

OPINION OF ADVOCATE GENERAL SAGGIO

delivered on 10 December 1998 *

Table of contents

Legislative context and facts	I- 209
The contested regulations	I- 209
Facts	I- 211
The judgment of 19 May 1992 and the subsequent proceedings	I- 212
Council Regulation (EEC) No 2187/93	I- 214
The specific claims for compensation	I- 215
Admissibility	I- 217
Substance	I- 218
Calculation of the compensation in general	I- 218
Case C-104/89	I- 219
The periods to be taken into account for the purposes of quantifying the damage ...	I- 219
The hypothetical income	I- 221
— The reference quantities for the hypothetical milk production during the years 1984 to 1989	I- 221
— The hypothetical income from milk sales	I- 223
— The hypothetical income from the sale of cull cows and calves	I- 225
— The variable costs	I- 228
— The cost of fodder	I- 233
— The cost of wages	I- 236
The alternative income	I- 239
— The capital factor	I- 242
— The land and labour factors	I- 244
Differentiation according to the various national territories	I- 247
The claim for further damages attributable to (a) an increase in the national tax rate, (b) currency devaluation and (c) compensatory interest accrued up to the date of payment of the compensation	I- 248
The compensation due to Mr Mulder	I- 250

* Original language: Italian.

The compensation due to Mr Brinkhoff	I- 254
The compensation due to Mr Muskens	I- 259
The compensation due to Mr Twijnstra	I- 263
Case C-37/90	I- 266
The hypothetical income	I- 267
— The period to be taken into account for the purposes of quantifying the damage .	I- 267
— The reference quantity and the rate of reduction	I- 268
— The income obtained from the sale of milk and from the sale of calves and cull cows	I- 270
— The variable costs	I- 271
The alternative income	I- 274
— The hypothetical alternative income	I- 274
The capital factor	I- 274
The land factor	I- 276
The labour factor	I- 277
— The actual alternative income obtained from fattening bulls during the years 1984 to 1989	I- 279
The claim for other damages due to an increase in the national tax rate and the claim for compensatory interest	I- 282
The compensation due to Mr Heinemann	I- 283
Costs	I- 285
Conclusion	I- 286

Legislative context and facts

products for a period of five years (Articles 1 and 2).

The contested regulations

1. Council Regulation (EEC) No 1078/77 of 17 May 1977 introducing a system of premiums for the non-marketing of milk and milk products and for the conversion of dairy herds¹ created a system of premiums for the non-marketing of milk

2. Council Regulation (EEC) No 856/84 of 31 March 1984 amending Regulation (EEC) No 804/68 on the common organisation of the market in milk and milk products² introduced an additional levy on the quantities of milk delivered in excess of a reference quantity to be determined (see Article 1, which inserts a new provision,

¹ — OJ 1977 L 131, p. 1.

² — OJ 1984 L 90, p. 10.

Article 5c, into the 1968 basic regulation). That quantity is determined on the basis of Council Regulation (EEC) No 857/84 of 31 March 1984 adopting general rules for the application of the levy referred to in Article 5c of Regulation (EEC) No 804/68 in the milk and milk products sector.³ The reference quantity is generally equal to the quantity of milk delivered or purchased during the 1981 calendar year, plus 1% (Article 2(1)). However, Member States may provide that on their territory the reference quantity is to be equal to the quantity of milk or milk equivalent delivered or purchased during the 1982 or 1983 calendar year, weighted by a percentage established so as not to exceed the total quantity guaranteed to each Member State, which is expressly indicated in Article 5c(3) (Article 2(2)). The detailed rules for applying that additional levy are laid down by Commission Regulation (EEC) No 1371/84 of 16 May 1984.⁴

3. In its judgments of 28 April 1988 in *Mulder*⁵ and *Von Deetzen*⁶ the Court of Justice ruled that Regulation No 857/84, as supplemented by Regulation No 1371/84, was invalid because it infringed the principle of the protection of legitimate expectations 'in so far as it does not provide for the allocation of a reference quantity to producers who, pursuant to an undertaking entered into under Council Regulation (EEC) No 1078/77 of 17 May 1977, did

not deliver milk during the reference year adopted by the Member State concerned'.⁷

4. Following those judgments, the Council adopted on 20 March 1989 Regulation (EEC) No 764/89 amending Regulation (EEC) No 857/84 adopting general rules for the application of the levy referred to in Article 5c of Regulation (EEC) No 804/68 in the milk and milk products sector.⁸ Regulation No 764/89 added a new provision (Article 3a) to Regulation No 857/84, under which producers who, pursuant to an undertaking given under Regulation No 1078/77, had not supplied milk during the reference year would receive under certain conditions, from 29 March 1989, a special reference quantity (Article 3a(1)) 'equal to 60% of the quantity of milk delivered or the quantity of milk equivalent sold by the producer during the 12 calendar months preceding the month in which the application for the non-marketing or conversion premium was made' (Article 3a(2)).

5. In its judgment of 11 December 1990 in *Spagl*, the Court ruled that the provisions of Article 3a(1) and (2) of Regulation No 857/84 were invalid in so far as Article 3a(1) 'excludes from the grant of a special reference quantity ... producers whose period of non-marketing or conversion, pursuant to an undertaking given under Council Regulation (EEC) No 1078/77 of 17 May 1977, expires before 31 December 1983 or, in some cases, before 30 September 1983', and Article 3a(2) 'restricts the special reference

3 — OJ 1984 L 90, p. 13.

4 — OJ 1984 L 132, p. 11.

5 — Case 120/86 [1988] ECR 2321.

6 — Case 170/86 [1988] ECR 2355.

7 — See the operative part of the Court's judgments in *Mulder* (particularly paragraph 2) and *Von Deetzen*.

8 — OJ 1989 L 84, p. 2.

quantity provided for in that provision to 60% of the quantity of milk delivered or the quantity of milk equivalent sold by the producer during the 12 calendar months preceding the month in which the application for the non-marketing or conversion premium [introduced by Regulation No 1078/77] was made'.⁹

7. The applicant in Case C-37/90 — O. Heinemann — is a German farmer who had given a non-marketing undertaking in respect of the period from 1979 to 1984. On 20 November 1984 and 16 December 1985 he applied for a reference quantity under Regulations Nos 856/84 and 857/84. Those requests were rejected in application of the aforementioned provisions. However, following the entry into force of the amending Regulation No 764/89, Mr Heinemann was granted a provisional special reference quantity and subsequently, on 29 August 1989, resumed milk deliveries.

Facts

6. The applicants in Case C-104/89 — J.M. Mulder, W.H. Brinkhoff, J.M.M. Muskens and T. Twijnstra — had given a non-marketing undertaking pursuant to Regulation No 1078/77 and, accordingly, had not produced milk or milk products during a period of five years, including the 1983 calendar year. That was the year chosen by the Netherlands as the reference period for application of the additional levy system referred to in Regulations Nos 856/84 and 857/84. The applicants were therefore unable to benefit from the quota system introduced in 1984. Mr Mulder, Mr Brinkhoff and Mr Twijnstra had resumed milk production after delivery of the judgments of 28 April 1988 in *Mulder and Von Deetzen*, in which the Court had ruled that Regulation No 857/84 was invalid. Mr Muskens, on the other hand, had deferred resumption pending the grant of a special reference quantity pursuant to Regulation No 764/89.

8. In their applications under Article 178 of the EC Treaty — lodged on 31 March 1989 in Case C-104/89 and on 7 February 1990 in Case C-37/90 — all the applicants claimed that the Court should rule that the Community was liable for the pecuniary losses which they had suffered as a result of the application of the aforementioned regulations, which had been declared invalid, and order the Council and the Commission to compensate them for the damage suffered.

⁹ — Case C-189/89 *Spagl* [1990] ECR I-4539; see also the judgment delivered on the same day in Case C-217/89 *Pastätter* [1990] ECR I-4585.

9. The two cases were joined by order of 9 July 1991.

The judgment of 19 May 1992 and the subsequent proceedings

amounts of compensation as from the date of this judgment;

10. In the interlocutory judgment delivered in respect of the two applications on 19 May 1992¹⁰ (hereinafter 'the 1992 judgment'), the Court declared that the Community was liable for the damage suffered by the applicants and ordered the Council and the Commission to compensate them.

11. The operative part of the judgment is worded as follows:

'The Court hereby:

1. Orders the defendants to make good the damage suffered by the applicants as a result of the application of Council Regulation (EEC) No 857/84 of 31 March 1984, as supplemented by Commission Regulation (EEC) No 1371/84 of 16 May 1984 in so far as those regulations did not provide for the allocation of a reference quantity to producers who, pursuant to an undertaking given under Council Regulation (EEC) No 1078/77 of 17 May 1977, did not deliver any milk during the reference year adopted by the Member State concerned;
2. Orders that interest at the annual rate of 8% in Case C-104/89 and 7% in Case C-37/90 shall be payable on the

3. For the rest, dismisses the applications;

4. Orders the parties to inform the Court within twelve months from the date of delivery of this judgment of the amounts of damages payable arrived at by agreement;

5. Orders that, in the absence of agreement, the parties shall transmit to the Court within the same period a statement of their views with supporting figures;

6. Reserves the costs.'

12. For the purposes of calculating the amount of the compensation, the Court declares in paragraph 26 of the judgment, that the loss of earnings is equal to the difference between the income which the applicants would have obtained in the normal course of events from the milk deliveries which they would have made if, 'during the period between 1 April 1984 (the date of entry into force of Regulation No 857/84) and 29 March 1989 (the date of entry into force of Regulation No 764/89)', they had obtained reference quantities, and the income which they

¹⁰ — *Mulder* [1992] ECR I-3061.

actually obtained not only from milk deliveries during that period but also from any replacement activities.

applicants', taking into account the fact that a farm which resumes its activity generally shows reduced profitability during the start-up period (paragraph 32).

13. According to the Court, the reference quantities are the quantities of milk delivered 'during a representative period prior to [the] non-marketing period [of the applicants], such as the quantity used as the basis for calculating the non-marketing premium' (paragraph 28).

14. The Court also declared that that 'quantity should be increased by 1% [under] Article 2(1) of Regulation No 857/84 so as to ensure that the applicants do not suffer a specific restriction compared with producers whose reference quantities are fixed in accordance with Article 2 of that Regulation'. However, the reference quantity was to be subject to 'a reduction representative of the rates of reduction applicable to the producers covered by Article 2 in order to avoid the applicants' being placed at an undue advantage compared with that category of producers' (paragraph 29).

15. For the purposes of calculating the hypothetical income, the Court stated that 'the basis which should be taken for calculating the [hypothetical]... income is the profitability of a farm representative of the type of farm run by each of the

16. Finally, with regard to the income from any replacement activities, the Court declared that this must include not only 'that which the applicants actually obtained from replacement activities, but also that income which they could have obtained had they reasonably engaged in such activities... Any operating losses incurred by the applicants... cannot be attributed to the Community, since the origin of such losses does not lie in the effects of the Community rules' (paragraph 33).

17. Following delivery of the judgment, the parties were unable to reach agreement on the amounts due to the producers and therefore recommenced proceedings, indicating their respective compensatory demands and offers.

18. By order of 12 July 1996, the Court appointed an expert, pursuant to Article 22 of the Statute and Article 49(1) of the Rules of Procedure, to determine the amount of the damage.

19. The expert lodged his report at the Court Registry on 27 February 1997.

which exceed the reference quantity which could be available to the producer before the allocation in question, excluding those referred to in the second subparagraph of Article 3a(2) of Regulation No 857/94.

Council Regulation (EEC) No 2187/93

20. Following delivery of the abovementioned judgment, the Council adopted Regulation (EEC) No 2187/93 of 22 July 1993 providing for an offer of compensation to certain producers of milk and milk products temporarily prevented from carrying on their trade.¹¹

22. The amount of the compensation is calculated according to the quantity and period in respect of which compensation is due by applying a series of amounts fixed for each production year (see Article 11 of Regulation No 2187/93 and the Annex thereto). The Annex, which is reproduced below, indicates — for each marketing year — the compensation to be offered according to the size of the farm.

21. In that Regulation, the Council lays down criteria for calculating the amount of compensation and, to that end, determines the hypothetical and actual income of the producers entitled to receive that compensation. In particular, the Council establishes in Article 6 that the hypothetical income is to be determined by reference to the annual quantity used to calculate the premium granted pursuant to Regulation No 1078/77, increased by 1% and reduced by a percentage representing the reductions applied in each Member State to the reference quantities of producers who could not benefit from the additional levy under Regulation No 856/84. Article 9 provides that the quantity in respect of which compensation is payable is to be reduced in respect of the period concerned by the quantities delivered or sold directly

‘ANNEX

Compensation to be offered pursuant to Article 11

(green ecus per 100 kg of milk)

Year	Farm size in terms of milk production		
	<50 000 kg	<120 000 kg	>120 000 kg
1990/1991	7.9	8.8	9.7
1989/1990	8.8	9.7	10.7
1988/1989	8.3	9.2	10.2
1987/1988	6.5	7.4	8.3
1986/1987	6.2	7.1	8.0
1985/1986	6.9	7.8	8.7
1984/1985	5.7	6.6	7.6'

¹¹ — OJ 1993 L 196, p. 6.

The specific claims for compensation

— NLG 578 957.20 for Mr Brinkhoff;

23. The applicants in *Case C-104/89* claimed in their application that the Council and the Commission should be ordered to pay them the following amounts:

— NLG 407 713.40 for Mr Muskens;

— NLG 533 997 to Mr Mulder;

— NLG 916 084.40 for Mr Twijnstra,

— NLG 288 473 to Mr Brinkhoff;

or, at least, such amounts as the Court might deem fair and reasonable, and still with the addition of interest at the annual rate of 8% for the period from 30 March 1989 to the date of payment.

— NLG 448 099 to Mr Muskens;

— NLG 787 366 to Mr Twijnstra.

25. In the statements lodged following the 1992 judgment, the applicants claimed the following amounts by way of compensation:

together with statutory interest at the annual rate of 8% to the date of payment.

— NLG 1 159 000 for Mr Mulder;

24. In their reply, the applicants claimed the following amounts by way of reparation:

— NLG 1 166 000 for Mr Brinkhoff;

— NLG 841 734.60 for Mr Mulder;

— NLG 778 500 for Mr Muskens;

— NLG 1 069 000 for Mr Twijnstra,

(19 May 1992) 'at the rate applied to State loans by the Netherlands authorities'.

or, at least, such amounts as the Court might deem fair and reasonable, together with interest at the annual rate of 8% from the date of delivery of the 1992 judgment in the present case — that is to say, from 19 May 1992 — until the date of payment.

27. In its observations lodged following the 1992 judgment, the Council stated that it was willing to offer compensation in accordance with Regulation No 2187/93.

26. In their statement of 4 June 1997 in response to the expert's report lodged on 27 February 1997, the applicants claimed the following amounts by way of reparation:

28. The Commission considered that compensation was due to the applicants as follows:

— NLG 50 579.15 for Mr Mulder;

— NLG 703 090 for Mr Mulder;

— NLG 109 675.55 for Mr Brinkhoff;

— NLG 570 020 for Mr Brinkhoff;

— NLG 120 090.83 for Mr Muskens;

— NLG 535 762 for Mr Muskens;

— NLG 137 299.20 for Mr Twijnstra.

— NLG 751 141 for Mr Twijnstra,

together with compensatory interest up to the date of delivery of the 1992 judgment

29. The applicant in *Case C-37/90*, Mr Heinemann, claimed in his application that the Council and the Commission should be ordered to pay him the sum of

DEM 52 652, together with statutory interest at the annual rate of 7% from the date on which the action was brought.

30. By document lodged on 17 November 1993 following delivery of the 1992 judgment, Mr Heinemann claimed, by way of reparation, the sum of DEM 71 826, together with interest at the annual rate of 7% from 19 May 1992 plus an additional sum of DEM 4 000 by way of compensation for the income tax payable on the compensation awarded.

31. In its observations lodged following the 1992 judgment, the Council stated that it was willing to offer compensation in accordance with Regulation No 2187/93.

32. The Commission offered the sum of DEM 1 238 by way of reparation.

Admissibility

33. In *Case C-104/89*, the Commission has raised an objection of inadmissibility in respect of that part of the compensation claims which exceeds the amounts claimed in the application.

34. In *Case C-37/90*, the Council and the Commission have raised an objection of inadmissibility in respect of the claim made by the applicant for the first time in his statement of 28 June 1993 concerning the default interest for the period prior to delivery of the 1992 judgment. The defendant institutions maintain that that claim must be regarded as new and therefore inadmissible under Article 42(2) of the Rules of Procedure.

35. In response, the applicants argue that in *Kampffmeyer and Others*,¹² the Court ruled that corrections or increases made during the proceedings to the amount claimed in the application did not constitute new claims under Article 42 of the Rules of Procedure.

36. I would simply point out that, in an action for damages, the applicant is normally entitled during the course of the proceedings to amend the total sum claimed. According to settled case-law, the specification of the amount of the claim for compensation after the application has been lodged actually constitutes 'a permissible amplification of [the claims for relief] contained in the application [and is] there-

12 — In Joined Cases 56/74 to 60/74 *Kampffmeyer* [1976] ECR 711, the Court found admissible an application for damages in which the applicants had reserved the right to indicate in the course of the proceedings the amount of the damages suffered. The application had been lodged for damage caused during a marketing year which had not finished when the application was lodged and the Court found that the application was admissible even though the application had not indicated a precise amount.

fore admissible' under the relevant provisions of the Rules of Procedure.¹³

Substance

Calculation of the compensation in general

37. At the current stage of the proceedings, the Court is being called upon to determine the amount of compensation which the Community was ordered to pay to a group of milk producers by the 1992 judgment. In that judgment, the Court indicated quite comprehensively the rules to be followed for calculating that amount: the damages were to consist in the difference between the income, defined by the parties as the *hypothetical income*, which the applicants would have obtained from the delivery of milk — if a marketing quota had been allocated — and the income which they obtained or could have obtained from activities carried out in replacement of milk production, defined by the parties as the *alternative income*.

