



Ministry of Infrastructure and Transport Motorway Concessions Supervisory Department

Autostrade per l'Italia S.p.A.

Addendum signed on 12 October 2007

Ministry for Infrastructure and Transport Motorway Concessions Supervisory Department

Autostrade per l'Italia S.p.A

Annex B

Method for calculating the 'X' investments component of the tariff adjustment formula and 'K' as referred to in CIPE^{*} Resolution No. 39 of 15 June 2007

* Inter-Ministry Committee for Economic Planning

_

The remuneration of the 'Additional Agreement IV works' investments has been calculated on the basis of a remuneration rate of 7.18% by preparing economic validation plans for each individual investment using the discounted cash flow method.

In terms of works which, as at the date of signing of this agreement, the executive plan/surveys and reports on variations have been approved by the Grantor, the relevant validation plans are to be treated as being in their final form.

In terms of works for which the Concessionaire has, as at the date of signing of this Agreement, presented surveys and reports on variations to the Grantor that the Grantor has not yet approved, the relevant validation plans will be adjusted for the purposes of a calculation, in final form, of the X investments component on the basis of the amount recorded in the Grantor's approval of the surveys and reports on variations, with the Grantor approving the relevant validation plan at the same time.

In terms of works that the Grantor has not approved as at the date of signature of this agreement, the total investments subject to remuneration will be as recorded in the final plan approved by the Grantor. Where these works are concerned, the relevant validation plan has been drawn up on a provisional basis on the basis of the best estimates available.

In order to calculate the investments subject to remuneration, the value taken is that set out in the economic framework in the executive or final plan approved by the Grantor, rectified to the extent set out below. This economic framework is prepared on the basis of the latest price lists in force and on any new prices that prove necessary, and includes, as part of the amounts available, the 'general expenses', valued on a flat-rate basis at 9% of the call for tenders reserve price, the 'amicable settlements fund' at 3% of the amount in the call for tenders reserve price and the 'unforeseen amounts' at 5% of the amount in the call for tenders reserve price.

The value of the economic framework, as established above, is reduced by a discount on the amounts in the call for tenders reserve price at a flat rate of 15%; the resultant net value is that subject to remuneration by means of the X investments.

Where the Concessionaire incurs final investment costs in relation to the individual validation plan that are lower, 80% of the lower amount of costs incurred, net of tax, shall be used to reduce the total amount of new investments subject to remuneration as referred to in Clause 22 of the Agreement.

The timescale for the works is that set out in the relevant timetable (Annex M to the Agreement).

The summary of the tariff increases calculated in relation to each individual new investment is annexed to the financial plan for the Agreement (Annex E).

The methods, the parameters used, the assumptions regarding traffic and the validation plans for each new piece of work are also annexed to the financial plan for the Agreement (Annex E).



The overall total amount of the tariff increases (X investments) paid for remuneration of the 'Additional Agreement IV works' new investments is:

Increases for X	At 2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
investments	6.5385%	1.2345%	2.6865%	1.3682%	2.2120%	2.3029%	1.4292%	1.1493%	1.6570%	2.0149%	2.4576%	2.4104%	2.2017%	1.6200%	0.6708%	0.3654%	0.0874%

The following are set out below:

- method used to draw up the economic validation plans; method used to review the validation plans; method used for the annual recalculation of the X investments.



Method used to draw up the economic validation plans

The remuneration of the additional investments has been calculated on the basis of a remuneration rate of 7.18%, by drawing up economic validation plans for each individual new investment.

For the purposes of completing the economic validation, the discounted cash flow method has been used.

The manner in which the tariff increase has been established means that the discounted value of anticipated additional revenue up until the Concession expires matches the discounted value of the investments and of the increased costs and charges, taking into account taxation.

The total amount of the investments is the figure set out in the executive plan or the final plan approved by the Grantor, calculated on the basis of criteria set out previously.

In the case of works for which the relevant executive plan or final plan have not been approved by the Grantor, the validation plan has been drawn up on a provisional basis on the basis of the best estimates available.

