[ECI]

Although prices (corrected by the appropriate common costs factor) for line termination plug alteration and interface alteration to lines up to 2 Mbps, on account of the work involved, which may imply the installation of new cables or the alteration of equipment, seem reasonable, prices proposed for the remaining activities, which may generally be performed remotely from PTC's operation centre²⁴, should be reviewed, travelling being deemed necessary at 50 % of events²⁵, without prejudice to the possibility to reassess this matter in due time.

Thus, ceiling prices for these services shall be as follows:

Table16. Ceiling prices for other alterations associated to digital lines

Type of alteration	Reviewed prices
Interface alteration for lines not exceeding 2 Mbps	€87,70
Time-slot alteration	€1,39
Alteration of support link	€1,39
Alteration of line termination plug	€11,18
Alteration of CRC4 facility	€4,87

2.2.6. Other alterations associated to analogue lines

As regards alterations proposed for analogue lines, PTC proposes the removal of some of the items (for example, the change from an analogue line to a digital line and change from a 2-wire line to a 4-wire line, and vice-versa), as such alterations have not been requested at all by any customer.

²⁴ PTC notes that as regards the alteration of the support link, the installation of a new link does not take place, thus the alteration is performed in an existing support.

²⁵ Roundtrip travel time, being assumed a 50-minute travel time (roundtrip), as proposed by PTC in the SLRO.

PTC considers that, as regards the number of wires of analogue lines, it would be meaningful only to define prices for changes from a 2-wire line to a 4-wire line and vice-versa.

For the change from a 2-wire line to a 4-wire line, PTC refers that it is necessary to install an additional pair of wires, and eventually, to alter interfaces or to replace the terminal equipment, proposing the application of the installation price associated to a new pair of wires.

The alteration from a 4-wire line to a 2-wire line implies, according to PTC, the removal of a copper pair, and, eventually, the alteration of interfaces or the replacement of the terminal equipment, proposing the application of a price of €160, based on the following assumptions:

Table 17. Costs of alteration from a 4-wire line to a 2-wire line [SCI]

Alteration from a 4-wire line to a 2-wire line	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Performance of tasks in both NTP (change from 4 wires to 2 wires, performance of trials and tests, replacement of interfaces or of terminal equipment) ²⁶	5,50	PTE		
Travelling				
Total				

[ECI]

As regards the alteration of the transmission quality of analogue lines, from standard to special and vice-versa, PTC proposes a price of €175, based on the following assumptions:

Table 18. Costs of alteration of the transmission quality of analogue lines, from standard to special and vice-versa [SCI]

Alteration of the transmission quality of analogue lines, from standard to special and vice-versa	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Performance of tasks in both NTP (change from 4 wires to 2 wires, performance of trials and tests, replacement of interfaces or terminal equipment) ²⁷	6,00	PTE		
Travelling				
Total				

[ECI]

Table 19 presents the reviewed ceiling prices and deviation from the current price.

Table 19. Prices of other alterations associated to analogue lines

Type of alteration	Current Price	Reviewed price	Variation (%)
Alteration from 2 to 4 wires	New line installation price	New line installation price	-
Alteration from 4 to 2 wires	€06,58	€46,39	37%
Alteration of quality	€06,58	€58,13	48%

²⁶ Includes roundtrip travel time.

²⁷ Includes roundtrip travel time.

Ceiling prices are higher than current prices. However, the grounds put forward seem reasonable (when compared to other items, such as speed alterations), and it should also be taken into account, as referred in the draft decision on alterations to the LLRO, that in the first nine months of 2005, only two analogue lines were installed for companies outside the PT Group, which evidences the low demand of this type of lines.

2.2.7. Other services and facilities

PTC proposes the following prices:

Table 20. Prices of other services and facilities

Type	Current Price	Proposal	Variation (%)
Alteration of the line holder	€12,79	€20	56%
Travelling ²⁸	€9,84	€40	34%
Intervention for undue fault report – Working hours ²⁹	€100	€95	-5%
Intervention for undue fault report – Period outside normal working hours	€175	€165	-6%

These prices are based, according to PTC, on the following grounds:

Table 21: Costs of alteration of the line holder [SCI]

Alteration of the line holder	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Alteration of information systems	0,33	GAT		
Total				

[ECI]

Table 22: Costs of intervention for undue fault report [SCI]

Intervention for undue fault report – Working hours	IP			Correction of common costs
	Hours	Category	Total	
Customer service, and request register and validation	0,25	ATM		
Alteration of information systems	3,00	PTE		
Travelling				
Total				

[ECI]

In the case of an intervention for undue fault report outside normal working hours, PTC applies a factor of around 70% to the price for undue fault report during working hours.