38. The main difficulty in determining the quantum stems from the impossibility of deducing this directly from the facts available and the consequent need to resort to presumptions and to principles of fairness. Presumptive evidence basically has to be used for two reasons. First, in order to calculate the hypothetical income, it has proved essential to use as a basis, for almost all the factors relating to the calculation, the mean statistical values for the region in which the farmer is established, in respect of the non-marketing period for which he is entitled to compensation. Second, for the purposes of calculating the alternative income the facts disclosed by the parties are in most cases clearly inadequate, so that, for this calculation as well, both the parties suffering the damage and the defendant institutions use general statistical values.

39. During the course of the proceedings, the parties have reached agreement in principle on the various incomings and outgoings to be taken into account for the calculation in question. The applicants in particular have redefined the terms of their initial calculation, broadly following the method indicated by the Council in Regulation No 2187/93, as outlined above.

40. It is not easy to assess here the accuracy of such a method, that is to say, the justification for choosing the various

¹³ — See, in particular, the judgment in Case 25/62 *Plaumann v Commission* [1963] ECR 95. It should be noted that there is a certain divergence between that case-law and several judgments of the Court of First Instance on the public service, which have held to be inadmissible claims for compensation in which the total amount of damages claimed was not indicated in precise terms. In this respect, see Case T-215/97 *Sari Kristiina Jouhki v Commission* [1998] ECR-SC I-A-503 and II-1513.

factors taken into account and the statistical data used to assess the effect of each factor. That difficulty is offset, however, by the fact that we have to hand several expert's reports which do not deviate from the general framework — or, if they do, do so only marginally — and therefore follow similar methodologies.

cant corresponds to what could have been obtained with the necessary diligence.

42. I will therefore proceed to analyse the various items of income indicated by the parties in each of the joined cases.

Case C-104/89

41. Let us look now at how this method actually works. To determine the hypothetical income, the parties take into account two sources of income, namely sales of milk and sales of cull cows (cows not intended for milk production) and calves. They then deduct only the variable costs, that is to say, the costs which are no longer payable on cessation of milk production, but not the fixed costs (those which the farmer still incurs when production is interrupted). The alternative income, on the other hand, is determined on the basis of the income obtained from three production factors which are released when milk production is interrupted, namely capital, land and labour. The adoption of a presumptive system for calculating the alternative income is rather puzzling since — given that this income is real, not hypothetical — it should in principle be assessed directly on the basis of specific facts. However, as already indicated, the parties have not provided sufficient evidence, making it necessary to use abstract statistical values. The defendant institutions point out in this respect that, in any event, the abstract calculation enables a minimum income threshold to be determined; this in turn makes it possible to ascertain whether or not the income declared by each appli-

43. As already noted, in order to calculate the hypothetical income, it is necessary to determine the profit margin derived from the sale of both milk and calves and cull cows over the period during which the applicants were illegally prevented from marketing milk, and then to deduct the variable costs from the amounts in question. I shall first consider the determination of the period to be taken into account and will then proceed to analyse the elements constituting the hypothetical income and the alternative income.

The periods to be taken into account for the purposes of quantifying the damage

44. In paragraph 26 of the 1992 judgment, the Court determined that the period to be taken into account for calculating the

damage to be compensated is that 'between 1 April 1984 (the date of entry into force of Regulation No 857/84) and 29 March 1989 (the date of entry into force of Regulation No 764/89)'. In light of the judgment in *Birra Wührer*,¹⁴ relied upon by the Council, it should be added that the relevant period for the purposes of determining the damage commences on the date of expiry of the non-marketing undertaking given by each applicant pursuant to Regulation No 1078/77 — hence the date from which the applicants were illegally prevented from resuming milk production — and terminates on 29 March 1989, the day on which a new production quantity was expressly offered to them and the date of entry into force of Regulation No 764/89, which expressly allocated a reference quantity to producers who, like the applicants, had entered into a non-marketing undertaking on the basis of Regulation No 1078/77

45. The date of expiry of the non-marketing undertaking is 1 October 1984 for Mr Mulder, 5 May 1984 for Mr Brinkhoff, 22 November 1984 for Mr Muskens and 10 April 1985 for Mr Twijnstra.

46. It is apparent from the expert's reports submitted by the applicants that milk production was resumed on 1 August 1988 by Mr Mulder and on 31 December 1988 by Mr Brinkhoff. Mr Muskens states that he resumed production at the end of 1989 (p. 34 of Annex 35 to the reply). Mr Twijnstra indicates that the years to be taken into account for the purposes of calculating the compensation are the calendar years 1984 to 1988, excluding therefore the three months of 1989 which fall within the last marketing year prior to the offer of a new milk quota as provided for by Regulation No 764/89. However, the expert states that the actual resumption of milk production by Mr Twijnstra dates back to 30 April 1988. That date is not contested by the applicant or by the Community institutions. Thus, three of the applicants — Mr Mulder, Mr Brinkhoff and Mr Twijnstra — resumed milk production before 29 March 1989. The problem is therefore to determine whether those dates should be regarded as marking the end of the relevant period for the purposes of calculating compensation. The Commission maintains that 1989 should be excluded from the calculation, since all the applicants resumed production in 1988.

47. On this point, there is no reason to depart from the findings of the 1992 judgment. It follows that, since that judgment recognised a right to reparation in respect of the damage caused by failure to grant the milk production quota provided for in Regulation No 857/84, that right disappears upon reallocation of a quota, hence not until 29 March 1989, when Regulation No 764/89 entered into force. Any resumption of milk production before that date constitutes a source of income which must be taken into account when assessing the damage. Consequently, if the

¹⁴ — In paragraph 10 of the judgment in Joined Cases 256/80, 257/80, 265/80, 267/80 and 5/81 *Birra Wührer v Council and Commission* [1982] ECR 85, the Court confirmed that 'the period of limitation which applies to proceedings in matters arising from the non-contractual liability of the Community therefore cannot begin before all the requirements governing an obligation to provide compensation for damage are satisfied and in particular before the damage to be made good has materialised' and therefore that, 'since the situations concerned are those in which the liability of the Community has its origin in a legislative measure, the period of limitation cannot begin before the injurious effects of that measure have been produced, and consequently, in the circumstances of these cases, before the time at which the applicants after completing the transactions entitling them to the refunds, were bound to incur damage which was certain in character'.

income obtained is higher than the income that the applicants would have obtained if a quota had been allocated, there is no need for reparation; if not, however, the applicant concerned will be entitled solely to the difference between the hypothetical income and the actual income. I consider, therefore, that the period to be taken into account for the purposes of assessing the damage starts on the date, indicated by the parties, on which the non-marketing undertaking expired and ends on 29 March 1989.

48. However, given that it is difficult to quantify, on the basis of the data provided by the parties and particularly by the applicants, the exact amount of the damage in respect of the period in which they actually resumed milk production and sales, it seems reasonable and fair to exclude, as the expert did, the 1988/89 marketing year from the overall calculation.

The hypothetical income

49. In order to calculate the hypothetical income, it is necessary first to determine the hypothetical production quantities for the marketing years concerned and then to examine the two sources of income specific

to the production of milk (sales of milk and of cull cows and calves) and the variable costs relating thereto.

— The reference quantities for the hypothetical milk production during the years 1984 to 1989

50. In paragraph 28 of the 1992 judgment, the Court established that, in order to determine the reference quantities to which the applicants were entitled from 1984 to 1989, account must be taken 'of the quantity of milk which they delivered during a representative period prior to their non-marketing period, such as the quantity used as the basis for calculating the non-marketing premium [pursuant to Regulation No 1078/77]'.

51. In the case of the applicants, the reference quantities were as follows:

Mulder	463 566 kg
Brinkhoff	296 507 kg
Muskens	300 340 kg
Twijnstra	591 905 kg

52. The parties agree that those quantities are to be regarded as the hypothetical production quotas for the 1984 to 1989 marketing years.

53. The Court then specified in the 1992 judgment (paragraph 29) that this quantity 'should be increased by 1% by analogy with Article 2(1) of Regulation No 857/84 so as to ensure that the applicants do not suffer a specific restriction compared with producers whose reference quantities are fixed in accordance with Article 2 of that regulation' and should be reduced on the basis of the rates of reduction 'applicable to the producers covered by Article 2 in order to avoid the applicants' being placed at an undue advantage compared with that category of producers'. Those rates of reduction are fixed by the Member States in the event that, in order to determine the additional levy pursuant to Article 5c(1) of Council Regulation (EEC) No 804/68, the national authorities base their calculation on the milk delivered or purchased, not during the 1981 calendar year, but during 1982 or 1983. This ensures that the overall quantity guaranteed to each Member State, which is expressly indicated in Article 5c(3) of Regulation No 804/68, is not exceeded.¹⁵

54. During the course of the proceedings, the parties have agreed that the rates of reduction applied may be those normally used by the Netherlands authorities when calculating the compensation provided for in Regulation No 2187/93. Those rates are as follows:

1984/85	2.05%
1985/86	3.03%
1986/87	3.03%
1987/88	4.97%
1988/89	7.34%
1989/90	7.34%

55. It may therefore be considered that the production quantities for each marketing year are those agreed by the parties, except for any deductions arising from the fact that only part of a marketing year is taken into account (for example, as regards Mr Mulder's 1984/85 marketing year, the reference quantity will be reduced so as to reflect the number of days of that marketing year excluded from the calculation of the compensation. It will therefore be considered that the relevant period for this calculation is 122 days for the 1984/85 marketing year and, accordingly, that the respective reference quantity is equal to 49% of the total).

¹⁵ — Article 2(1) of Regulation No 857/84 provides: "The reference quantity referred to in Article 5c(1) of [Regulation (EEC) No 804/68] shall be equal to the quantity of milk or milk equivalent delivered by the producer during the 1981 calendar year (formula A), or to the quantity of milk or milk equivalent purchased by a purchaser during the 1981 calendar year (formula B), plus 1%". Article 2(2) provides: "However, Member States may provide that on their territory the reference quantity referred to in paragraph 1 shall be equal to the quantity of milk or milk equivalent delivered or purchased during the 1982 calendar year or the 1983 calendar year, weighted by a percentage established so as not to exceed the guaranteed quantity defined in Article 5c of Regulation (EEC) No 804/68".

— The hypothetical income from milk sales

56. The applicants have not produced specific data concerning their milk production, on the basis of which the hypothetical income for the period taken into account could be determined; instead, they have calculated the loss of earnings suffered in each marketing year on the basis of statistics concerning the incomes of representa-

tive farms operating in their sector. The Council and the Commission have disputed whether it is possible to determine the hypothetical incomes in that way and have proposed that the calculation method laid down by the Council in Regulation No 2187/93 be used, subject to any adjustments suggested by the Court. According to the applicants, the total hypothetical income per 100 kg of milk, taken from data based on the DELAR method (the method applied by the Netherlands authorities),¹⁶ is as follows:

Year	Mulder	Brinkhoff	Muskens	Twijnstra
1984/85	62	59	68	—
1985/86	65	64	57	48
1986/87	65	75	58	50
1987/88	70	64	63	54
1988/89	77	67	68	61
1989/90				
1990/91				

The Council and the Commission contest those figures, pointing out, first, that the average income per 100 kg of milk indicated by the applicants is equivalent to approximately NLG 62, as compared with the sum of NLG 45 fixed by Regulation No 2187/93; and, second, that the figures were supplied to the applicants by a private commercial organisation which determines income on the basis of statistical data — the DELAR method — which cannot in any way be regarded as representative of the production of farms operating in the Netherlands. Accordingly, those figures cannot be checked in any way. According to the Commission, the following amounts represent the national averages for income

obtained from the sale of milk during the 1984 to 1989 marketing years (again, per 100 kg of milk):

Year	Commission
1984/85	39.83
1985/86	41.01
1986/87	44.96
1987/88	49.40
1988/89	53.43
1989/90	54.94
1990/91	49.81

¹⁶ — See Annex 1 to the expert's reports lodged as an annex to the statement of 18 June 1990, p. 24 of the original.

57. The parties have failed during the course of the proceedings to reach agreement on the price of milk and therefore on the profit margin. However, they have agreed to use as a basis not the general statistics based on national averages but the actual price of milk applied by the dairies to which the milk was normally delivered. The expert was therefore asked to deter-

mine the specific prices of the milk delivered by each applicant and the net profit resulting. Page 18 of the expert's report indicates — as illustrated by the following two tables — the prices, inclusive of tax, paid by each dairy (Table A) and the respective income obtained by each applicant during the years 1984 to 1989 (Table B).

Table A

	Twee Provinciën (alt) (1) ha/kg	Noord-Nederland (2) ha/kg	Nestlé Ned. Friesland (3) ha/kg	Campina (4) ha/kg	De Goede Verwachting (5) ha/kg
1984	77.87	77.39	77.94	76.73	79.58
1985	78.97	79.06	80.03	77.09	79.56
1986	78.77	78.34	80.06	78.63	79.78
1987	80.55	79.34	81.05	79.57	81.28
1988	85.63	84.90	87.11	82.12	85.83
1989	84.35	80.36	86.22	86.32	85.40

(1) Mulder

(2) Brinkhoff

(3) Brinkhoff

(4) Muskens

(5) Twijnstra

Table B

	Mulder		Brinkhoff		Muskens		Twijnstra	
	Total	/100 kg	Total	/100 kg	Total	/100 kg	Total	/100 kg
1984/85	177 582 (1)	77.87	206 031 (3)	77.67	80 978 (5)	76.73	0 (7)	79.58
1985/86	358 536	78.97	230 997	79.55	226 762	77.09	449 845	79.56
1986/87	357 628	78.77	229 995	79.20	231 292	78.63	462 493	79.78
1987/88	358 393	80.55	228 226	80.20	229 374	79.57	461 762	81.28
1988/89	101 779 (2)	85.63	201 386 (4)	86.01	230 821 (6)	82.12	39 078 (8)	85.83

(1) from 1/10/84

(2) to 9/7/88

(3) from 5/5/84 (4) to 2/2/89

(5) from 22/11/84 (6) to 31/3/89

(7) from 10/4/85 (8) to 30/4/88

58. The applicants broadly acknowledge the accuracy of the prices indicated by the expert. However, referring to the observations made by the LEI (Landbouw Economisch Instituut) on that report — appended to their statements of 4 June 1997 — the applicants state that the expert has in fact reduced the amount of the compensation by approximately NLG 10 000 by choosing to take into account calendar years rather than the various marketing years, which start on 1 April.

deliveries from Mr Twijnstra. In light of the foregoing considerations, I therefore regard it as fair and reasonable that the calculation of the (hypothetical) income obtained from the sale of milk should be made on the basis of the values indicated by the expert and set out above. However, that does not apply in the case of the income for the 1988/89 marketing year, which, as explained, was postulated by the expert on the basis of figures which have proved to be inaccurate.

— The hypothetical income from the sale of cull cows and calves

59. Those criticisms do not detract from the reliability of the figures provided by the expert who, in any case, produced at the hearing data on incomes calculated on the basis of the mean price of milk for each marketing year. It is apparent from these tables that the variation in annual income is limited to a relatively small increase in the total income. Nor does there appear to be any ground for the Commission's criticism that the expert made an error by using, for Mr Twijnstra, the data concerning the annual price of milk applied by the 'De Goede Verwachting' dairy, rather than the 'Twee Provinciën' dairy named by the applicant as being the dairy which he normally supplies. It is sufficient to observe in this respect that the expert explained that the first dairy, De Goede Verwachting, had purchased the second, thus becoming the hypothetical recipient of the milk

60. For the purposes of calculating the hypothetical income, the sale of 'cull' cows (cows intended for slaughter) and calves must be taken into account. This element was specifically introduced by the Commission in the calculation of the compensation offer made following the 1992 judgment, even though the parties had not quoted them as separate items in the expert's reports submitted during the written procedure prior to delivery of that judgment. Accordingly, the applicants took into account the annual income obtained from the sale of cull cows and calves. They also

specified the amounts of that income, deduced from the LEI statistics (see Annex 1 to the statement of 22 December 1993, Table 1), as per the following table.

	1984	1985	1986	1987	1988
Turnover and reorganisation per cow *					
LEI	710	790	685	815	940
DELAR	745	840	760	890	990
Percentage difference	+ 4.9%	+ 6.3%	+ 10.9%	+ 9.2%	+ 5.3%

* Indicative income obtained from the sale of cull cows and calves, expressed per 100 kg of milk.

The Commission, too, suggested figures for the prices obtained for calves and cows (see the following table), which, in its opinion, should be higher than those used by the applicants.

	1984/85	1985/86	1986/87	1987/88	1988/89
Price of a calf	385	395	418	440	465
Residual value of dairy cow	1 600	1 650	1 700	1 750	1 800

The parties have reached agreement on the above figures provided by the Commission.