The parameters used in the individual validation plans are the following:

- final average revenue from light vehicles 2012;
- final average revenue from heavy vehicles 2012;
- final total 'light' vehicles/Km 2012;
- final total 'heavy' vehicles/Km 2012;
- tariffs charged since 12 April 2013;
- concession fee of 2.4%;
- predicted traffic as per annex H to the agreement;
- discounting rate of 7.18%;
- tax at the IRES [corporate income tax] rate of 27.5% and IRAP [regional tax on production] rate of 4.49%;
- investment of the construction and the relevant timescale;
- date on which the investment goes into operation;
- additional traffic as a result of the construction with a valuation of the additional revenue:
- additional running costs (staff and maintenance).

The tariff shall come into effect on 1st January following approval of the executive plan or the final plan by the Grantor as specified by Clause 21 of the Agreement.

The relevant parameters (traffic and additional costs, investment) are established for each individual venture.

The parameters listed above apply to all ventures in accordance with the following method:

- the first single venture shall have, as its base, the average revenue figure;
- the second new venture shall use, as the base tariff, that established with the previous economic validation plan and so on, until the last venture;

- as well as establishing the additional tariff for the purposes of its economic valuation, the last venture will show the total amount of the various 'X investments'.

Method used to adjust the validation plans

In accordance with Clause 21, point 3, of the Agreement, the Parties shall carry out final recalculations of the validation plan for each set of works on the basis of the final plan and/or the executive plan submitted to the Grantor for approval for each of the 'Additional Agreement IV works' investments referred to in Clause 2 of the agreement, on the basis of the following parameters:

- overall tariffs finally charged;
- actual traffic on the entire network;
- tariff increases for X investments charged by the Concessionaire;
- total amount of the investments established on the basis of the executive plan and/or the final plan approved by the Grantor in accordance with the criteria set out above;
- date on which the venture is expected to go into operation.

Adjustment of the validation plans will result in new amounts of the X investments being recalculated for each of the said sets of work, which will be used by the Concessionaire on the basis of the stage reached in the works as better set out in the 'Method for annual application of the X investments' section.

Method for annual application of the x investments

In implementation of Clause 21 of the Agreement, the parties shall establish the method to be used for application of the value of the X investments on the basis of the stage of the individual investments progressively reached as set out below.

- 1) Given the correlation between the overall value of the X investments (total of the annual values) and the overall total amount of the anticipated investments, both of which are set out in the financial plan (Annex E to the Agreement), a coefficient is calculated for each venture, to four decimal places, (coefficient for each EUR/mln) equal to the *ratio* of the total of the specific values of the annual X investments to the overall total of the specific investments anticipated.
- 2) By 15 October of each year, an accrual coefficient will be calculated equal to the EUR/mln of progressive investments made to the previous 30 September, i.e. at the end of the previous quarter, multiplied by the coefficient calculated at point 1, to which is added the first tariff increase applied in accordance with the procedure set out at point 5 of Clause 21 of the Agreement.
- 3) By 15 October of each year, for the investments referred to in Clause 21 of the Agreement an accrual coefficient will be calculated equal to the EUR/mln of progressive investments made to the previous 30 September, i.e. at the end of the previous quarter, multiplied by the coefficient calculated at point 1. This method shall also be used in the event of a 'failure to start works by 15 November in the year following application of the first tariff increase' as governed by point 7 of Clause 21 of the Agreement.
- 4) For the purposes of calculating the annual value of the X investments to be applied as from 1 January of the following year, the lower of (i) the final accrual coefficient (calculated in accordance with points 2 or 3) and (ii) the accrual



coefficient referred to in the financial plan for the Agreement (Annex E) shall be taken. The tariff increases applied for the specific investment up until that point in time shall be deducted from the value calculated as set out above.

Calculation of fair remuneration of the capital invested and of the K parameters

The fair remuneration of the capital invested that is used in order to calculate the K parameter of the price cap formula governed by Clause 22 of this Master Agreement has been calculated by applying the market practices that are most usually adopted, taking into account, into addition, the methods set out in Cipe Resolutions No. 38 of 15 June 2007 and No. 27 of 21 March 2013.

In accordance with the Resolutions 38/2007 and 27/2013 as referred to above, the granted remuneration rate on the capital invested defined in accordance with the weighted average cost method and taken gross of tax is equal to:

$$r = g * r_d * (1-t_{ires}) + (1-g) * r_e$$

$$\frac{1-t_e}{1-t_e} \qquad \frac{1-t_e}{1-t_e} \qquad (1)$$

where

- g is the financial leverage rate
- *r_d* is the return rate allowed on debt
- r_e is the nominal return rate allowed for shareholders' equity
- *t_{ires}* is the rate of tax charged on the company's income;
- *t_e* is the equivalent tax rate on the Concessionaire's income.

