EUROPEISKA GEMENSKAPERNAS KOMMISSION

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Rapport om tillämpningen av direktiv 90/88

Förslag till

EUROPAPALAMENTETS OCH RÅDETS DIREKTIV

om ändring av direktiv 87/102/EEG (ändrat genom direktiv 90/88/EEG) om
tillnärmning av medlemsstaternas lagar och andra författningar rörande
konsumentkredit

(framlagt av Komissionen)

I.   Inledning och sammanfattning

1.   Den 22 februari 1990 antog rådet direktiv 90/88 om ändring av direktiv 87/102 "om tillnärmning av medlemsstaternas lagar och andra författningar om konsumentkrediter". Direktivet trädde i kraft den 31 december 1992.

2.   Enligt artikel 1a(5)(b) i det ändrade direktivet skall kommissionen "till rådet överlämna en rapport med förslag som skall göra det möjligt att mot bakgrunden av vunna erfarenheter tillämpa en enda matematisk formel för beräkning av den effektiva räntan inom gemenskapen." Enligt artikel 1a(5)(c) skall rådet "före den 1 januari 1996 fatta beslut med kvalificerad majoritet på grundval av kommissionens förslag."

Bakgrund[1]

3.   Det första direktivet om konsumentkrediter, direktiv 87/102/EEG om tillnärmning av medlemsstaternas lagar och andra författningar om konsumentkrediter[2], införde principen om en enhetlig metod för beräkning av den "effektiva räntan". Men principen infördes utan att metoden hade utvecklats. Efter diskussion med regeringsexperter föreslog kommissionen ett nytt direktiv[3], senare ändrat[4] till att inte bara reglera den matematiska aspekten utan också vilka faktorer som skall ingå i beräkningarna. Direktiv 90/88 antogs av rådet den 22 februari 1990. Direktivet införde en formel för beräkning av den "effektiva räntan" inom gemenskapen för konsumentkrediter och bestämde vilka kostnadsfaktorer som skall ingå vid beräkningen genom att ange de kostnader, som inte får medräknas[5].

4.   Alla medlemsstater skulle åtminstone se till att **endast en** matematisk formel för beräkning av "effektiv ränta" användes inom landet. Under en övergångsperiod fram till den 1 januari 1996 skulle de medlemsstater som (före den 1 mars 1990) tillämpade en annan matematisk formel för beräkningen av den "effektiva räntan" få fortsätta med det.

5.   Direktiv 90/88 införlivades i Avtalet om Europeiska ekonomiska samarbetsområdet (EES-avtalet) och därför täcker denna rapport Island, Lichtenstein och Norge såväl som de 15 medlemmarna i Europeiska unionen.

6.   I enlighet med kravet i artikel 1a(5)(b) på att kommissionen skall överlämna till rådet "en rapport med förslag" som skall göra det möjligt att definitivt tillämpa en enda matematisk formel för beräkning av den "effektiva räntan" inom gemenskapen, anställde kommissionen en expert för att genomföra

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[1]   För en mera detaljerad bakgrund till direktiven 87/102 och 90/88, se kapitel 2 i rapporten om tillämningen av direktiv 87/102: KOM(95)117, 11.5.1995.

[2]   EGT nr L 42, 12.2.1987, s. 48.

[3]   EGT nr C 155, 14.6.88, s. 10.

[4]   EGT nr C 155, 23.6.1989, s. 4.

[5]   Ingress nr 3, direktiv 90/88.

en studie över tillämpningen av hur direktiv 90/88 genomförs i Europeiska gemenskapen och i EFTA-länderna[6]. Möten och kontakter med regeringarnas experter skedde också mellan april 1995 och januari 1996. På grundval av resultaten av ovannämnda studie, andra studier över hur direktivet inlemmats i nationell lagstiftning[7], och i synnerhet efter resultaten från kontakterna med regeringarnas experter, överlämnar kommissionen denna rapport som åtföljs av ett förslag till ett direktiv[8] som skall

"göra det möjligt att mot bakgrunden av vunna erfarenheter tillämpa en enda matematisk formel för beräkning av den effektiva räntan inom gemenskapen."

7. Eftersom direktivet kräver en utvärdering och en rapport som "ska göra det möjligt att mot bakgrunden av vunna erfarenheter tillämpa en enda matematisk formel ... inom gemenskapen", måste även andra frågor än den matematiska formeln undersökas för att en enhetlig tillämpning av formeln skall kunna fastställas.