61. In order to determine the hypothetical income from the sale of cull cows and calves, the expert bases his calculation on the unit prices proposed by the Commission. However, he assumes that the number of animals is different from that used by the

parties, inasmuch as this must include all the animals needed if the herd is to be self-renewable and constant milk production maintained. The total number of animals necessary to form a herd containing 100 dairy cows is given in Table A. The income obtained from the sale of cull cows and calves by each applicant during the five relevant marketing years is indicated in Table B. It should be noted that the expert rounded up the number of cows and calves wherever the calculation resulted in a fraction of an animal.

Table A

	Start of year	Births	Losses	Sales	Replacements - +		End of year
Dairy cows	100	—	(1)	(25)	—	26	100
Heifers + 2 years	12	—	—	—	(12)	12	12
Heifers 1-2 years	26	—	—	—	(26)	26	26
Heifers 0-1 year	27	—	(1)	—	(26)	27	27
Female calves	0	50	(6)	(17)	(27)	0	0
Male calves		50	(7)	(43)	—	0	0
Total	165	100	(15)	(85)	(91)	91	165

Table B

	1984/85	1985/86	1986/87	1987/88	1988/89
Mulder					
Income from cows and calves	29 024	62 840	62 606	52 012	49 498
Brinkhoff					
Income from cows and calves	34 976	38 949	39 677	33 373	27 349
Muskens					
Income from cows and calves	13 737	38 949	34 239	37 075	33 090
Twijnstra					
Income from cows and calves	0	78 076	79 467	65 984	5 114

Both the institutions and the applicants contest these calculations and the results produced and generally maintain that the rounding-up of the figures alters the final amount. In particular, the Commission argues, on the strength of the LEI's observations on the expert's report, that although calculation of the average of the number of cows which produce milk on a farm can lead to tenths of an animal being taken into account, the rounding-up can cause account to be taken of a quantity of

milk which exceeds the actual annual production by five or six thousand kilograms.

62. Apart from this criticism, which is relatively minor, the parties do not contest the general figures representing the composition of the herd; nor have they proposed other models for assessing the number of

animals. In those circumstances, it is reasonable and fair to adopt the expert's calculation, which also takes account of the 'mean price' of the cull cows and calves on which the parties have agreed.

— The variable costs

63. For the purposes of calculating the milk production costs, the Council and the Commission take into account only the variable costs, that is to say, those which disappear when milk production ceases, and not the fixed costs, which the appli-

cants continue to bear even in the absence of milk production. The 13th recital in the preamble to Regulation No 2187/93 refers to variable costs, stating that the potential revenue is calculated by deducting, 'on the expenses side,... only the variable costs which are immediately eliminated when milk production ceases and not the fixed costs relating to land, labour and capital'. Although the Council did not, in that Regulation, include 'labour' among the variable costs, within the framework of these proceedings both the Council and the Commission have considered it necessary to take into account, in addition to the other variable costs, that relating to (hypothetical) external labour. That is why the disagreements on the calculation of the variable costs focus on labour costs, together with the other main item of expenditure, namely the cost of fodder.

Data provided by the Commission

Variable costs	1984	1985	1986	1987
Muskens	- 18.10	- 35.63	- 35.30	- 34.72
Mulder	- 27.34	- 29.56	- 28.91	- 26.16
	1984/85	1985/86	1986/87	1987/88
Brinkhoff	- 42.92	- 36.38	- 32.98	- 31.92
Twijnstra	—	- 42.41	- 40.21	- 39.31

Data provided by the applicants

Variable costs, particularly fodder	1984/85	1985/86	1986/87	1987/88	1988/89
Mulder	52.65	53.37	48.58	42.55	40.92
Brinkhoff	49.07	49.74	45.28	39.66	38.14
Muskens	50.18	50.87	46.30	40.56	39.01
Twijnstra	38.27	38.79	35.31	30.93	29.75

64. Unlike the parties, the expert defined the various items of expenditure, proposing the figures which appear in the following

tables. These tables relate to two areas of the Netherlands. For each area, two different groups of costs are taken into account.

Data relating to the northern region of the Netherlands

Table 1

Year	Fodder NLG/animal	Other variable costs NLG/animal	Total variable costs NLG/animal	No of animals/ha	Total NLG/ ha	Total 2 NLG/ha	Total NLG/ha
1984/85	1 391	207	1 598	2.03	3 244	2 050	5 294
1985/86	1 398	217	1 615	2.02	3 262	2 093	5 355
1986/87	1 319	268	1 587	1.88	2 984	2 084	5 068
1987/88	1 129	304	1 433	1.79	2 565	1 955	4 520
1988/89	1 142	322	1 464	1.68	2 460	1 786	4 246

Table 2

Year	Energy costs NLG/ha	Cultivation costs NLG/ha	Products obtained from cultivation etc. NLG/ha	Sub- contracting NLG/ha	Hire and mainte- nance of machinery	Mainte- nance of buildings	Feed for other animals	Total 2 NLG/ha
1984/85	194	595	-196	298	1 083	87	-11	2 050
1985/86	186	679	-292	290	1 149	88	-7	2 093
1986/87	139	651	-360	272	1 285	104	-7	2 084
1987/88	137	537	-546	357	1 357	121	-8	1 955
1988/89	127	498	-608	304	1 339	135	-9	1 786

Data relating to the western region of the Netherlands

Table 1

Year	Fodder NLG/animal	Other variable costs NLG/animal	Total variable costs NLG/animal	Total costs Number of animals/ha	Total variable costs/ha NLG/ha	Total 2 NLG/ha	Total NLG/ha
1984/85	1 622	248	1 870	2.32	4 338	1 948	6 287
1985/86	1 589	226	1 815	2.2	3 993	2 017	6 010
1986/87	1 517	243	1 760	2.06	3 626	2 181	5 806
1987/88	1 286	303	1 589	1.87	2 971	1 907	4 879
1988/89	1 229	279	1 508	1.81	2 729	1 845	4 574

Table 2

Year	Energy costs NLG/ha	Cultivation costs NLG	Products obtained from cultivation etc. NLG/ha	Sub- contracting NLG/ha	Hire and mainte- nance of machinery	Mainte- nance of buildings	Feed for other animals	Total 2 NLG/ha
1984/85	194	477	-208	240	1 149	116	- 20	1 948
1985/86	186	535	-204	262	1 159	103	- 24	2 017
1986/87	139	521	-188	240	1 361	124	- 16	2 181
1987/88	137	401	-433	345	1 357	123	- 23	1 907
1988/89	127	386	-443	319	1 342	138	- 24	1 845

These figures have been criticised by the applicants and by the defendant institutions in terms of both the identification of the various items of expenditure and the quantification of the amounts relating to them. According to the applicants, who refer to the LEI's report annexed to their observations of 4 June 1997, most of the expenditure in the second table on page 33 of the

expert's report (energy costs, cultivation costs, feed for animals not involved in milk production, costs of hiring and, in particular, of maintaining machinery and cowsheds — this last cost accounting for a fairly large sum) does not fall within the concept of variable costs, inasmuch as those expenses are linked to activities which are also carried out in the absence

of milk production. In its report, the LEI points out, in particular, that the cost of wages, the cost of maintaining equipment and cowsheds and the costs of water and electricity cannot be regarded as variable costs, even though they affect the income generally obtained from milk production. The LEI therefore deducts these costs. However, since minimal values are assigned to those costs, that only minimally reduces the income. The LEI also observes that the items covering the costs of seeds and plant

health products are taken into account twice, since they appear in the second column in both the first and second tables. Finally, the LEI takes the view that costs should be calculated using the system indicated by the Commission in Decision 85/377/EEC¹⁷ and, with regard to the various items specified therein, proposes the figures given in the following table. These figures concern the annual production of 100 kg of milk and include both the variable costs (Table A) and, to a lesser extent, the fixed costs (Table B):

Table A

Accounting year	Variable costs excluding fertilizers (p. 33 of the Ernst & Young report, Table 1), 'total var/ha', after correcting the cost of fodder)	Fertilizers ('dairy cows 1975—1995', p. 110, Annex 1a)	Total variable costs/ha
1984/85	3 191	605	3 796
1985/86	3 192	680	3 872
1986/87	2 914	642	3 556
1987/88	2 471	529	3 000
1988/89	2 373	487	2 860

17 — Annex I to Commission Decision 83/377/EEC of 7 June 1985 establishing a Community typology for agricultural holdings (OJ 1985 L 220, p. 1) specifies, in point 1(c), that 'in order to calculate the SGMs the following specific costs are deducted from the gross production: (1) *In the case of crop production* — seeds and seedlings (purchased or produced on the farm), — fertilizers purchased, — crop protection products, — various specific costs including: — water for irrigation purposes, — heating, — drying, — specific marketing costs (e.g. grading, cleaning, packaging), and processing costs, — specific insurance costs, — other specific costs.'

Table B

Non-variable costs to be deducted						
Year	Fuel	Hire of machinery and other activities	Wages	Water	Electricity	Equipment
1984/85	110	78	297	62	157	129
1985/86	117	83	290	54	152	133
1986/87	89	82	273	64	104	144
1987/88	81	67	355	59	101	142
1988/89	79	64	304	55	93	151

Total non-variable costs to be deducted		Total	Total
Year	Total	Variable costs	Costs to be deducted
1984/85	833	3 796	4 629
1985/86	829	3 872	4 701
1986/87	756	3 556	4 312
1987/88	805	3 000	3 805
1988/89	746	2 860	3 606

On the basis of those data, the LEI calculates the (hypothetical) milk production costs of the applicants for the 1984 to 1989 marketing years as follows:

Year	Mulder		Brinkhoff		Muskens		Twijnstra	
	Total	/100 kg	Total	/100 kg	Total	/100 kg	Total	/100 kg
1984/85	96 382	42.26	113 422	42.76	38 975	36.93	0	0
1985/86	190 843	42.03	121 022	41.67	111 115	37.77	236 077	42.72
1986/87	174 300	38.39	112 377	38.70	102 577	34.87	222 462	38.37
1987/88	148 802	33.44	95 658	33.61	97 657	33.88	189 190	33.30
1988/89	39 984	33.64	79 685	34.03	91 654	32.61	15 346	33.71

65. The expert pointed out at the hearing that the LEI had actually included in the variable costs the hire and maintenance of machinery, fuel, electricity and water, and had admitted also taking into account sources of expenditure which the parties do not include in their calculations but regard as sources of alternative income and therefore deduct from the total amount of the hypothetical income. In particular, according to the expert, a comparison of the figures proposed by the LEI and those given in the expert's report would lead to roughly the same result, the only difference arising from the assessment (lower by the LEI) of the costs of maintaining the machinery.

definition of variable costs in Decision 85/377.

67. Having generally examined the components of the production costs, a more detailed examination should be made of the two main elements of those costs, namely the purchase of fodder and the use of external labour.

— The cost of fodder

66. The framework presented by the expert is meticulous but unclear. Several sources of expenditure are listed which do not appear to be directly linked to milk production. Since such an approach can only unfairly penalise the farms which have already suffered damage, I consider that, in calculating the costs to be deducted from the hypothetical income, it is in fact appropriate to take into account only the costs linked — and not just — marginally to milk production. In my view, therefore, the table of costs produced by the expert is not totally reliable. In fact, the data provided by the LEI, which appears in the document produced by the applicants, with which one can therefore assume they agree and which has not, moreover, been contested by the Commission, may constitute a reliable reference basis. The LEI in fact used the official data of the Netherlands authorities and broadly follows the Commission's

68. The determination of the cost of fodder raises two problems. The first concerns the number of cows required, in the years 1984 to 1989, for each applicant to produce the milk quantities indicated above, whilst the second concerns the question whether those costs can also be determined in relation to the size of the farm.

69. (1) With regard to the cost of fodder, the figures produced by the applicants and by the Commission are significantly different. The applicants indicate that the figures which they have used range between NLG 26 and NLG 37 per 100 kg of milk (see the LEI report annexed to the statement of 22 December 1993), whereas the figures used by the Commission vary between NLG 60 and NLG 70, likewise

per 100 kg of milk. This difference seems to stem from the differing estimates of the number of cows required for milk production during each marketing year. According to the Commission and the Council, it should be assumed that the number of cows remained unchanged during the years taken into account for the purposes of calculating the compensation. This implies that the number of cows to be taken into account should be the number of cows owned by the applicants at the beginning of the non-marketing period, namely 1978. According to the applicants, however, given the increase in productivity of farms throughout Europe, which can be statistically proven, the basic datum to be used should be that of the average production of farms in the Netherlands during the period from 1984 to 1989. The Commission observes in this respect that, in the case of at least three of the four applicant producers, productiv-

ity was already below the average during the period prior to the non-marketing undertaking and that the production capacity figures for the various farms cannot therefore be underestimated.

70. However, the expert, like the applicants, does not accept that the cost of fodder can be calculated without taking into account the average productivity of farms which, as has been established, is constantly increasing. From this he infers that the productivity of the applicants' farms must be determined on the basis of the general data for the regions in which the farms are situated. The general statistics on productivity in the western and northern regions of the Netherlands are, according to the expert, as follows:

Year	North	West
1984/85	5 410 kg/year	5 455 kg/year
1985/86	5 600 kg/year	5 660 kg/year
1986/87	6 000 kg/year	6 015 kg/year
1987/88	6 390 kg/year	6 120 kg/year
1988/89	6 435 kg/year	6 155 kg/year

On the basis of those data, the expert arrives at the conclusion that the number of cows needed to ensure, in the years 1984 to

1989, the production of the reference quantity of each applicant is that given in the following table:

Number of cows	1984/85	1985/86	1986/87	1987/88	1988/89
Mulder					
Reference quantity	458 604	454 01	454 015	444 932	433 836
Productivity	5 410	55 600	6 000	6 390	6 435
Number of cows	85	82	76	70	68
Brinkhoff					
Reference quantity	293 333	290 398	290 398	284 588	277 491
Productivity	5 410	5 600	6 000	6 390	6 435
Number of cows	55	52	49	45	44
Muskens					
Reference quantity	297 125	294 152	294 152	288 267	281 078
Productivity	5 455	5 660	6 015	6 120	6 155
Number of cows	55	52	49	48	46
Twijnstra					
Reference quantity	585 569	579 710	579 710	568 112	553 944
Productivity	5 410	5 600	6 000	6 390	6 435
Number of cows	109	104	97	89	87

Also, according to the expert, the annual cost of fodder per cow would be, in the northern and western regions respectively, that indicated in the following two tables:

Western regions

Fodder NLG/animal	
1984/85	1 622
1985/86	1 589
1986/87	1 517
1987/88	1 286
1988/89	1 229

Northern regions

Fodder NLG/animal	
1984/85	1 391
1985/86	1 398
1986/87	1 319
1987/88	1 129
1988/89	1 142

71. The expert's analysis can be accepted. Indeed, it is reasonable and fair to use national average values to establish the

hypothetical performance of each farm. It is impossible to establish that development solely on the basis of (hypothetical) data for each farm, as the data in question vary according to a variety of internal and external factors whose effect on the production volume is difficult to establish by means of assumptions. According to this reasoning, although the expert's assessment starts from one figure, namely the reference quantity of each producer, which gives an indication of the capacity and size of the individual farm, he goes on to develop that value by taking into account the increase in the national average productivity which constitutes the only reference for plotting the performance of a farm.

tion cost. However, applying the Commission's calculation method, the costs would increase in proportion to the acreage.

73. On this point, reference need only be made to the expert's critical observations. He states that, by including the size of the farm in the elements on which the cost of fodder is based, the Commission has in fact also taken into account costs (such as feed and veterinary care) which may also relate to other animals on the farm. This confirms that the figures proposed by the Commission cannot be taken into account for the purposes of calculating the variable costs.

72. (2) Turning to the examination of the second problem in determining the cost of fodder, it should be observed that the Commission also takes into account the acreage covered by each farm. It justifies this choice by reference to both the official calculation methods indicated by the LEI and the need to calculate the productivity according to the size of each farm. The method adopted consists in dividing the number of hectares covered in the case of each farm by the number of cows and the number of kilograms of milk produced. The applicants criticise the Commission's calculations, maintaining that the data on which those calculations are based are completely unrealistic, given that they do not take into account the fact that the variable costs of milk production vary in inverse proportion to the acreage: that is to say, the more land there is, the less effect the variable costs have on the total produc-

— The cost of wages

74. The applicants all state that they did not have recourse to external labour during the period following the interruption of milk production. However, as this case requires a hypothetical income to be calculated, it must be considered whether this item of expenditure should also be taken into account when calculating the total production cost and, on this basis, the (hypothetical) income of the farmer, that is to say, whether, for the (hypothetical) production of the reference quantity, the (hypothetical) cost of external labour should also be included.

The Commission has chosen to take into account the cost of wages in the case of each applicant and provides the following figures, expressed in terms of the production of 100 kg of milk:

Cost of external labour	1984/85	1985/86	1986/87	1987/88	1988/89
Mulder	21.87	22.15	22.16	22.41	23.11
Brinkhoff	12.80	12.97	12.97	13.11	13.53
Muskens	12.08	12.23	12.24	12.37	12.76
Twijnstra	19.23	19.47	19.48	19.69	20.31

The applicants contest this method of calculation on the ground that the cost of wages should not be deducted from the hypothetical income. In support of that argument, they state that, according to the statistics provided by the LEI, recourse to paid workers on farms in the Netherlands does not normally exceed the threshold of 4% of the total labour force working on the farm. They also point out that, in Decision 85/377 and in its proposal of 21 April 1993 for a regulation providing for an offer of compensation to certain producers of milk or milk products,¹⁸ the Commission did not take into account wage costs when calculating the hypothetical income. They also contest the basic data for calculating the wage, to which the Commission refers in its defence: according to the Commission, the production of milk requires 60 hours' work per cow per annum, whereas the applicants consider

that 35 hours per cow per annum are sufficient.