Prices proposed (corrected by the common costs factor), and grounds presented, seem reasonable, however the 3-hour period of time required by the technical staff of PTC to find the (unduly reported) fault appears to be questionable.

²⁸ At the request of the customer operator and regardless of the number of tasks to be performed.

²⁹ Period between 9 a.m. and 12.30 a.m. and between 2 p.m. and 6 p.m., on working days.

III. DETERMINATION

Having regard to the assessment above, and considering the analysis of comments received and the grounds for the decision comprised in the “Prior hearing report concerning the draft decision on the leased lines reference offer”, which is an integral part hereof, the Board of Directors of ICP-ANACOM, in the scope of assignments provided for in points b), e) and f) of article 6 of the Statutes, approved by Decree-Law no. 309/2001, of 7 December, in the pursue of assignments provided for in points b) and g) of article 9 of the mentioned Statutes, and taking into account the regulation targets provided for in points a) of paragraph 1 and b) of paragraph 2 of Law no.5/2004, of 10 February, and to implement measures determined following the analysis of the leased line’s terminal segments wholesale market and the leased line’s transit segments wholesale market, determines the following:

1. PT Comunicações must alter the leased lines reference offer, within a 10-day period, taking into account the following:

- (a) PT Comunicações shall inform the OSP thirty days in advance, before proceeding to any interruption or suspension of services for failure to pay engaged services, of that interruption or suspension of services;
- (b) PT Comunicações shall undertake to pay compensation for non compliance, provided that the OSP has supplied it with the service forecast plans, regardless of whether or not the payments of services provided to the OSP and incumbent thereupon in the scope of the LLRO are delayed or at fault.
- (c) PT Comunicações shall take into account the following ceiling prices:

Ceiling prices for interior changes

Type of interior change	Local extension	Internal extension/ interconnection internal extension
With installation of new connection	€158,13	Installation price
Without installation of new connection		€72,4

Ceiling prices for exterior changes

Type of exterior change	Local extension	Internal extension
Analogue	Installation price	Not applicable
Digital		Installation price

Ceiling prices for other NTP changes

Type of alteration	Ceiling price
Change from an end-to-end line to a part circuit, maintaining one of the NTP	Price of an internal extension installation
Change from a part circuit to an end-to-end line, maintaining one of the NTP	Price of a local extension installation
Change from an interconnection line to an internal extension for traffic interconnection, in the same IP	Price of an internal extension installation for traffic interconnection
Change from an internal extension for traffic interconnection to an interconnection line, in the same IP	Price of a local extension installation

Ceiling prices for speed alteration

Speed alteration	End-to-end line	Part circuit
<i>Downgrade</i>	€205,09	€205,09
<i>Upgrade from 64K to N×64K</i>	Local extension installation price	Local extension installation price + difference between the price of installation of new internal extension and of the current one
<i>Upgrade from 64K to 2M</i>	Local extension installation price	Local extension installation price + price of installation of internal extension
<i>Upgrade from N×64K to higher level</i>	€205,09	€122,92 + Local extension installation price + difference between the price of installation of new internal extension and of the current one
<i>Upgrade from N×64K to 2M</i>	difference between the price of installation of new local extensions and of current ones	difference between the price of installation of new local extension and of the current one +price of installation of internal extension
<i>Upgrade in the 2M group (1920 to 2048K)</i>	€205,09	€205,09

Ceiling prices for other alterations associated to digital lines

Type of alteration	Ceiling price
Interface alteration for lines not exceeding 2 Mbps	€87,70
Time-slot alteration	€1,39
Alteration of support link	€1,39
Alteration of line termination plug	€11,18
Alteration of CRC4 facility	€4,87

Ceiling prices of other alterations associated to analogue lines

Type of alteration	Ceiling price
Alteration from 2 to 4 wires	Installation price associated to a new pair of wires
Alteration from 4 to 2 wires	€146,39
Alteration of quality	€158,13

Ceiling prices of other services and facilities

Type	Ceiling price
Alteration of the line holder	€16,85
Travelling	€40,00
Intervention for undue fault report – Working hours	€87,70
Intervention for undue fault report – Period outside normal working hours	€149,10