The remuneration rate is defined in formula (1) in nominal terms: the guidelines allow the Concessionaire to opt to apply a remuneration rate defined in real terms, with the capital invested therefore being valued at current values. In these circumstances, the following equation shall apply:

$$r_{real} = \frac{1+r}{1+P} - 1 \tag{2}$$

where P is the rate of inflation for the period.

The return rate allowed on debt rd is the sum of the return rate associated with risk-free assets and a component of the debt premium:

the return rate on risk-free assets is identified as the average of the benchmark 10year BTP returns for the last 12 months;

the debt premium is established on a Concessionaire-by-Concessionaire basis on the basis of the conditions for access to debt identified in the sector and specific to the Concessionaire; this component shall not in any event be higher than two percentage points.

12

The nominal rate of return allowed on shareholders' equity is the sum of the return rate associated with risk-free assets and a component that reflects the systemic risk of the business carried on by the Concessionaire. This component is the result of the equity risk premium multiplied by the beta coefficient:

the equity risk premium is equal to the difference between overall stock market return and the return on the risk-free financial assets and is established at 4%;

the beta coefficient reflects the specific and non-diversifiable risk of the asset. On the basis of these parameters the weighted average cost is 10.21%, as set out in the table below.

Calculation of the weighted average cost of capital (CIPE Resolutions 38/2007 and 27/2013)

Equity remuneration			Notes
, ,	Risk free return	5.69%	Year 2012
	Market risk premium	4.00%	
	Levered beta	0.820	
	Equity remuneration	8.97%	
	E/(D+E)	45.70%	
	Equity remuneration as percentage of WACC	4.10%	
Debt remuneration			
Dept remaineration	Kd	6.99%	Risk free + 130bps
	Tax shield	-1.92%	
	Net debt remuneration	5.07%	
	D/(D+E)	54.30%	
	Net debt remuneration as percentage of WACC	2.75%	
Net WACC		6.85%	
	Staff costs as average percentage of capital invested	0.032	
	Staff costs	386.0	
	Capital invested	11,972.0	
	IRES [corporate income tax] rate	27.50%	
	IRAP [regional tax on production] rate	4.49%	
	Average tax rate (IRES and IRAP)	32.93%	
Gross WACC	,	10.21%	

Calculation of Levered Beta on the basis of final data for 2012 (Cipe resolutions 38/2007 and 27/2013)

Market survey of Levered Beta

Company	Levered Beta listed
Atlantia	0.824
SIAS	0.744



Calculation of Unlevered Beta

Delevering formula						
βu = βI / [1 [®] + (1+tax rate)*D/E]	Own resources	Net Financial Debt	D/E	Tax Rate	Unlevered Beta	
Atlantia	9,091.8	10,064.0	1.11	27.50%	0.46	
Closing price (Elaz) [⊕]	13.74					
No. of shares (in mln)	661.8					
SIAS	1,458.2	1,521.4	1.04	27.50%	0.42	
Closing price	6,41					
No. of shares	227,500					
Average					0.44	

Calculation of Levered Beta

Levering formula					
$\beta I = \beta u * [1 + (1-tax rate)*D/E]$	Own resources	Net Financial Debt	D/E	Tax Rate	Levered Beta
Autostrade per l'Italia SpA	9,091.8	10,801.8	1.19	27.50%	0.82

The said cost will be recalculated at the start of each five-year period using the same method.

, d

Translator's note: the quality of the Italian original (a pdf) means that the initial symbol inside the opening square bracket cannot be read clearly but would appear to read '1'.

Translator's note: the quality of the Italian original (a pdf) means that the initial symbol inside the opening bracket cannot be read clearly but would appear to read 'E'.

'K' – ANNUAL PERCENTAGE FACTOR TO ENABLE REMUNERATION OF THE NEW INVESTMENTS UNDER CIPE RESOLUTIONS NO. 39 OF 15 JUNE 2007 AND NO. 27 OF 21 MARCH 2013

FACTOR K AND COSTS ALLOWED

On the basis of the estimate of the annual amount of the new investments subject to remuneration with factor K, an estimate that is set out in the validation plan and, as a result, in the financial plan, a specific factor K is established for the investments made in one particular year for the purposes of applying the formula referred to in Clause 19 of the agreement.