75. The expert considers that, for milk production, account should be taken not only of the work undertaken directly by the owner of the farm, as the applicants and the Commission indicate, but also of that done by family members. The expert states that the farmer devotes 2 496 hours per annum to the production of milk (equivalent to 8 hours per day) and that it can be assumed that the time spent by family members on this activity is approximately (according to the LEI's statistics, to which he refers) 80% of the hours worked by the farmer himself, that is to say, 1 996 hours per annum, giving a total of 4 492 hours per annum worked by the farmer and the family members. For the purposes of calculating the costs, only the working time over and above that of the farmer and the

18 — See COM(93)161 final.

family members is taken into account. The expert concludes that the cost of external labour for the applicants' hypothetical production would be as follows:

Year	Mulder		Brinkhoff		Muskens		Twijnstra	
	Total	/100 kg	Total	/100 kg	Total	/100 kg	Total	/100 kg
1984/85	—	—	—	—	—	—	—	—
1985/86	—	—	—	—	—	—	7 658	1.35
1986/87	—	—	—	—	—	—	—	—
1987/88	—	—	—	—	—	—	—	—
1988/89	—	—	—	—	—	—	—	—

76. As already indicated, the first question to arise when considering this item of expenditure is whether it should be included in the calculation of the hypothetical income. Although the farmer may have recourse to external labour, in my opinion it cannot be assumed, on the basis of general statistical values, that this is inevitable. It must therefore be established whether the calculation of the hypothetical income should automatically include this item of expenditure based on the working hours needed to ensure the production of the quantity of milk of each farm and on the presumed working hours of the owner of the farm and possibly those of his family — as indicated by the expert — or whether the actual situation of each farm should be examined in order to determine whether the farm normally had recourse to external labour during the periods preceding and following the interruption of production. In practice, in order to determine

the significance of this item of expenditure, an analysis of the actual situation of each farm is indispensable, since the use of external labour is linked to very personal choices made by the farmer, such as the distribution of labour among family members. As a result, the statistical data does not in principle support the presumption that external labour is employed.

77. Given that, in this case, it is common ground that the applicants did not use external labour other than sporadically, that is to say, since no positive evidence has been provided that any of the applicant holdings constantly used external labour, it cannot be concluded from abstract values such as statistical averages that the statements made by the applicants — not refuted by any evidence in rebuttal — should

be left out of account in the analysis of such a hypothetical cost. If those statements were deemed to be unfounded, notwithstanding the lack of evidence to the contrary, this would impose on the applicants the burden of proving a negative fact (the non-hiring of external labour), a task which, according to general legal principles, cannot be imposed on a plaintiff (*negativa non sunt probanda*). It follows that, in calculating the hypothetical income, reference cannot be made to external labour costs unless it is shown that external workers were normally employed for the period during which the milk was produced. If this fact is contested, the institutions must prove the presence of workers from outside the family or the absolute necessity of using such workers. In the present case, no such evidence has been adduced. In fact, as indicated above, it is agreed between the parties — and moreover confirmed by the expert — that the applicant farms did not normally employ external labour. I therefore consider that, in this case, this item of expenditure should not be included in the applicants' variable costs. I would add that the expert himself reached the same conclusion (except as regards Mr Twijnstra's 1985/86 marketing year) by following the method of applying abstract values taken from general statistics.

78. In light of the above, it seems reasonable and fair to calculate the costs in this case in the manner set out by the LEI. Accordingly, neither the cost of maintaining the machinery nor the cost of external

labour should be taken into account.¹⁹ That aside, the calculation method chosen by the LEI, which I propose to follow, with perhaps a few minor variations, coincides with the expert's calculation.

The alternative income

79. It must first be stated that, whereas it proved appropriate to calculate the hypothetical income (except for the income obtained from the (hypothetical) sale of milk) using national average values drawn from the statistics for the period in question — subject to the reservations indicated above concerning the assessment of the effect of the labour cost — in the case of the alternative income, that is to say, net profits obtained from the activities replacing milk production, it is not possible *a priori* to rule out an examination of the activities *actually* carried out by the applicant farms. This is because, as mentioned

¹⁹ — It is noted in this respect that, in the table relating to the LEI calculation, the fixed costs include an item entitled 'Loonwerk' or 'wages'. This item covers the costs of any activities carried out on a sub-contracting basis, as is confirmed by the fact that the reported values are those indicated — with slight deviations — under the 'sub-contracting' item in the expert's table.

above, it appears that when the applicants ceased milk production, they carried out various replacement activities.

Twijnstra, of converting their farms to activities other than milk production. Mr Mulder turned to breeding sheep, bulls and dairy cows and grazing cattle, whilst Mr Twijnstra concentrated on cultivating vegetables and selling cattle feed. The situation of Mr Brinkhoff was different, in that he carried out a paid activity, as was that of Mr Muskens, who was able to diversify the crops on his land.

80. That said, it is necessary to identify the criteria to be applied in calculating the alternative income. Our point of departure is the 1992 judgment, according to which, in cases where the income obtained by the applicants from activities replacing milk production is lower than the minimum income which the farm would presumably have obtained by producing milk, the fall in income in relation to the minimum values is to be attributed to the negligence of the party suffering loss and therefore entails a corresponding reduction in the sum to be paid by way of reparation. It need hardly be added that the burden of proving, even if only by presumption (as in this case), negligence on the part of the farm owner falls on the defendant institutions, as this is a circumstance which either cancels or reduces the obligation to provide compensation. Consequently, failing sufficient evidence, the hypothetical income cannot be reduced by an amount higher than the alternative income actually obtained during the period in question.

81. In the case of *Mulder and Others*, the applicants confine themselves to declaring — without however producing any evidence — that the incomes they obtained were only minimal, because of the difficulty, particularly for Mr Mulder and Mr

82. The defendant institutions maintain that the parties have not provided adequate evidence of the income obtained from the replacement activities and have, in any case, indicated excessively low alternative incomes. The institutions propose to adopt the abstract calculation method which is broadly defined by Regulation No 2187/93. That method does not refer to actual alternative income, being based, as indicated above, on the determination of the income deriving from each of three production factors (capital, land and labour) released in consequence of the interruption of milk production. This method, according to the institutions, leads to the finding that, where a farm can prove having carried out a production activity and having obtained from that activity an income lower than that determined on the basis of this calculation method, its claim for compensation must be rejected in so far as it relates to the difference between the actual alternative income and the hypothetical alternative income determined using

the abstract system. In such cases, according to the institutions, it must be supposed, by way of premiss to the calculation, that the farm has not shown that it exercised 'due diligence' in its efforts to limit the loss.

83. Following the adoption of Regulation No 2187/93 — hence after the 1992 judg-

ment — the applicants accepted the possibility of applying such a calculation method and also indicated their respective (hypothetical) alternative incomes determined precisely according to that method (see, in particular, the applicants' statement of 22 December 1993 and the LEI's expert's report appended to that statement). The data on the alternative incomes provided by the applicants and by the Commission appear in the following table:

Balance of the replacement activities*					
Year	Mulder	Brinkhoff	Muskens	Twijnstra	Commission
1984/85	12	31	32	—	19.66
1985/86	13	32	16	12	19.39
1986/87	16	27	24	14	18.46
1987/88	13	11	12	10	18.41
1988/89	73 **	15 **	15	39 **	18.73

* All amounts are expressed in NLG and are per 100 kg of milk.

** Including the income obtained from milk production.

84. It is easy to see that the differences in the determination of the alternative income relate, at the current stage of proceedings, not so much to whether or not general account is taken of the actual incomes of the applicants as to the assessment of the incomes hypothetically attributable to the three production factors released, by reference to which the minimum profit which each farm *should* have obtained from 'replacement activities' falls to be calculated. As a result, since it cannot be excluded from the outset that actual income has a place in the calculation of the alternative income, the hypothetical alternative incomes should be calculated first, and only then should it be ascertained whether these are higher than the actual

incomes. The actual incomes will therefore be taken into account only if they are higher than the hypothetical incomes.

85. That said, I now propose to examine the various elements which determine, to a greater or lesser extent, the quantification of the alternative incomes and, specifically, the 'capital factor', the 'land factor' and the 'labour factor'.

— The capital factor

86. With regard to the income derived from the release of capital, the Commission maintains that this must be calculated not only on the basis of the capital obtained from the sale of animals after the interruption of production but also on the basis of the capital released because of the reduced cost of maintaining installations (cowsheds, silos and agricultural equipment). That reduction amounts to around 50% of the costs borne by the farm when carrying out its production activity. The capital in question is estimated by the Commission to amount, in total, to an average of NLG 6 700 per cow, plus interest at the annual rate of 5.5% (NLG 368.50 per cow).

87. The applicants dispute the Commission's calculations in several respects. First, they contest the inclusion of costs relating to the maintenance of installations such as cowsheds and milking machines, since the farms still had to maintain these for other activities. They add that, even if those machines had been sold, their market value would have been minimal and therefore much lower than what they would have represented, for the same farmer, if re-used on the resumption of milk production. The Commission replies that it has taken into account the possibility of the machines being used for purposes other than milk production and that this is why it included only 50% of the maintenance costs in the

alternative incomes. The Commission also questions whether those machines can still, as the applicants maintain, be re-used after a lengthy interruption of milk production.

88. Second, the applicants state that the Commission's calculation of the market value of cows sold is based on the market prices charged in the middle of the 1980s whereas the years which should be taken into account are 1978 and 1979. It was actually during those years, prior to the non-marketing undertaking, that the cows were sold. The price difference is considerable since the average market value of a cow was NLG 3 100 in 1978 and 1979, as compared with the figure of NLG 6 700 quoted by the Commission. The latter contends that the figure of NLG 6 700 was determined by taking into account not only the specific value of a cow but also the costs, in relation to a single cow, of the equipment and machinery used for milk production. The value of the cow for the purposes of calculation would actually be NLG 1 800, not NLG 3 500, the figure quoted by the applicants on the basis of the data provided by the LEI.

89. Finally, the applicants contest the inclusion of interest in the calculation of the income from capital as they assume that any capital obtained from the sale of cows would be partly or totally used to carry out the replacement activities and that, in any

case, an item of income from capital not included in the sources of hypothetical income cannot be taken into account for calculation purposes.

90. The data provided by the Commission are somewhat puzzling. It seems legitimate to question how the amount of the reduction in machinery maintenance costs can be regarded as income-producing capital. Although there is no doubt that the interruption in milk production led to a reduction in those costs, that reduction is not actually easy to ascertain and quantify given that, as already observed, the effect of the interruption of milk production on any intensification of the use of the equipment in question for activities other than milk production cannot be assessed. In any case, the cost of the machinery, which is linked to the (hypothetical) milk production from 1984 to 1989, has already been taken into account in calculating the hypothetical income. It follows that, if the reduction in machinery maintenance costs were included in the sources of income from capital, it would actually be counted twice: once as an item of expenditure and

once as a component of the alternative income.

91. The expert also maintains, like the applicants, that the calculation of the alternative income from capital must include only the income from the sale of dairy cows. Machinery, such as the refrigerating installations, should be taken into account only in the variable costs. He therefore suggests the following calculation method: the commercial value of the animals in a herd at the time of the hypothetical resumption of production, namely 1985, is taken as the basic datum; this amount is then increased by interest at the rate offered by local savings banks and reduced to take account of the rate of inflation, in both cases by reference to the years in question. The average price of a cow during the periods in question was, according to the expert, NLG 2 358, a figure which represents the average price of cows at the various stages of lactation. The expert therefore proposes, in relation to the applicants alone and for the various periods involved, the amounts shown in the table below.

	Mulder		Brinkhoff		Muskens		Twijnstra	
Capital (NLG)	200 430		129 690		129 690		245 232	
1984/85	4 256	1.87	5 008	1.89	1 967	1.86	0	1.87
1985/86	8 478	1.87	5 486	1.89	5 486	1.86	10 118	1.79
1986/87	12 367	2.72	8 002	2.76	8 002	2.72	15 131	2.61
1987/88	13 108	2.95	8 482	2.98	8 482	2.94	16 038	2.82
1988/89	3 646	3.07	7 267	3.10	8 611	3.06	1 338	2.94

92. The Commission does not agree with this calculation method. In its view, the rate of inflation cannot be deducted from the interest rate offered by local savings banks, inasmuch as the applicants could have obtained other income from such capital, thereby compensating for the losses resulting from the rise in consumer prices.

93. It seems reasonable and fair to follow, in this case, the method recommended by the expert for calculating the alternative income from capital. As already seen, that method is based on the market price of the cattle at the time when these would presumably have been purchased, that is to say, at the time of the probable resumption of milk production. As noted, the expert includes among the animals to be taken into account the heifers and cows at the various stages of lactation. He therefore takes into account all the animals which were involved in milk production. To my mind, even the inclusion of these latter elements in this calculation is correct.

94. The solution recommended by the expert should be accepted. According to his method, the interest rate applied to the capital is that offered by the local savings banks, which is the rate which reasonably approximates most closely to what the

applicants may be regarded as having actually received. However, I do not believe that account should also be taken, as the expert suggests, of the effects of inflation on the (hypothetical) income derived from capital and that the interest rate should therefore be reduced by a value equal to that of inflation. The reason for this is that, if the rate of inflation is deducted from the interest rate applied by the local savings banks, the variation in the purchasing power of money is borne by the holder of the capital, thus penalising, without any justification, the applicants who are entitled to compensation. The fact is that the income from capital, given the constancy of the nominal value and the rise in consumer prices, falls as the purchasing power of money decreases.

— The land and labour factors

95. (a) The income from the land factor relates to the land not used for stock-farming. According to the Commission, this must be calculated on the basis of the average rent per hectare of agricultural land in the country in which the farm is established. The data provided in this respect by the Commission are as follows:

1984/85	1985/86	1986/87	1987/88	1988/89
435	443	468	490	478

The applicants do not contest those data. It should be pointed out that the figures indicated by the Commission coincide almost totally with those indicated by the LEI, that is to say, the source to which the applicants refer to justify their claims. The expert maintains, by contrast, that, for the purposes of determining the income derived from the land released following the inter-

ruption of milk production, account must be taken not only of the income deriving from the letting of agricultural land but also that produced by the letting of buildings. The income derived from the land released and the buildings situated on that land is, for each applicant, that indicated in the following table:

	Mulder 42 ha		Brinkhoff 24 ha		Muskens 24 ha		Twijnstra 54 ha	
	Total	/100 kg	Total	/100 kg	Total	/100 kg	Total	/100 kg
1984/85	13 367	5.86	15 731	5.93	4 530	4.29	0	5.89
1985/86	26 508	5.84	16 764	5.79	13 153	4.48	32 701	5.80
1986/87	26 640	5.87	17 129	5.91	12 525	4.27	33 909	5.87
1987/88	27 335	6.14	17 525	6.17	13 542	4.71	34 660	6.12
1988/89	7 596	6.39	15 097	6.47	14 624	5.22	2 908	6.40
Total	101 446		82 246		60 374		104 178	

96. That method of calculating the income derived from the 'land released' is criticised both by the Commission, which points out that it is not clear what basis the expert has used to identify the rent for the land, and by the applicants, who observe that the assumption that, in the absence of milk production, the buildings were also rented out amounts to acceptance of a circumstance which in itself is fairly unlikely, namely that the farmers would have chosen to live elsewhere in order to obtain an alternative income from their buildings. What is more, that method fails to take account of the cost of finding somewhere else to live.

97. (b) Finally, as regards the income linked to the labour factor, this corresponds to the working time released following the interruption of the stock-farming. To calculate this income, the Commission uses as the basic datum the number of hours needed for the stock-farming at the time when milk production was abandoned and deducts from that figure the number of hours devoted by the farmer to raising each cow, assessed at 2 496 hours per annum. That calculation is based on the number of hours which the farmer normally devotes to stock-farming and on the wages of agricultural workers for the period in question. During that period, those wages ranged

between NLG 14 and NLG 16 per hour, as shown in the following table:

1984/85	1985/86	1986/87	1987/88	1988/89
14.80	15.14	15.46	15.62	15.88

None of those data is contested by the applicants. On the other hand, the expert considers that, in calculating the income derived from labour, account should also be taken of the labour hypothetically under-

taken by family members. In view of this element and with reference to the average working hours indicated by the Commission, the expert calculates the income from capital as follows:

	1984/85	1985/86	1986/87	1987/88	1988/89
Mulder					
* Farmer	1 241	2 496	2 496	2 496	684
* Family	788	1 276	848	514	117
* Income (NLG)	30 027	57 108	51 698	47 016	12 721
* NLG/100 kg	13.17	12.58	11.39	10.57	10.70
Brinkhoff					
* Farmer	2 257	2 392	2 156	1 935	1 597
* Family	130	—	—	—	—
* Income (NLG)	35 336	36 215	33 332	30 225	25 353
* NLG/100 kg	13.32	12.47	11.48	10.62	10.83
Muskens					
* Farmer	887	2 496	2 496	2 352	2 162
* Family	286	364	101	0	0
* Income (NLG)	17 348	43 300	40 150	36 738	34 333
* NLG/100 kg	16.44	14.72	13.65	12.74	12.21
Twijnstra					
* Farmer	0	2 434	2 496	2 496	205
* Family	0	1 947	1 772	1 331	102
* Income (NLG)	0	66 332	65 983	59 778	4 883
* NLG/100 kg	11.35	11.73	11.38	10.52	10.72

98. The Commission observes that the figures used by the expert to determine the (hypothetical) income from labour are different from those on which the parties have agreed. The applicants, for their part, deny that the labour undertaken by family members can be taken into account for calculation purposes. The expert, they maintain, wrongly disregarded their family situation and therefore did not take into account the fact that the sons of Mr Mulder, Mr Brinkhoff and Mr Muskens were at the time too young to be able to work outside the family and that applicants' wives participated in the production activity but worked only a few hours each day, so that it seems inconceivable that they could work outside the farm and receive a separate income. Moreover, at the material time Mr Twijnstra did not have any family.

assume that the applicants, like any other entrepreneur in a similar situation, used those buildings for another activity. It is therefore fair to include in the income derived from the land factor not only the land but also the buildings on that land. On the other hand, with regard to the 'labour factor', the expert's position does not seem correct. He has included in the calculation the income which could have been received by members of the farmer's family by carrying on an activity outside the holding. In so doing, he has not taken into account the fact that, in this case, the particular nature of the applicants' family situations, as indicated above, means that it cannot be assumed from statistical data relating to a specific reality that family members had an external activity.

99. The Commission's calculation of the income derived from the 'labour factor' and the 'land factor' is not contested by the parties. It does not therefore seem necessary or appropriate to rule on the determination of that income: consequently, we only need to take note of the general data concerning the income in question provided by the Commission (relating to the average monthly wage of an agricultural worker and the average rental for the period in question). However, it is useful to make a few comments on the method followed by the expert. First, with regard to the 'land factor', I agree with the expert that it is not only the land but also all the farm buildings on the land which should be taken into account as being let. It is reasonable to

Differentiation according to the various national territories

100. The applicants criticise the Council and the Commission for not having taken into account, when calculating the hypothetical income, the fact that the productivity and therefore the profitability of individual operators varies according to the Member State in which they are established, and therefore for not having differentiated the compensation offer by reference to the various national territories but solely by reference to the size of the farm.

They state that the calculation model chosen by the institutions penalises Dutch holdings in particular, since their productivity is significantly higher than the European average. The Council points out in this respect that, in the 1992 judgment, the Court stated that the calculation of the compensation should be based on the productivity of a representative holding and should therefore be based essentially on the size of the farm, and that, in any case, the differences between the Member States are also reflected within each national territory, where some regions are more productive than others.

request that the sum due to them by way of reparation be increased to take account of (a) the loss caused by the fact that the rate of tax on the total amount of compensation will be higher than that which would have been applied if income had been regularly received during the period of non-marketing, namely from 1984 to 1989; (b) the financial loss resulting from the devaluation of the florin since 1984, the year in which Council Regulation No 857/84 illegally prevented the applicants from marketing milk; and (c) the loss arising from the unavailability of capital.

101. I agree with the Council's observations and would add that in reality the calculations made to date have taken into account, where necessary (see the above analysis of the price of milk and the variable costs), the index of productivity in the region in which the applicants are situated, and therefore the territorial element, has been a significant factor in calculating their income.

103. The Commission contends that this claim is inadmissible. It states that this claim was not expressly set out in the application and therefore constitutes a new claim and as such is inadmissible pursuant to Article 42(2) of the Rules of Procedure. The Commission and the Council also raise a second plea of inadmissibility, arguing that, in the 1992 judgment, the Court had already determined the interest for the period following the date of its delivery and that an award of further interest for the period between the damage occurring and delivery of the judgment should therefore be regarded as precluded.

The claim for further damages attributable to (a) an increase in the national tax rate, (b) currency devaluation and (c) compensatory interest accrued up to the date of payment of the compensation

102. In their statements submitted following the 1992 judgment, the applicants

That objection is unfounded. Contrary to the assertions made by the institutions, the applicants did claim, in the application

initiating Case C-104/89, 'statutory interest at the annual rate of 8% to the date of payment' and they did therefore refer to the period prior to delivery of the judgment and therefore prior to the calculation of the damage. I also regard as unfounded the assertion by the defendant institutions that the Court rejected such a claim in the 1992 judgment. In my opinion, the Court confined itself in that judgment to ruling on the interest for late payment (the default interest expressly referred to in paragraph 35) and did not decide on the claim for interest in respect of the earlier period, despite the fact that a claim in that regard had been made. It cannot be ruled out, therefore, that other statutory interest may be awarded, which is attributable not to the late payment of the compensation which the Community has been ordered to pay but specifically to the need to re-establish the real value of the sums to which the applicants are entitled.

104. I shall therefore proceed to analyse the substance of each claim separately. The first claim, under (a), concerns the potential loss arising from an increase in the tax rate applicable to the compensation amount, which would be higher than that applied to the (hypothetical) income for the years 1984 to 1989. The difference in question would stem from the fact that, under normal conditions (if the income had been staggered over time), the rate — which is proportional to the income — would have had to be calculated according to the amounts of income in the various periods, whereas in the case of compensation covering the whole period from 1984 to 1989 and paid in one lump sum, the rate would

be calculated on that higher sum and therefore the amount of tax payable would be higher than the sum of the taxes relating to each individual year. That argument cannot be accepted. Losses caused by the collection of taxes imposed by the various national laws cannot be taken into account when calculating the amount of compensation pursuant to the second subparagraph of Article 215 of the Treaty because they are not caused by illegal conduct on the part of the institutions but by the conduct of the national authorities.²⁰

105. The claims under (b) and (c) concern the loss arising from currency devaluation and the compensatory interest. In this respect, the applicants maintain that an interest rate of 5.5% from 1984 should be applied. It should be pointed out, first, that, according to the case-law of the Court on non-contractual liability, the party suffering the damage is entitled to the full restoration of his financial position. Where, as in this case, the total amount of the compensation is determined by reference to the date on which the damage occurred, the effect of the passage of time on the sum due to that party should be taken into account. It is therefore necessary for the nominal amount of the damage to be increased to take account of any devaluation suffered by the currency during the period between the date on which the damage occurred and the

20 — This issue is not new. In Case T-459/93 *Siemens* [1995] ECR II-1675, the Court of First Instance held, with regard to the recovery of illegally granted State aid, that the Commission is not obliged 'to determine the incidence of tax on the amount of aid to be recovered, since that calculation falls within the scope of national law; it is merely required to indicate the gross sum to be recovered' (paragraph 83).

date of payment of the compensation.²¹ That increase may be effected by awarding the injured party interest on the basic sum from the date on which the damage occurred up to the date of delivery of the judgment ordering payment of the compensation. It should be pointed out that, in this case, the 1992 judgment has already awarded the applicants default interest from the date of its delivery to the date of actual payment.

from the date when they were illegally refused a milk production quota, which coincides with the date of cessation of the applicants' non-marketing undertaking — namely 1 October 1984 for Mr Mulder, 1 May 1984 for Mr Brinkhoff, 1 January 1985 for Mr Muskens and 1 January 1985 for Mr Twijnstra — to 19 May 1992, when the interlocutory judgment was delivered, which is the date from which the default interest at the rate of 8% starts to run, as already established by the Court.

In order to determine and apply the interest rate in this case, it should be noted that the average variation in the price index in the Netherlands in the years 1984 to 1988 was 1.85%, according to Eurostat data. It therefore seems reasonable and fair that, since all the damage relates to the loss of earnings which the applicants progressively suffered over all the marketing years for which they were not allocated a milk quota, namely progressively over the years 1984 to 1989, the interest should be fixed at a rate below the average, taking specific account of the gradual nature of the losses suffered. I consider it fair, therefore, that the basic sum should be increased by interest at a fixed and flat rate of 1.3%

In the absence of exhaustive evidence, the increase thus granted in accordance with fair criteria remedies not only the effects of devaluation but also any losses due to the unavailability of the capital. Consequently, that increase must be regarded as including the compensatory interest expressly claimed by the applicants.

The compensation due to Mr Mulder

21 — Case C-308/87 *Grifoni* [1994] ECR I-341. It should be recalled in this connection that, although it is a principle common to the Member States that, for the purposes of compensating loss and damage, account must also be taken of the loss resulting from the unavailability of capital from the date of the event causing the damage, the solutions adopted for such compensation are most disparate; in some Member States the payment of interest and the date from which it is calculated are left to the discretion of the court, whilst in others that date is the date on which the debtor received formal notice of default or the date of the judgment, or it may depend on the subject-matter of the claim on which interest is payable (see the Opinion of Advocate General Capotorti in Joined Cases 64/76 and 113/76, 167/78 and 239/78 and 27/79, 28/79 and 45/79 *Dumortier* [1982] ECR 1733 and the Opinion of Advocate General Tesaro in *Grifoni*, cited above).

106. In his statement of 4 June 1997, Mr Mulder indicates NLG 703 090 as the sum claimed by way of reparation. It should be noted that this replaces the previous claims made for different amounts.

107. As regards the alternative income obtained between 1984 and 1988 in the absence of milk production, the applicant

states, and has provided an expert's report to that effect (see Annex 1 to the observations lodged on 18 June 1993), that he sold the cattle raised before 1984 at a very low price and that, because of the refusal to allocate him a milk quota for the years 1984 to 1988, he concentrated on the

breeding of animals for slaughter, and specifically sheep, cows and bulls. In the statements lodged following delivery of the 1992 judgment, the applicant produces, as general data on the alternative income, the figures shown in the following table:

Mulder	1984	1985	1986	1987
Replacement activities				
Income	22.21	24.38	36.04	22.03
Costs	- 10.04	- 11.00	- 11.43	- 9.18
BALANCE	12.17	13.38	16.40	12.85

108. The total compensation offered by the Commission to Mr Mulder is NLG 50 579.15. This is based on the following data:

Mulder	1984/85	1985/86	1986/87	1987/88	1988/89
1. Income from milk production					
Income:					
= milk sales to dairy	73.47	73.98	74.36	76.69	79.93
= sales of calves and cull cows	18.11	18.63	19.46	20.27	21.12
Total	91.58	92.61	93.82	96.96	101.05
Less:					
= variable costs, particularly fodder	52.65	53.37	48.58	42.55	40.92
= wages of workers (3 924 hours)	21.87	22.15	22.16	22.41	23.11
Gross earnings	17.06	17.09	23.08	32.00	37.02
2. Income from replacement activity, consisting of income from the production factors used					
= capital	8.51	8.51	8.51	8.51	8.51
= land	4.41	4.49	4.74	4.97	4.85
= labour	7.86	8.15	8.32	8.41	8.55
Total income from factors	20.78	21.15	21.57	21.89	21.91
3. Amount of compensation after deducting income from factors from the gross production profit under (1)	—	—	1.51	10.11	15.11
4. Compensation offered by the Council	19.16	21.63	18.93	19.34	23.90
Over - (+)/under - (-) compensation per 100 kg of milk	+19.16	+21.63	+17.42	+9.23	+8.79

109. Finally, the total amount of compensation due to Mr Mulder, as calculated by the expert, is NLG 475 767. This is based on the following data:

Mulder	1984/85	1985/86	1986/87	1987/88	1988/89	Total
Milk sales	177 582	358 536	357 628	358 393	101 779	
Sales of cows and calves	29 024	62 840	62 606	52 012	13 561	
Income	206 606	421 376	420 234	410 405	115 340	
Variable costs	(110 228)	(217 393)	(204 859)	(176 763)	(47 080)	
External labour costs	—	—	—	—	—	
Profit margin on milk production	96 378	203 983	215 375	233 642	68 260	817 638
Alternative income						
— Income from capital	(4 256)	(8 478)	(12 367)	(13 108)	(3 646)	
— Income from land	(13 367)	(26 508)	(26 640)	(27 335)	(7 596)	
— Income from labour	(30 027)	(57 108)	(51 698)	(47 016)	(12 721)	
Total alternative income	(47 650)	(92 094)	(90 705)	(87 459)	(23 963)	(341 871)
Loss of earnings	48 728	111 889	124 670	146 183	44 297	475 767

110. From the observations made so far and from the conclusions reached with regard to the various factors of hypothetical income and (hypothetical) alternative

income,²² it appears that the total amount of income for the period in question, namely from 1 October 1984 to 1 August 1988, is NLG 630 416. This takes into

22 — For the purposes of quantifying the various items involved in determining the compensation, the sources from which the data taken into account in that determination have been obtained should be briefly indicated.

(a) *As regards the hypothetical income*

— for the (gross) income obtained from the milk sales and the sales of cull cows and calves, the data used are those of the expert (see pp. 20 and 28 of the expert's report), apart from certain purely numerical changes due to several factors: (a) for the 1984/85 marketing year of Mr Mulder, whilst indicating a correct initial date, the expert wrongly calculated the number of days of the first marketing year, which is not 100 but 122. This error leads to a difference between the milk quantities taken into account in the calculation, and thus to a difference in the hypothetical income; (b) as regards the 1988/89 marketing year of Mr Brinkhoff, the expert refers to a date for the actual resumption of milk production — and therefore to a final date of the period taken into account for the purposes of compensation — which does not coincide with that on which this Opinion is based (see p. 20 of the expert's report); (c) for the 1988/89 marketing year of Mr Twijnstra, an error was made in calculating the number of actual days of non-production of milk, in that, although indicating the number of days as 30, which is correct, the expert then calculated the milk quantity for a different total number of days;

— for the variable costs, the data used are those of the LEI contained in the expert's report annexed to the applicants' statement of 4 June 1997, with some numerical changes due to the fact that the LEI calculated the total data for each marketing year on the basis of the expert's indications for the reference quantities and therefore on the calculation errors just mentioned.

(b) *As regards the alternative income*

The data taken into account are mainly those provided by the expert: however, certain corrections have been made to those data whenever there has been a divergence from the calculation system followed by the expert. In particular, in the calculation of the income derived from all the factors, with regard to the initial and final marketing years of the period taken into account for calculating the compensation, the total income has in each case been reduced by a percentage corresponding to the number of days in each marketing year excluded from that period. In addition:

— as regards the 'capital' factor, the rate of increase in consumer prices during the years 1984 to 1989 has not been deducted from the interest rate offered by local savings banks (as pointed out, that rate must be applied to the basic capital to determine the income which that capital produces);

— as regards the 'labour' factor, the hypothetical incomes of the family members have not been taken into account, which is why the average value of the hourly wages, on which the parties have agreed, has been multiplied only by the hours corresponding to the working time of the farmer alone;

— as regards the 'land' factor, account has been taken of the average rents indicated by the expert on page 41, which have been multiplied by the number of hectares of land intended for milk production as indicated by Mr Mulder, Mr Brinkhoff and Mr Muskens on p. 4 of the expert's reports annexed to the statement of 18 June 1993. In the case of Mr Twijnstra, since the indication of the extent of the land provided by the applicant seems unlikely (30 ha), given the overall production of the farm, it is the indication provided by the expert (54 ha) which has been used.

account the data appearing in the following table:

Mulder	1984/85	1985/86	1986/87	1987/88	1988/89 ²	Total
Milk sales	178 207 ¹	358 311 ¹	359 648 ¹	364 043 ¹	126 909 ¹	
Sales of cows and calves	29 024	62 840	62 606	52 012	17 310	
Total	207 231	421 151	422 254	416 055	144 219	
Variable costs	96 382	190 843	174 300	148 802	55 929	
Hypothetical income	110 849	230 308	247 954	267 253	88 290	
Alternative income						
— Income from capital	7 512	12 947	12 747	11 965	4 894	
— Income from land	14 470	30 038	30 314	32 154	10 398	
— Income from labour	18 366	38 588	37 789	38 987	13 069	
Total alternative income	40 348	81 573	80 850	83 106	28 361	
Loss of earnings	70 501	148 735	167 104	184 147	59 929	630 416

(1) Amount adjusted in accordance with the information provided by the expert at the hearing (for the 1988/89 marketing year the deduction is based on a value calculated at a flat rate).

(2) The amounts indicated by the expert and, for the variable costs, those indicated by the LEI have been adjusted in accordance with the comments made on the period of the 1988/89 marketing year which is taken into account in this calculation. This period diverges from that indicated by the expert, on which the LEI's calculation is also based.

In conformity with the approach adopted above, since the amount quoted by the applicant as actual alternative income is less than the hypothetical alternative income, it has not been taken into account in calculating the compensation. As a result, the total amount of that compensation, given the difference between the hypothetical and alternative incomes for each marketing year, is equal to NLG 630 416 plus interest at the rate of 1.3% from 1 October 1984 to 19 May 1992, from which date the default interest at the annual rate of 8% becomes payable until the date of actual payment.

The compensation due to Mr Brinkhoff

111. In his statement of 4 June 1997, Mr Brinkhoff indicates NLG 570 020 as the sum claimed by way of reparation. It should be noted that this replaces the previous claims for different amounts.