K is the annual percentage variation in the tariff fixed each year in order to enable the remuneration of the investments made the year before the year of application; it is fixed in such a way that the discounted value of the expected specific incremental revenue of the investment for the regulatory period is equal to the discounted value of the specific higher costs of the investment that are allowed, discounting the amounts at the fair remuneration rate.

Factor K, which is established on an annual basis in relation to the previous year's investments, is subsequently adjusted at the start of each subsequent regulatory period.

For the purposes of calculating the costs allowed, amortisation and capital remuneration are included.

Operating costs that are specific to the investment are not included in the costs allowed for the investments on the basis that they are estimated at an insignificant amount or are set off by the additional revenue resulting from use of the specific investment.

In order to ensure a five-year adjustment of the factor K's applied annually that aims at zero, in accordance with the principle of the Concessionaire's economic neutrality, nominal entries have been included in or deducted from the costs allowed pursuant to Article 5.4 of Cipe Directive No. 39/2007 as amended.

The net capital invested and to be calculated in order to establish the costs allowed corresponds with the total amount of the investments in reversible assets relating to the new investments not inserted, as at 3 October 2006, in the financial plan in force on that date and subject to remuneration and amortisation, established in accordance with the methods set out below.

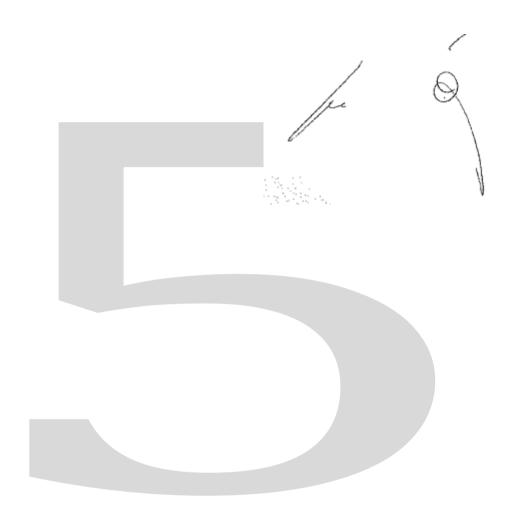
Amortisation relating exclusively to the said invested capital is included in the costs allowed in accordance with straight-line financial amortisation for the duration of the concession starting from the year after the investment is actually made.

6

FACTOR K APPLIED IN THE FINANCIAL PLAN

The economic and financial validation plans that establish a specific value for K for each annual investment are inserted in the financial plan for the agreement (Annex E).

The table below sets out the amounts for the k parameter.



autostrade per l'italia spa
Financial plan 2013
Table of 'K' (Cipe directives No. 39/2007 and No. 27/2013) and 'X investments' parameters