112. In his statements lodged after the delivery of the 1992 judgment, Mr Brink-

hoff declares that he carried out several activities during the relevant period, that is to say, between 1984 and 1989. He boarded young cattle, sold fodder, drove a lorry and started up an undertaking generically defined as a 'sub-contracting' business. All those activities allowed him to obtain, for the years 1984, 1985 and 1986, an income higher than the hypothetical income calculated based on the method proposed by the defendant institutions. The Commission therefore considers that, for the first three years, the actual alternative income should be included whereas, for the 1987/88 and 1988/89 marketing years, the data on the 'hypothetical' alternative income should be used. With regard to the last two marketing years, the applicant maintains that the relatively low level of income achieved in 1987 and 1988 was due to several con-

comitant factors, specifically: (a) the fact that the maize cultivated was rotten, which confirms that his land could not be used for cultivation, only for stock-farming; (b) the fact that the introduction of the additional levy had led to a reduction in the number of animals on farms given over to milk production and therefore a fall in demand for young cattle and fodder; and (c) the fact that his 'sub-contracting' undertaking had led, after an initial phase, to the need to renew and increase the machinery used, which could not be done since he did not have enough available cash. According to the data provided by the applicant in his statements following the 1992 judgment, the total amount of alternative income for the years 1984 to 1987 is shown in the following table:

Brinkhoff	1984/85	1985/86	1986/87	1987/88
Replacement activities				
Income	41.40	38.76	36.04	17.69
Costs	- 10.60	- 7.14	- 9.18	- 6.93
Balance	30.80	31.62	26.36	10.76

113. The total compensation offered by NLG 109 675.55. This is based on the the Commission to Mr Brinkhoff is following data:

Brinkhoff	1984/85	1985/86	1986/87	1987/88	1988/89
1. Income from milk production					
Income:					
= milk sales to dairy	73,47	73,98	74,36	76,69	79,93
= sales of calves and cull cows	16,15	16,60	17,34	18,06	18,82
Total	89,62	90,58	91,70	94,75	98,75
Less:					
= variable costs, particularly fodder	49,07	49,74	45,28	39,66	38,14
= Wages	12,80	12,97	12,97	13,11	13,53
Gross earnings	27,75	27,87	33,45	41,98	47,08
2. Income from replacement activity, consisting of income from the production factors used					
= capital	7,58	7,58	7,58	7,58	7,58
= land	4,11	4,18	4,42	4,63	4,51
= labour	12,29	12,74	13,01	13,15	13,37
Total of income from factors	23,98	24,50	25,01	25,36	25,46
3. Amount of compensation after deducting income from factors under (1)	3.77	3.37	8.44	16.62	21.62
4. Compensation offered by the Council	19.16	21.63	18.93	19.34	23.90
Over - (+)/under - (-) compensation per 100 kg milk	+15.39	+18.26	+10.49	+ 2.72	+ 2.28

114. Finally, the total amount of compensation due to Mr Brinkhoff, calculated by the expert, is NLG 386 891. This is based on the following data:

Brinkhoff	1984/85	1985/86	1986/87	1987/88	1988/89	Total
Milk sales	206 031	230 997	229 995	228 226	201 386	
Sales of cows and calves	34 976	38 949	39 677	33 373	27 349	
Income	241 007	269 946	269 672	261 599	228 735	
Variable costs	(129 716)	(137 859)	(132 080)	(113 633)	(93 828)	
External labour costs	—	—	—	—	—	
Profit margin on milk production	111 291	132 087	137 592	147 966	134 907	663 843
Alternative income						
— Income from capital	(5 008)	(5 486)	(8 002)	(8 482)	(7 267)	
— Income from land	(15 731)	(16 764)	(17 129)	(17 525)	(15 097)	
— Income from labour	(35 336)	(36 215)	(33 332)	(30 225)	(25 353)	
Total alternative income	(56 075)	(58 465)	(58 463)	(56 232)	(47 717)	(276 952)
Loss of earnings	55 216	73 622	79 129	91 734	87 190	386 891

115. On the basis of the observations made hitherto and from the conclusions reached with regard to the various factors relating to hypothetical income and (hypothetical) alternative income,²³ it appears that the total amount of income for the period in question, namely from 5 May 1984 to 31 December 1988, is NLG 363 908. In

conformity with the approach adopted above, the amount indicated by the applicant as actual alternative income is relevant only for the first three marketing years, namely for the years 1984 to 1987, as this income is higher than the hypothetical alternative income, whereas, for the last two marketing years, account should be taken of the alternative income calculated hypothetically. The general data on each

23 — See, in this respect, footnote 22.

marketing year are set out in the following table:

Brinkhoff	1984/85	1985/86	1986/87	1987/88	1988/89 ²	Total
Milk sales	207 279 ¹	230 699 ¹	230 718 ¹	232 360 ¹	160 994 ¹	
Sales of cows and calves	34 976	38 949	39 677	33 373	20 505	
Total	242 255	269 648	270 395	265 733	181 499	
Variable costs	113 422	121 022	112 377	95 658	64 212	
Hypothetical income	128 833	148 626	158 018	170 075	117 287	
Alternative income						
— Income from capital	8 928	8 377	8 248	7 742	6 525	
— Income from land	15 600	17 631	17 793	18 873	18 495	
— Income from labour	33 403	36 214	33 331	30 224	25 360	
Total alternative income	57 931	62 222	59 372	56 839	50 380	
Actual alternative income	82 237	92 927	76 548			
Loss of earnings	46 596	55 699	81 470	113 236	66 907	363 908

1) Amount adjusted in accordance with the information provided by the expert at the hearing (for the 1988/89 marketing year the deduction is based on a value calculated at a flat rate).

2) The amounts indicated by the expert and, for the variable costs, those indicated by the LEI have been adjusted in accordance with the comments made on the period of the 1988/89 marketing year which is taken into account in this calculation. This period diverges from that indicated by the expert, on which the LEI's calculation is also based.

As a result, the total amount of this compensation, given the difference between the hypothetical and alternative incomes for each marketing year, is equal to NLG 363 908 plus interest at the rate of

1.3% from 5 May 1984 to 19 May 1992, from which date the default interest at the annual rate of 8% becomes payable until the date of actual payment.

The compensation due to Mr Muskens

116. In his statement of 4 June 1997, Mr Muskens indicates NLG 570 020 as the sum claimed by way of reparation. It should be noted that this replaces the previous claims for different amounts.

117. Mr Muskens used his land for various crops, achieving an average monthly turnover of NLG 8 000/9 000 for the years 1984 to 1986. The Commission therefore considers that, for 1984, the calculation of the compensation must take account of the actual income and not the hypothetical income, as the former was higher than the latter. Mr Muskens contests that method of calculation, pointing out that the figures taken into account represent the turnover, not the income, for the three years in question. In the statements submitted following the delivery of the 1992 judgment, he indicates the alternative income for the various marketing years as shown in the following table:

Muskens	1984	1985	1986	1987
Replacement activities				
Income	48.79	35.30	44.29	33.65
Costs	- 14.51	- 19.31	- 20.31	- 21.25
Balance	34.28	15.99	23.98	12.40

118. The total compensation offered by NLG 120 090.83. This is based on the the Commission to Mr Muskens is following data:

Muskens	1984/85	1985/86	1986/87	1987/88	1988/89
1. Income from milk production					
Income:					
= milk sales to dairy	73.47	73.98	74.36	76.69	79.93
= sales of calves and cull cows	15.68	16.12	16.84	17.54	18.28
Total	89.15	90.10	91.20	94.23	98.21
Less:					
= variable costs, particularly fodder	50.18	50.87	46.30	40.56	39.01
= wages	12.08	12.23	12.24	12.37	12.76
Gross earnings	26.89	27.00	32.66	41.30	46.44
2. Income from replacement activity consisting of income from the production factors used					
= capital	7.36	7.36	7.36	7.36	7.36
= land	4.20	4.49	4.74	4.97	4.49
= labour	12.13	12.58	12.85	12.98	13.20
Total income from factors	23.69	24.43	24.95	25.31	25.05
3. Amount of compensation after deducting income from factors from the gross production profit under (1)	3.20	2.57	7.71	15.99	21.42
4. Compensation offered by the Council	19.16	21.63	18.93	19.34	23.90
Over - (+)/under - (-) indemnisation par 100 kg de lait	+ 15.96	+ 19.06	+ 11.22	+ 3.35	+ 2.48

119. Finally, the total amount of compensation due to Mr Muskens, as calculated by the expert, is NLG 318 938. This is based on the following data:

Muskens	1984/85	1985/86	1986/87	1987/88	1988/89	Total
Milk sales	80 978	226 762	231 292	229 374	230 821	
Sales of cows and calves	13 737	38 949	34 239	37 075	33 090	
Income	94 715	265 711	265 531	266 449	263 911	
Variable costs	(52 935)	(142 055)	(138 118)	(125 222)	(116 258)	
External labour costs	—	—	—	—	—	
Profit margin on milk production	41 780	123 656	127 413	141 227	147 653	581 729
Alternative income						
— Income from capital	(1 967)	(5 486)	(8 002)	(8 482)	(8 611)	
— Income from land	(4 530)	(13 153)	(12 525)	(13 542)	(14 624)	
— Income from work	(17 348)	(43 300)	(40 150)	(36 738)	(34 333)	
Total alternative income	(23 845)	(61 939)	(60 677)	(58 762)	(57 568)	(262 791)
Loss of earnings	17 935	61 717	66 736	82 465	90 085	318 938

120. On the basis of the observations made hitherto and from the conclusions reached with regard to the various factors relating to hypothetical income and (hypothetical) alternative income,²⁴ it appears that the total amount of income for the period in question, namely from 22 November 1984 to 29 March 1989, is NLG 445 563. In conformity with the approach adopted above, the amount indicated by the appli-

cant as actual alternative income is relevant only for the 1986/87 marketing year, as this income is higher than the hypothetical alternative income, whereas, for the last three marketing years, account should be taken of the alternative income calculated hypothetically. The general data on each marketing year are set out in the following table:

Muskens	1984/85	1985/86	1986/87	1987/88	1988/89	Total
Milk sales	81 073 ¹	227 895 ¹	231 983 ¹	231 213 ¹	233 773 ¹	
Sales of cows and calves	13 737	38 949	34 239	37 075	33 090	
Total	94 810	266 844	266 222	268 288	266 863	
Variable costs	38 975	111 115	102 577	97 657	91 654	
Hypothetical income	55 835	155 729	163 645	170 631	175 209	
Alternative income						
— Income from capital	3 472	8 377	8 248	7 742	9 597	
— Income from land	5 460	16 182	15 312	15 341	16 733	
— Income from labour	13 127	37 789	38 588	36 738	34 332	
Total alternative income	22 059	62 348	62 148	59 821	60 662	
Actual alternative income			70 596 ²			
Loss of earnings	33 776	93 381	93 049	110 810	114 547	445 563

(1) Amount adjusted in accordance with the information provided by the expert at the hearing (for the 1988/89 marketing year the deduction is based on a value calculated at a flat rate).

(2) The applicant has stated the alternative income for each calendar year. It has been deemed appropriate, for the sake of fairness, to use the data for 1986 to calculate the compensation for the 1986/87 marketing year.

As a result, the total amount of this compensation, given the difference between the hypothetical and alternative incomes for each marketing year, is equal to

NLG 445 563 plus interest at the rate of 1.3% from 22 November 1984 to 19 May 1992, from which date the default interest at the annual rate of 8% becomes payable until the date of actual payment.

24 — See, in this respect, footnote 22.

The compensation due to Mr Twijnstra

should be noted that this replaces the previous claims for different amounts. Mr Twijnstra declares that he turned his farm over to the cultivation of various products and achieved an average monthly turnover of NLG 9 000, resulting in the total income indicated below:

121. In his statement of 4 June 1997, Mr Twijnstra indicates NLG 751 141 as the sum claimed by way of reparation. It

Twijnstra	1985/86	1986/87	1987/88
Replacement activities			
Income	- 18.59	- 18.25	- 15.34
Costs	- 6.59	- 4.39	- 6.20
Balance	12.00	13.86	9.14

122. The total compensation offered by NLG 317 299.20. This is based on the the Commission to Mr Twijnstra is following data:

Twijnstra	1984/85	1985/86	1986/87	1987/88	1988/89
1. Income from milk production:					
Income:					
= milk sales to dairy	73.47	73.98	74.36	76.69	79.93
= sales of calves and cull cows	15.25	15.68	16.38	17.06	17.78
Total:	88.72	89.66	90.74	93.75	97.71
Less:					
= variable costs, particularly fodder	38.27	38.79	35.31	30.93	29.75
= wages	19.23	19.47	19.48	19.69	20.31
Gross earnings	31.22	31.40	35.95	43.13	47.65
2. Income from replacement activity, consisting of income from the production factors used					
= capital	7.16	7.16	7.16	7.16	7.16
= land	3.20	3.26	3.44	3.60	3.51
= labour	6.16	6.38	6.52	6.59	6.70
Total income from factors	16.52	16.80	17.12	17.35	17.37
3. Amount of compensation after deducting income from factors from the gross production profit under (1)	14.70	14.60	18.83	25.78	30.28
4. Compensation offered by the Council	19.16	21.63	18.93	19.34	23.90
Over- (+)/under- (-) compensation per 100 kg milk	+ 4.46	+ 7.03	+ 0.10	- 6.44	- 6.38

123. The total amount of compensation due to Mr Twijnstra, as calculated by the expert, is NLG 517 186. This is based on the following data:

Twijnstra	1984/85	1985/86	1986/87	1987/88	1988/89	Total
Milk sales	—	449 845	462 493	461 762	39 078	
Sales of cows and calves	—	78 076	79 467	65 984	5 114	
Income	—	527 921	541 960	527 746	44 192	
Variable costs	—	(268 920)	(261 465)	(224 741)	(18 070)	
External labour costs	—	(7 658)	—	—	—	
Profit margin on milk production	—	251 343	280 495	303 005	26 122	860 965
Alternative income						
— Income from capital	—	(10 118)	(-15 131)	(16 038)	(1 338)	
— Income from land	—	(32 701)	(33 909)	(34 660)	(2 908)	
— Income from labour	—	(66 332)	(65 983)	(59 778)	(4 883)	
Total alternative income	—	(109 151)	(115 023)	(110 476)	(9 129)	(343 779)
Loss of earnings	—	142 192	165 472	192 529	16 993	517 186

124. On the basis of the observations made hitherto and from the conclusions reached with regard to the various factors relating to hypothetical income and (hypothetical) alternative income,²⁵ it appears that the total amount of income for the period in question, namely from 10 April 1985 to

30 April 1988, is NLG 709 791. In conformity with the approach adopted above, the amount indicated by the applicant as actual alternative income is relevant only for the first three marketing years, namely for the years 1984 to 1987, as this income is higher than the hypothetical alternative income, whereas, for the last two market-

25 — See, in this respect, footnote 22.

ing years, account should be taken of the alternative income calculated hypotheti-

cally. The general data on each marketing year are set out in the following table:

Twijnstra	1985/86	1986/87	1987/88	1988/89 ²	Total
Sales of milk	450 156 ¹	464 668 ¹	468 225 ¹	38 075 ¹	
Sales of cows and calves	78 076	79 467	65 984	4 976	
Total	528 232	544 135	534 209	43 051	
Variable costs	236 077	222 462	189 190	15 346	
Hypothetical income	292 155	321 673	345 019	27 705	
Alternative income					
— Income from capital	15 841	15 596	14 640	1 451	
— Income from land	35 262	35 586	37 746	2 959	
— Income from labour	36 850	38 588	38 987	3 255	
Total alternative income	87 953	89 770	91 373	7 665	
Loss of earnings	204 202	231 903	253 646	20 040	709 791

(1) Amount adjusted in accordance with the information provided by the expert at the hearing (for the 1988/89 marketing year the deduction is based on a value calculated at a flat rate).

(2) The amounts indicated by the expert and, for the variable costs, those indicated by the LEI have been adjusted in accordance with the comments made on the period of the 1988/89 marketing year which is taken into account in this calculation. This period diverges from that indicated by the expert, on which the LEI's calculation is also based.

As a result, the total amount of this compensation, given the difference between the hypothetical and alternative incomes for each marketing year, is equal to NLG 709 791 plus interest at the rate of 1.3% from 10 April 1985 to 19 May 1992, from which date the default interest at the annual rate of 8% becomes payable until the date of actual payment.

Case C-37/90

125. In order to determine the amount of compensation to which Mr Heinemann is entitled, it is necessary to proceed in accordance with the familiar method: by calculating, first, the income from the hypothetical milk production and then the

income from the activities replacing that production.

the data provided by the latter expert, namely Mr Spandau.

The hypothetical income

— The period to be taken into account for the purposes of quantifying the damage

126. It should be pointed out that, in order to determine the hypothetical income, the parties take into account two sources of income. These are the sale of milk and the sale of cull cows (cows not intended for milk production) and calves. They then deduct from those incomes only the variable costs, that is to say, the costs which are no longer payable on cessation of milk production, and not the fixed costs, namely those which the farmer still incurs when production is suspended.

127. I should also point out that Mr Heinemann produced four expert's reports, three by Mr Wortmann and one by Mr Spandau. At the express request of the Judge-Rapporteur, the applicant explained that the reports of the first expert (two of which were lodged before the 1992 judgment, appended respectively to the application and the reply, and the third following the judgment, appended to the statement of 23 December 1993) were produced specifically in order to adapt the method used for determining the amount of compensation claimed to the general information provided to the Court, whereas Mr Spandau's report, lodged as an annex to the statement of 25 June 1993, is based on the calculation method followed in Regulation No 2187/93. However, the applicant has declared that his claim is based solely on

128. Mr Heinemann is claiming compensation for the loss suffered over the non-marketing period, that is, from 1 April 1984, when he should have resumed milk production, to 28 August 1989, when he actually resumed production. The Council and the Commission contest the initial date of the compensation period, stating that the applicant gave, pursuant to Regulation No 1078/77, a non-marketing undertaking ending on 20 November 1984. Consequently, in Mr Heinemann's case, the 1984/85 marketing year should start not on 1 April 1984 but on 20 November 1984 and cannot therefore be fully taken into account for the purposes of calculating the compensation. The Commission also maintains, with regard to the final date of the period taken into account, that in the 1992 judgment the Court established that the period of non-production, relevant for the purposes of the compensation, ran from 1 April 1984 to 29 March 1989 when Regulation No 764/89 entered into force. Consequently, the applicant cannot claim compensation for a subsequent period which would in this case be from 29 March 1989 to 28 August 1989. From 29 March 1989, it is therefore the applicant who should bear the financial consequences of the delay in resuming his milk production. During the written procedure, the applicant agreed to regard 20 November 1984 as the *dies a quo* (of the relevant period for the purposes of the compensation). However,

he continues to contest the final date indicated by the Commission, maintaining that, during the period after 29 March 1989, no German producer actually obtained a quota allowing the resumption of milk production. He himself did not resume production until the following August because he was unable to obtain a milk quota before that date.

129. As already observed in Case C-104/89, the compensation must be determined in relation to the period during which the farmer was actually prevented from marketing milk. Therefore, the initial date and the final date of that period, indicated in paragraph 26 of the 1992 judgment, must be regarded as marking the interval which elapsed between the illegal act, in respect of which the Community has been ordered to pay compensation for the loss suffered, and the date of restoration of the right to milk quotas. The fact that Regulation No 764/89, making it the parties' responsibility to request allocation of the quota from the national authorities, did not allow the immediate resumption of production does not, in my opinion, impose an obligation on the Community to compensate for the absence of production for the period after that date. Any non-marketing of milk during that period is attributable not to the conduct of the institutions but rather, as the case may be, to the conduct of the national authorities. As a result, in the case of Mr Heinemann, the non-marketing period to be taken into account for assessing the loss is that

between 20 November 1984 and 29 March 1989.

— The reference quantity and the rate of reduction

130. The parties are in agreement concerning the reference quantity to be taken into account for the purposes of calculating the hypothetical income. That quantity is equivalent to the reference milk quota allocated to Mr Heinemann at the time of his non-marketing undertaking in 1979, namely 36 705 kg. On the basis of the 1992 judgment, 1% must be added to that quantity and the percentage equivalent to the rate of reduction applied to the milk quotas allocated in 1984 in Germany (Article 2(2) of Regulation No 856/84) must be deducted. The determination of the latter percentage is still in dispute. According to Mr Heinemann, the German regulation implementing the Community additional levy scheme provides that, even if the national rate of reduction is 4%, for minimal milk production quantities such as those of the applicant, that percentage must not exceed 2%. However, according to the Council and the Commission, the German regulation does not provide for the application of a rate of reduction lower than the general rate of 4%. The Commission also maintains that, for the marketing years after 1984/85, a rate of reduction of 7.5% was applied in Germany and therefore the rate of 4% proposed by the institutions is more favourable than the general rate specified by the national legislation. As the parties were unable to agree on this point, the Court asked the expert to

determine the initial reference quantity of Mr Heinemann and to indicate the rate of reduction. The expert replied that, in this case, a differentiated rate of reduction should be applied. To be specific, for the first three marketing years from 1984 to the start of 1987, a rate of reduction of 2% should be applied, since Article 4(2) and (3) of the aforementioned German regulation provides for a derogation from the application of the 4% rate of reduction for farms, such as that of Mr Heinemann, which produce a milk quantity lower than 161 000 kg. The expert went on to say that, for the years 1987 to 1989, the rate of reduction applied by the German authorities, namely 7.5%, should be used. The rates of reduction for each marketing year would therefore be as follows:

1984/85 - 2%

1985/86 - 2%

1986/87 - 2%

1987/88 - 7.5%, namely 2% + an additional 5.5%

1988/89 - 7.5%, namely 2% + an additional 5.5%.

The applicant does not contest those data. He merely observes that the national rules specified, for the years 1987 and 1988 (the years during which not all farms were treated uniformly), a subsidy applicable to minimal milk quantities.²⁶ Given that the applicant's reference quantity is 36 705 kg and that this quantity is to be regarded as falling within those giving entitlement to this subsidy, Mr Heinemann should have received, for the 1987/88 and 1988/89 marketing years, DEM 440 per year. I would simply point out in this respect that, in calculating the income obtained from the sale of milk, the expert has included the subsidy to which the applicant asserts that he is entitled. One of the components of the income derived from the sale of milk is the subsidy of DEM 600 for the 1987/88 marketing year and of DEM 482 for the 1988/89 marketing year (see the table on p. 52 of the expert's report). However, the Commission does not accept the expert's position and simply refers to the argument

26 — It should be pointed out in this respect that, in Case C-21/92 *Kamp* [1994] ECR I-1619, relied on by Mr Heinemann in support of his arguments, the Court held that Article 3a(2) of Regulation No 857/84, as amended by Council Regulation (EEC) No 1639/91 of 13 June 1991, must be interpreted as meaning that, for the purposes of calculating the reference quantities exempt from the additional levy on milk to be allocated to producers who have suspended deliveries under the system of premiums for non-marketing or conversion introduced by Regulation No 1078/77, it is necessary to deduct from the basic quantity reflecting the level of production prior to the non-marketing period a percentage which is the sum of the percentage representing all the reductions applied to the reference quantities in the Member State in question and the percentage corresponding to the basic reduction applied to all Community producers in respect of the temporary withdrawal of a proportion of the reference quantities introduced by Council Regulation (EEC) No 775/87 of 16 March 1987 (OJ 1987 L 78, p. 5).

which it made in support of its interpretation of the German regulation.

— The income obtained from the sale of milk and from the sale of calves and cull cows

131. Although it is true that the Community judicature is not competent to interpret national law, it should be noted that the Commission's criticisms of the interpretation of the German legislation to which the expert refers cannot be accepted, given their general nature and the absence of reasons for them. It follows that, in calculating the reference quantity, account should be taken of the data provided by the expert.

132. With regard to milk sales, the parties have indicated prices which are approximately the same. The difference is solely due to the fact that, whereas the applicant uses statistical data for the Hanover region, which is the region of origin of Mr Heine-mann, the Council and the Commission use data covering the whole national territory. During the written procedure, the parties reached agreement, in so far as the defendant institutions accepted the data provided by the applicant with regard to the price of milk and the price of calves and cull cows. Those prices appear in the following table, in which the price of cull cows and calves is given under the heading 'Additional services':

Marketing year	Milk production kg/year	Price of milk DEM/kg	Additional services DEM/kg	Variable costs DEM/kg	Gross earnings DEM/kg
1984/85	4 664	0.671	0.159	0.460	0.370
1985/86	4 764	0.701	0.154	0.420	0.435
1986/87	4 828	0.693	0.140	0.390	0.443
1987/88	4 509	0.693	0.130	0.380	0.443
1988/89	5 117	0.752	0.141	0.390	0.503
1989/90	5 070	0.743	0.144	0.394	0.493

133. On the basis of the data agreed as follows the total income obtained from between the parties, the expert quantifies milk production:

	Heinemann 1984/85	Heinemann 1985/86	Heinemann 1986/87	Heinemann 1987/88	Heinemann 1988/89	Total
Days	132	365	365	365	363	
Basic quantity	36 705	36 705	36 705	36 705	36 705	
Increase of 1%	37 072	37 072	37 072	37 072	37 072	
Total income (DEM/kg)	0.830	0.855	0.833	0.823	0.893	
Reduction 2% *	2%	2%	2%	2%	2%	
Reference quantity	13 139	36 331	36 331	36 331	36 132	
Income	10 905	31 063	30 263	29 900	32 265	134 397
Reduction 4% **	4%	4%	4%	4%	4%	
Reference quantity	12 871	35 589	35 589	35 589	35 394	
Income	10 683	30 429	29 646	29 290	31 607	131 654
Reduction 7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	
Quantities compensated	12 401	34 292	34 292	34 292	34 104	
Income	10 293	29 319	28 565	28 222	30 455	126 854
Gradual reduction	2.0%	2.0%	2.0%	7.5%	7.5%	
Quantities compensated	13 139	36 331	36 331	34 292	34 104	
Income + subsidies	10 905	31 063	30 263	28 822	30 937	
Income per kg milk	0.830	0.855	0.833	0.840	0.907	131 990

* Percentage reduction proposed by the applicant.

** Percentage reduction proposed by the Commission.

134. Given the agreement on the various items, and in the light of my observations on the determination of the rate of reduction, I consider that the net earnings indicated in the final column of the above table, based on a rate of reduction of 2% for the first three marketing years and 7.5% for the last two, must be taken into account in order to determine the hypothetical income.

— The variable costs

135. With regard to the variable costs, the parties are in agreement concerning the calculation method, since the applicant has altered his initial position and accepted the method specified in Council Regulation No 2187/93. However, the parties are still

in disagreement concerning the statistical data to be used for the calculation. The applicant uses statistics relating solely to Westphalia, whereas the defendant institutions use data on the average production throughout the whole national territory. The expert points out that the data used by Mr Heinemann relate to farms which have a particularly high productivity rate and whose production costs are therefore relatively low. The expert, in comparing the statistical data for the Hanover region and

the Westphalia region, therefore arrived at the conclusion that the variable costs of the milk production for Mr Heinemann should be determined on the basis of the data for the Hanover region in which the applicant is established. The data on the Westphalia region and those relating specifically to the applicant are set out in the following table and those relating to the cost per animal for the Hanover region appear in the second table below:

	Figures for the Westfalen-Lippe Region			Applicant			
	Variable cost per cow	Productivity in Westfalen-Lippe	Variable costs per 100 kg	Variable costs per 100 kg	Quota according to the applicant	Number of cows needed	Variable costs per cow according to the applicant
1984/85	2 612	5 586	46.76	46	36 331	8	2 089
1985/86	2 466	5 838	42.24	42	36 331	8	1 907
1986/87	2 362	6 028	39.18	39	36 331	8	1 771
1987/88	2 308	6 041	38.20	38	36 331	9	1 534
1988/89	2 512	6 320	39.74	39	36 331	8	1 771

1984/85	2 199	(category 4 280 - 4 750 kg)
1985/86	2 265	(category 4 750 - 5 250 kg)
1986/87	2 217	(category 4 770 - 5 250 kg)
1987/88	2 267	(category 5 260 - 5 750 kg)
1988/89	2 242	(category 5 270 - 5 740 kg)

136. On the basis of these data, Mr Heinemann's variable costs for the years 1984 to 1989 are, according to the expert, as set out in the following table:

	Heinemann 1984/85	Heinemann 1985/86	Heinemann 1986/87	Heinemann 1987/88	Heinemann 1988/89	Total
Days	132	365	365	365	363	
Basic quantity	36 705	36 705	36 705	36 705	36 705	
Increase of 1%	37 072	37 072	37 072	37 072	37 072	
Variable costs (DEM/cow)	2 199	2 265	2 217	2 267	2 242	
Reduction 2%	2%	2%	2%	2%	2%	
Number of cows	9	8	8	9	8	
Pro rata variable costs	7 157	18 120	17 736	20 403	17 838	
Variable costs (DEM/100 kg)	54.47	49.88	48.82	56.16	49.37	81 254
Reduction 4%	4%	4%	4%	4%	4%	
Number of cows	8	8	8	9	8	
Pro rata variable costs	6 362	18 120	17 736	20 403	17 838	
Variable costs (DEM/100 kg)	49.43	50.91	49.84	57.33	50.40	80 459
Reduction 7.5%	7.5%	7.5%	7.5%	7.5%	7.5%	
Number of cows	8	8	8	8	7	
Pro rata variable costs	6 362	18 120	17 736	18 136	15 608	
Variable costs (DEM/100 kg)	51.30	52.84	51.72	52.89	45.77	75 962
Gradual reduction	2.0%	2.0%	2.0%	7.5%	7.5%	
Number of cows	9	8	8	8	7	
Pro rata variable costs	7 157	18 120	17 736	18 136	15 608	
Variable costs (DEM/100 kg)	54.47	49.88	48.82	52.89	45.77	76 757

137. With regard to this calculation, the Commission simply notes that, in order to determine the gradual increase in Mr Heinemann's productivity, the expert used the averages for the Netherlands instead of those for the region in which the applicant is established. However, this criticism is unfounded. Although the expert clearly indicated (on page 13 of his report), that he deemed it necessary also to take into account the productivity increase percentages for the Netherlands when determining the compensation due to the applicant,

it is clear (from the tables included here) that he used, for almost all the data, the statistics on farms located in the Hanover region in which the applicant is established and that therefore — as indicated by the expert — the reference to the data on productivity in the Netherlands has a minimal effect in the context of the calculation as a whole. It follows that, for the calculation of the variable costs, the figures provided by the expert can be used. It should be recalled that, in the *Mulder* case, the expert's calculation was not used in

order to determine the costs of the hypothetical milk production, basically for two reasons: first, because the quantification of the costs of maintaining the machinery was excessive and, second, because it did not seem correct to include certain items of expenditure. In this case, given that the parties have not contested the cost items taken into account by the expert and since, moreover, Mr Heinemann's milk production, being relatively small-scale, minimises the effect of the costs regarded in the Opinion in *Mulder and Others* as not falling within the general calculation, it can be concluded that, in calculating the variable costs, the figures provided by the expert should be followed.

The capital factor

139. The applicant indicates the sum of DEM 6 200 as the total amount of capital released. This is equivalent to half the value of a cowshed space (estimated at DEM 8 000) plus the average purchase price of a heifer (DEM 2 200). That sum of DEM 6 200 is not contested by the defendant institutions. The Commission simply points out that the applicant has not taken into account the sums needed for the purchase of new machinery which would have allowed the resumption of milk production in 1984 and, more specifically, that he has not taken into account the subsequent expenses for the renewal of the milking installations which should have been provided for regardless of the state of the machinery already on the farm.

The alternative income

— The hypothetical alternative income

138. It should be recalled that the determination of the hypothetical alternative income is based on the calculation of income derived from three production factors which were released by the suspension of milk production: capital, land and labour.

140. As for the income produced by that capital, the applicant maintains that this should be calculated at 3.5% per annum, that is to say, on the basis of the data derived from the agricultural statistics provided by the German authorities. The applicant denies that this income can be calculated at the higher rate generally produced by available cash. The Council and the Commission consider, on the other hand, that the interest rate should be around 5.5% per year. The expert bases his figures not on the value of cowshed space (released), but on the purchase price of the cattle required upon the (hypothetical) resumption of milk production, and therefore calculates the capital saved due to the absence of such resumption. He is of the opinion that the sum needed to purchase eight or nine heifers in 1984 in order

to ensure the production of Mr Heinemann's milk quota is DEM 19 800. According to the expert, the general interest rate applied by the local savings banks should then be applied to this capital,

reduced by the annual rate of variation in the consumer price index. The income earned from capital by the applicant should therefore be calculated by applying the rates which appear in the following table:

Year	Interest rates of savings banks	Inflation	Capital return rate
1984/85	3.39%	2.40%	+ 0.99%
1985/86	3.25%	2.00%	+ 1.25%
1986/87	2.78%	(0.10)%	+ 2.88%
1987/88	2.38%	0.20%	+ 2.18%
1988/89	2.25%	1.30%	+ 0.95%

Those conclusions are contested both by the applicant and by the Commission and the Council. The institutions assert that the total capital should be determined in relation not only to the price of heifers but also to that of all animals in the herd, with this price relating to the date of resumption of milk production and with the herd consisting of both heifers and cows and calves. As regards the return on the capital, all the parties contest the deduction of the rate of inflation from the interest rate applied by the local savings banks. According to the Commission, it would be irrational to make such a deduction solely in respect of the income earned from capital and not in relation to the other income. The applicant, on the other hand, observes that such a calculation model would lead — given the interest rates offered by public savings banks — to any income being reduced to nil. This is because the deduction of the two percentages would normally be negative, with the result that there would be no income earned from the capital.

141. The doubts expressed by the Commission with regard to the animals to be taken into account and to the deduction of the rate of inflation may partly be accepted. As regards the animals to be taken into account, it is evident from the expert's report that the calculation of the income earned from capital in Mr Mulder and Others is different from that for Mr Heinemann. In the former case, the expert fixed the average price of an animal by taking into account the prices of cows at the various stages of lactation whereas, in this case, the price used is only the general price of heifers. Despite this, in the absence of data on the average price of the various animals in the herd, it seems reasonable and fair, in calculating the income earned from capital, to take into account, the values to which the expert referred. In any event, it may be assumed that the expert proposed a simplified version of the calculation applied in *Mulder and Others* (by not indicating the differentiated price of the various animals), on account of the smaller

milk production of Mr Heinemann. It cannot therefore be excluded that Mr Heinemann had, as animals intended for milk production, only heifers and no other animals. As for the observations of the Commission concerning the deduction of the rate of inflation, these should be accepted. On this point, reference need only be made to the comments made in relation to *Mulder and Others*. To conclude, I consider that, for the purposes of calculating the income earned from capital by Mr Heinemann, the interest rate of the local savings banks should be applied to the total amount of the capital indicated by the expert.

The land factor

142. The applicant calculates the income produced by the land factor by reference to the average agricultural rent according to the statistics of the Hanover Chamber of Agriculture. He provides the data set out in the following table:

Year	Milk production kg/year	Fodder crops ha/cow	Rent DEM/ha	Rent DEM/kg
1984/85	4 664	0.43	358	0.033
1985/86	4 764	0.44	308	0.028
1986/87	4 828	0.41	383	0.033
1987/88	4 509	0.40	366	0.032
1988/89	5 117	0.43	283	0.024
1989/90	5 070	0.37	379	0.028

According to the Commission, which uses the Westphalia statistics and not those of Hanover where the applicant is established, the income figures indicated in this table are too low. In particular, they do not take into account the surface area which, in any dairy farm, is given over to the production

of fodder. That surface area would be equal to 0.5 ha per cow. According to the Commission, account should be taken of the fact that Mr Heinemann used 4.5 ha for fodder crops, as he normally had nine cows for milk production.