Fair remuneration rate (wacc) 10.21%

	Investments remunerated at K	1			% variations in base tariff pursuant to CIPE (of the average)		Nominal entries (€/1.000)		Rectified Plan Tariffs (€)		% variations in tariffs	
Year		Light	Heavy	Average	% variation on base year	% variation on year	For the period	Accumulated	Light	Heavy	% variations at base tariff	% variations on previous year
а	b	С	d		е	f	g	h	i	k	1	m
2012	22,895	0.04778	0.08068	0.05518			0.00	0.00	0.04778	0.08068		
2013	50,109	0.04947	0.08353	0.05703	3.35%	3.35%	2,044.1	2,044.1	0.04947	0.08353	3.54%	3.54%
2014	75,838	0.05167	0.08724	0.05957	7.95%	4.45%	3,770.7	6,023.6	0.05167	0.08724	8.13%	4.43%
2015	76,324	0.05306	0.08958	0.06118	10.86%	2.70%	7,528.2	14,167.1	0.05306	0.08958	11.04%	2.69%
2016	76,324	0.05493	0.09274	0.06334	14.78%	3.53%	10,497.9	26,112.0	0.05493	0.09274	14.96%	3.53%
2017	76,324	0.05692	0.09610	0.06563	18.93%	3.62%	12,754.1	41,533.4	0.05692	0.09610	19.11%	3.62%
2018	76,324	0.05848	0.09873	0.06743	22.19%	2.74%	14,546.8	60,322.6	0.05848	0.09873	22.38%	2.74%
2019	66,424	0.05991	0.10116	0.06908	25.19%	2.46%	15,926.2	82,410.4	0.05991	0.10116	25.39%	2.46%
2020	66,414	0.06167	0.10413	0.07111	28.86%	2.93%	15,892.4	106,720.6	0.06167	0.10413	29.07%	2.93%
2021	66,414	0.06370	0.10755	0.07345	33.10%	3.28%	14,739.6	132,361.2	0.06370	0.10755	33.31%	3.28%
2022	51,449	0.06608	0.11156	0.07619	38.07%	3.74%	12,423.3	158,304.5	0.06608	0.11156	38.28%	3.74%
2023	0	0.06848	0.11562	0.07896	43.09%	3.64%	8,818.2	183,292.8	0.06848	0.11562	43.31%	3.64%
2024	0	0,07070	0.11938	0.08153	47.74%	3.25%	2,184.3	204,199.5	0.07070	0.11938	47.97%	3.25%
2025	0	0.07259	0.12256	0.08370	51.68%	2.67%	-4,068.6	220,988.9	0.07259	0.12256	51.92%	2.67%
2026	0	0,07384	0.12467	0.08514	54.29%	1.72%	-9.582.1	233,979.8	0.07384	0.12467	54.53%	1.72%
2027	0	0.07489	0.12644	0.08635	56.48%	1.42%	-14,852.7	243,027.0	0.07489	0.12644	56.73%	1.42%
2028	0	0.07574	0.12788	0.08734	58.27%	1.14%	-19,433.4	248,417.6	0.07574	0.12788	58.51%	1.14%
2029	0	0.07654	0.12923	0.08825	59.93%	1.05%	-23,942.0	249,850.2	0.07654	0.12923	60.18%	1.05%
2030	0	0.07734	0.13058	0.08918	61.61%	1.05%	-28,461.0	246,910.2	0.07734	0.13058	61.86%	1.05%
2031	0	0.07815	0.13195	0.09012	63.30%	1.05%	-32,990.2	239,140.6	0.07815	0.13195	63.56%	1.05%
2032	0	0.07897	0.13334	0.09106	65.02%	1.05%	-37,529.9	226.037.7	0.07897	0.13334	65.28%	1.05%
2033	0	0.07980	0.13474	0.09202	66.75%	1.05%	-42,080.2	207,046.1	0.07980	0.13474	67.01%	1.05%
2034	0	0.08064	0.13616	0.09298	68.50%	1.05%	-46,641.2	181,553.6	0.08064	0.13616	68.77%	1.05%
2035	0	0.08149	0.13758	0.09396	70.27%	1.05%	-51,213.0	148,885.5	0.08149	0.13758	70.54%	1.05%
2036	0	0.08234	0.13903	0.09495	72.06%	1.05%	-55,795.6	108,297.8	0.08234	0.13903	72.33%	1.05%
2037	0	0.08321	0.14049	0.09594	73.87%	1.05%	-60,389.3	58.970.6	0.08321	0.14049	74.14%	1.05%
2038	0	0.08408	0.14196	0.09695	75.69%	1.05%	-64,994.1	-0.0	0.08408	0.14196	75.97%	1.05%

FINAL CALCULATION OF ANNUAL FACTOR K TO BE APPLIED TO THE TARIFF FORMULA ON THE BASIS OF THE INVESTMENTS MADE

Calculating the investments

For the investments subject to remuneration with factor K, the amount subject to remuneration shall be the amount that appears in the economic framework of the executive plan or final plan approved by the Grantor, rectified to the extent set out below.

This economic framework is prepared on the basis of the latest price lists in force and on any new prices that prove necessary and includes, as part of the amounts available, the 'general expenses', valued on a flat-rate basis at 9% of the call for tenders reserve price, the 'amicable settlements fund' at 3% of the amount in the call for tenders reserve price and the 'unforeseen amounts' at 5% of the amount in the call for tenders reserve price.

The value of the economic framework, as established above, is reduced by a discount on the amounts in the call for tenders reserve price at a flat rate of 15%; the resultant net value is that subject to remuneration.

The annual factor K is calculated on the basis of the stage progressively reached as recorded in the Concessionaire's statement of financial position as at 30 September in the same year, with the value as at 30 September of the previous year to be subtracted from the same; the calculation is to be recorded in writing by the parties by 15 October of each year prior to application of the said factor.

The factor K is calculated updating the relevant validation plans using the same methods of calculation as those contained in the economic and financial plan.