Year	DEM/ha	ha (x)	DEM/year (=)
1984/85 (223 days)	429	4.5	1 179
1985/86	426	4.5	1 917
1986/87	446	4.5	2 007
1987/88	472	4.5	2 124
1988/89 (301 days)	495	4.5	1 837
		Total	9 064

143. The expert, still referring to the statistics of the Hanover Chamber of Agriculture, uses a different calculation method, in that he takes into account not only the income produced by letting of land but also that produced by letting of the buildings on

that land. In order to determine the size of the part of Mr Heinemann's farm given over to milk production, the expert bases his calculation on the total number of animals of that producer. The result of that calculation is as follows:

	Heinemann 1984/85	Heinemann 1985/86	Heinemann 1986/87	Heinemann 1987/88	Heinemann 1988/89
Days	132	365	365	365	363
Basic quantity	36 705	36 705	36 705	36 705	36 705
Increase of 1%	37 072	37 072	37 072	37 072	37 072
Progressive reduction	2.0%	2.0%	2.0%	7.5%	7.5%
Land released (ha)	5.06	4.74	4.46	4.26	
Pro rata income from land	1 026	2 463	3 289	2 585	12 112
Income from land (DEM/100 kg)	7.81	6.78	9.05	7.58	

144. The applicant contests these figures, for two reasons. First he criticises generally the inclusion of the rent for buildings in the sources of income: and, second, he points out that the only type of income that his land could produce was that inherent in the breeding of bulls, representing 16% of the total surface area. That criticism cannot be accepted. Reference need only to be made to the observations appearing above on this subject. However, I do not believe that reference can be made to the Commission's calculations, since the latter uses statistics for the Westphalia region, not the Hanover region in which the applicant is established. To conclude, the income from the land factor must be calculated on the basis of the rental indicated by the expert.

The labour factor

145. The labour factor is composed of the labour released due to the cessation of milk production. The applicant maintains that, in order to determine the amount of income from this production factor, reference should be made to the working hours required for rearing dairy cows which, due to the suspension of production, the farmer could devote to other production activities. In the present case, account should therefore be taken of the working hours devoted by Mr Heinemann to the rearing of dairy cows. According to the applicant, this amounts to one and a half

hours per day, giving a total of 547.5 hours per annum which could not be devoted to other activities because of its restrictive nature. On the other hand, the Commission maintains that the total number of hours required to rear a cow is 80 hours per annum and that Mr Heinemann should

therefore, in order to rear his nine cows, have devoted 720 hours per year to this. Using this working time as the calculation basis, the total income would be DEM 25 390 as indicated by the data set out in the following table:

Year	Average wage — Agricultural workers DEM/hour	x 720 hours	= Income per year
1984/85 (223 days)	9.39	x 720 hours	4 131
1985/86	8.15	x 720 hours	5 868
1986/87	8.82	x 720 hours	6 350
1987/88	4.50	x 720 hours	3 240
1988/89 (301 days)	9.77	x 720 hours	5 801
		Total	25 390

The expert bases his calculation on the assumption that the working time devoted by the applicant to the nine dairy cows on his farm is that indicated by the latter, namely 68.44 hours per cow per annum. By

applying the data on the average wage of an agricultural worker in the years 1984 to 1989, the expert calculates the income earned from the labour of Mr Heinemann as set out in the following table:

	Heinemann 1984/85	Heinemann 1985/86	Heinemann 1986/87	Heinemann 1987/88	Heinemann 1988/89	Total
Days	132	365	365	365	363	
Basic quantity	36 705	36 705	36 705	36 705	36 705	
Increase of 1%	37 072	37 072	37 072	37 072	37 072	
Time/cow	70	70	70	70	70	
Hourly rate	9.67	9.97	10.17	10.40	10.55	
Progressive reduction	2.0%	2.0%	2.0%	7.5%	7.5%	
Time released (hours)	227.84	560.00	560.00	560.00	487.32	
Pro rata income from time	2 203	5 583	5 695	5 826	5 141	
Income from time (DEM/100 kg)	16.77	15.37	15.68	16.98	15.08	24 447

The applicant considers that this income is too high. The Commission denies, however, that the expert calculated the income earned from the labour released without taking account of the time needed for other work, such as the cultivation and storage of fodder, which is not strictly linked to the rearing of cows, but which is generally carried out by the farmer. Inclusion of those activities produces the figure of 80 working hours per cow per annum indicated by the Commission.

— The actual alternative income obtained from fattening bulls during the years 1984 to 1989

146. In my opinion, it is reasonable on the basis of the information provided by the parties, to assume that the expert took account of all the activities inherent in milk production and therefore also of any fodder cultivation activities. As a result, to what the Commission asserts, the expert's view can be followed when he states, like the applicant, that the working time devoted to the nine cows on the farm amounted to 68.44 hours per annum. The calculations made by the expert may therefore be used to determine the income from the labour factor.

147. The alternative activity actually carried out by Mr Heinemann during the period between 1984 and 1989 was the fattening of bulls. This fact is not contested. However, the parties are still in disagreement concerning the determination of the number of animals reared by Mr Heinemann. The applicant states, without providing any evidence, that he had reared nine bulls, being the maximum number of animals for which he had appropriate accommodation. The total number of bulls was therefore the same as that of the dairy cows previously kept. The Commission contests this calculation, maintaining that it is false to compare the income obtained from those two activities by reference to the byre space given over to milk production. On the basis of the average values quoted by the applicant for the average income produced from the rearing of bulls during the 1984 to 1989 marketing years (see the applicant's statement of 30 June 1993, p. 8), the Commission concludes that Mr Heinemann either suffered no actual loss or that his financial loss was minimal since his replacement activities produced an income higher than that which he would have obtained from milk production. The Commission's calculations are based on the data

provided by the expert, Mr Wortmann, as set out in the following table:

Year	Income from milk production (DEM)	Actual income (DEM)	Damage (DEM)
1984/85 (223 days)	5 653	9 303	0
1985/86	11 388	15 227	0
1986/87	12 456	15 227	0
1987/88	13 168	15 227	0
1988/89 (301 days)	12 326	12 557	0
		Total loss	0

148. The Commission also asserts, on the basis of the data provided by Mr Wortmann (without, however, specifying in which of the expert's reports produced by the applicant these figures appear), that the difference between the income attributable to hypothetical milk production and alternative income is only DEM 4 739. This is

because, whereas the hypothetical income from milk production would have been DEM 54 991, according to the expert's report, the applicant's gross earnings amounted to DEM 50 252 in the years 1984 to 1989, as is clear from the following table:

Year	Gross earnings/bull × 35	Earnings (DEM)
1984/85 (223 days)	317	6 779
1985/86	335	11 725
1986/87	476	16 660
1987/88	328	11 480
1988/89 (301 days)	125	3 608
Total		50 252

Moreover, again according to the Commission and on the basis, likewise, of the data contained in the expert's report annexed by the applicant to his statement of 25 June 1993, a loss amounting to DEM 12 534 might be produced. This would result (as

shown by the following table) from the difference between the hypothetical income, estimated at DEM 69 820, and the alternative income, estimated at DEM 57 286. The figure of DEM 3 500 should then be deducted from this amount,

as being equivalent to the premium offer for the rearing and fattening of bulls provided for by Council Regulation (EEC) No 467/87 of 10 February 1987 amending

Regulation (EEC) No 805/68 on the common organisation of the market in beef and veal and the systems of premiums granted in the beef and veal sector.²⁷

Year	Gross margin per kg of milk	Profit	Gross earnings per bull	Earnings for 35 bulls
1984/85 (223 days)	0.370	8 045	356	7 613
1985/86	0.435	15 481	340	11 900
1986/87	0.443	15 766	432	15 120
1987/88	0.443	15 766	325	11 375
1988/89 (301 days)	0.503	14 762	389	11 278
Total		69 820		57 286

149. On the other hand, the expert considers that it is possible to conclude from the data provided by the applicant on the number of animals intended for milk production and the actual size of the cowshed that Mr Heinemann could have reared 21 bulls during the period in question. If that number is multiplied by the average income

attributable to the sale of each bull, as indicated by the applicant in his statement of 25 June 1993 and not contested by the defendant institutions, this gives a total amount which is greater than that indicated by the applicant and is based on the calculation factors set out in the following table:

Year	Gross earnings/bull	Earnings (DEM)
1984/85 (223 days)	356	2 242
1985/86	340	7 140
1986/87	432	9 072
1987/88	325	6 825
1988/89 (301 days)	389	8 169
Total		33 448

²⁷ — OJ 1987 L 48, p. 1.

150. It is unnecessary to examine this calculation in depth, for the following two general reasons. First, it involves the same abstract features as the calculation needed in order to determine the income produced by the three production factors (capital, land and labour) released following the suspension of milk production. The calculation of the number of bulls, as in the case of that relating to the income obtained from their sale, is based on statistical data and cannot therefore be regarded as quantifying the actual income of Mr Heinemann. Second, the total amount determined on the basis of this method is slightly lower than that resulting from the calculation of the (hypothetical) income obtained from the three production factors released. Consequently, it seems reasonable and fair to use the calculation method followed by the expert.

The claim for other damages due to an increase in the national tax rate and the claim for compensatory interest

151. The applicant claims reimbursement of the national tax due on the amount of the total compensation for the loss suffered. In this respect, he simply states, without providing any confirmation from the relevant national tax provisions, that the tax rate in question will be higher than the (minimal or even nil) rates of tax which would have applied to the income obtained during the various marketing years taken into account in the quantification of the loss suffered, namely the 1984 to 1989 marketing years.

152. On this point, I would refer to the observations made above concerning the similar claim of the applicants in Case C-104/89. It should merely be recalled that financial loss caused by an increase in the national tax rate does not constitute a loss attributable, even indirectly, to unlawful conduct on the part of the institutions, and is not therefore relevant for the purposes of calculating the compensation due.

153. The applicant also claims that the total amount should be increased by interest²⁸ at the rate of 7%. As regards this claim, too, I would refer to the observations made in this respect in the *Mulder* case. Those observations confirm that the applicant is entitled to interest from the date of the damage and hence from the date on which the non-marketing undertaking expired up to the date of determination of the compensation, namely the date of delivery of the 1992 judgment. As regards the rate of that interest, the Eurostat data show that the rise in consumer prices in Germany was on average 2.1% per annum in the years 1984 to 1992. Given that Mr Heinemann suffered financial losses *gradually*, in that the loss occurred over the years 1984 to 1989, a percentage which takes account of the progression over time of the loss should be deducted from this average rate. In view of this, it is reasonable and fair to fix at 1.5% the rate of interest to be

28 — In his observations of 25 June 1993 (p. 12 of the original), the applicant qualifies this interest as 'compensatory'.

applied to the total amount of the compensation.

155. The total compensation offered by the Commission is DEM 1 239.

The compensation due to Mr Heinemann

154. In his statement of 25 June 1993, Mr Heinemann indicates DEM 71 826 as the sum claimed by way of reparation. It should be noted that this replaces the previous claims for different amounts.

156. Finally, the expert quantifies the total amount of the compensation due to the applicant in the sum of DEM 17 167 if, in the calculation of the reference quantity of the milk, the differentiated rate of reduction is applied (2% for the first three marketing years and 7.5% for the last three marketing years), based on the general data set out in the following tables:

	Heinemann 1984/85	Heinemann 1985/86	Heinemann 1986/87	Heinemann 1987/88	Heinemann 1988/89	Total
Days	132	365	365	365	363	
Basic quantity	36 705	36 705	36 705	36 705	36 705	
Increase of 1%	37 072	37 072	37 072	37 072	37 072	
Progressive reduction	2.0%	2.0%	2.0%	7.5%	7.5%	
Gross earnings	3 748	12 943	12 527	10 686	15 329	55 233
Gross earnings (DEM/100 kg)	28.53	35.62	34.48	31.16	44.95	
Gross profit	28.53	35.62	34.48	29.41	43.53	

	Heinemann 1984/85	Heinemann 1985/86	Heinemann 1986/87	Heinemann 1987/88	Heinemann 1988/89	Total
Days	132	365	365	365	363	
Basic quantity	36 705	36 705	36 705	36 705	36 705	
Increase of 1%	37 072	37 072	37 072	37 072	37 072	
Progressive reduction	2.0%	2.0%	2.0%	7.5%	7.5%	
Alternative income	3 300	8 294	9 555	9 005	7 913	38 066
Alternative income (DM/100 kg)	25.11	22.83	26.30	26.26	23.20	

	Heinemann 1984/85	Heinemann 1985/86	Heinemann 1986/87	Heinemann 1987/88	Heinemann 1988/89	Total
Days	132	365	365	365	363	
Basic quantity	36 705	36 705	36 705	36 705	36 705	
Increase of 1%	37 072	37 072	37 072	37 072	37 072	
Progressive reduction	2.0%	2.0%	2.0%	7.5%	7.5%	
Difference	448	4 649	2 973	1 681	7 416	17 167
Difference (DM/100 kg)	3.41	12.80	8.18	4.90	21.74	
Difference	3.41	12.80	8.18	3.15	20.33	

157. In the light of all the above considerations,²⁹ I consider that the total amount of compensation due to Mr Heinemann is

DEM 16 517, based on the data set out in the following table.

Heinemann ⁽¹⁾	1984/85	1985/86	1986/87	1987/88	1988/89	Total
Hypothetical income	4 543	12 943	12 527	10 686	15 329	
Alternative income						
— Income from capital	214	572	648	418	396	
— Income from land	956	2 509	3 350	2 800	2 638	
— Income from labour	2 203	5 583	5 695	5 824	5 141	
Total alternative income	3 373	8 664	9 693	9 042	8 739	
Loss of earnings	1 170	4 279	2 834	1 644	6 590	16 517

(1) All the amounts have been adjusted in accordance with the information provided by the expert at the hearing.

29 — For the purposes of quantifying the various items involved in determining the loss, the sources from which the data taken into account for this determination have been taken should be briefly indicated.

(a) *With regard to the hypothetical income*, the data indicated are those provided by the expert.

(b) *With regard to the alternative income*, the data taken into account are also those provided by the expert, to which, however, certain corrections have been made whenever there has been a divergence from the calculation method followed by the expert. In particular, in the calculation of the income from all factors, with regard to the initial and final marketing years of the period taken into account for calculating the compensation, the total income has in each case been reduced by a percentage corresponding to the number of days excluded from the various marketing years in that period. In addition,
— as regards the capital factor, the rate of increase in consumer prices during the years 1984 to 1989 has not been deducted from the interest rate offered by local savings banks,
— as regards the land factor, the data on the hypothetical income provided by the expert have been taken into account.

The total amount of compensation must be increased by interest at the annual rate of 1.5% from 20 November 1984 to 19 May 1992, from which date the default interest at the annual rate of 7% becomes payable until the date of actual payment.

to pay the costs. Article 69(3) goes on to provide that the Court may order that the costs be shared between the parties, either wholly or in part, if the parties respectively fail on one or more heads. It is indisputable that, in this case, the parties have partly failed both as regards the establishment of the Community's liability, which arises only from the illegality of the milk quota legislation of 1984 and not from the illegality of the 1989 regulation alleged by the applicants,³¹ and as regards the quantification of the loss. I therefore consider that each party should bear its own costs.

Costs

158. In both Case C-104/89 and Case C-37/90, the applicants claim that the defendant institutions should be ordered to pay the costs. Those costs include the fees of the expert which, it should be recalled, may be incurred by the parties as 'recoverable' expenses pursuant to Article 73(a) of the Rules of Procedure.³⁰

The fees in respect of the expert's report may also be borne by the Court as to one third of the total amount, with the other two thirds being payable by the parties. It seems reasonable and fair that half of the latter amount should be paid by the institutions and the other half jointly by the five applicants in the two joined cases.

Under Article 69(2) of the Rules of Procedure, the unsuccessful party is to be ordered

31 — The Court in fact held that the Community could not incur liability for the adoption of Regulation No 764/89 since, although there had been a breach of the principle of the protection of legitimate expectations, that breach 'cannot be described as being sufficiently serious' to confer a right to reparation pursuant to the second subparagraph of Article 215 of the Treaty (paragraphs 18 to 20 of the 1992 judgment).

30 — The amount of the fees claimed by the expert has been contested by all the parties to the dispute and the Court will therefore have to determine that amount by order under Article 74 of the Rules of Procedure.

Conclusion

159. In the light of the foregoing, I propose that the Court should:

(1) *in Case C-104/89*, order the defendant institutions to pay:

—to Mr J.M. Mulder the sum of NLG 630 416 plus interest at the rate of 1.3% from 1 October 1984 to 19 May 1992;

—to Mr W.H. Brinkhoff the sum of NLG 363 908 plus interest at the rate of 1.3% from 5 May 1984 to 19 May 1992;

—to Mr J.M.M. Muskens the sum of NLG 445 563 plus interest at the rate of 1.3% from 22 November 1984 to 19 May 1992;

—to Mr Tj. Twijnstra the sum of NLG 709 791 plus interest at the rate of 1.3% from 10 April 1985 to 19 May 1992;

- (2) *in Case C-37/90*, order the defendant institutions to pay to Mr O. Heinemann the sum of DEM 16 517 plus interest at the rate of 1.5% from 20 November 1984 to 19 May 1992;
- (3) order each party to bear its own costs in respect of the joined cases. The expert's fees should be paid as to one third by the Court, as to one third by the defendant institutions and as to the remaining third by the five applicants.