Rapportens slutsatser[9]

8. Inlemmande av direktivet har skett i flertalet av Europeiska gemenskapens medlemsstater och i ovriga EEA Länderna. Formeln i bilaga II till direktivet tillämpas för närvarande i alla EG- och i ovriga EEA länderna, förutom Tyskland, Frankrike[10] och Finland.

9. En del språkliga ändringar behöver göras i den engelska och grekiska versionen av artikel 1a(1)(a) beträffande definitionen av "effektiv ränta".

10. Termen definieras inte exakt likadant i alla medlemsstaterna sedan de inlemmat direktivet, vilket vore önskvärt för tydlighetens skull. Men om man beaktar hur mycket arbete som lagts ned för att förmedla till konsumenterna hur termen används i varje medlemsstat, så kan det inte anses lämpligt att föreslå att ordalydelsen ändras i de olika språken. Trots detta är det önskvärt att ett gemensamt element införs för att i synnerhet konsumenter som idkar gränshandel skall kunna se dessa termer som motsvarande den som används i deras eget land. Efter diskussioner med regeringarnas experter och i enlighet med proportionalitet- och subsidaritetsprincipen, föreslås härmed att en symbol skall användas tillsammans med den innevarande termen. Denna symbol kommer att vara likadan i alla

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[6] *Studie över metoden för beräkning av "effektiv ränta" i EES-området*, avtal A02600/94/000101. Tillgänglig på GD XXIV.

[7] Se fotnot 3 i KOM(95)117, Rapport över hur rådets direktiv om tillnärmning av medlemsstaternas lagar och andra författningar om konsumentkrediter tillämpats.

[8] Medan termen "beslut" används i artikel 1a5c, är detta inte ett beslut enligt artikel 189 i fördraget, utan snarare ett direktiv eftersom dess syfte skulle kräva att medlemsstaterna ändrade sin lagstiftning. Detta förklaras ytterligare i den förklarande promemorian som medföljer förslaget till direktiv.

[9] Kapitel VI nedan.

[10] Se bilaga II till detta dokument

medlemsstaterna. Den kommer inte medföra en förändring av terminologi och bara medföra en låg extra kostnad för inlemmande.

11. Beträffande den matematiska formeln har det bekräftats att den i direktiv 90/88 angivna formeln är den enda korrekta och det rekommenderas därför att den skall bibehållas och vara den inom Europeiska gemenskapen och EEA länderna slutgiltigt använda formeln.

12. Vad beträffar vilka element som skall ingå i beräkningen av den effektiva räntan, så har inlemmandet av direktivet medfört att det nu finns en harmoniserad miniminivå för konsumentskydd inom hela EG- och EEA-området. Eftersom medlemsstaterna anfört få problem med detta, och de uppkomna skillnaderna är minimala, föreslås nu inga ändringar i listan med undantag i artikel 1a(2).

13. Därför ges tillsammans med rapporten ett förslag till direktiv. Förslaget avser följande ändringar i direktiv 90/88:

    - Ett krav på att tillsammans med termen "effektiv ränta" använda en gemensam symbol, som är identisk i alla medlemsstaterna.
    - Artikel 1a(5) stryks för att ta bort övergångsförfarandet samt hänvisningarna till denna rapport och därmed förbundna förslag till lagstiftning.
    - Artikel 1a(3) stryks eftersom åtgärden inte har utnyttjats av någon medlemsstat[11].
    - Krav på att använda en noggrannhet på två decimaler införs i bilaga II i direktivet, och där så krävs, även i bilaga III.
    - Krav på att använda ett år på 365 eller 366 dagar införs i bilaga II i direktivet, och där så krävs, även i bilaga III.
    - Språkliga ändringar införs i artikel 1a1a i den engelska och grekiska språkversionen av direktivet.

14. Vad andra väsentliga delar av direktiv 90/88/EEG beträffar, så skulle alla förslag till ändringar i det här avseendet kunna beaktas tillsammans med förslag som möjligen kan uppstå efter att samråd skett om rapporten om tillämpningen av direktiv 87/102[12].

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[11] Det förekom inga invändningar mot detta förslag från medlemsstaterna vid mötet i april 1995 (punkt 6 ovan) eller sedan dess.

[12] Fotnot 1 ovan.

II   The mathematical formula in Directive 90/88/EEC

15.   Directive 90/88 introduced a common method for the calculation of the "annual percentage rate of charge" into the requirement of price disclosure in consumer credit already contained in Directive 87/102/EEC. The intention was that the annual percentage rate of charge should add a commonly defined and acknowledged element of price disclosure to consumer credit, making its price comparable throughout the EC as well as between different forms of consumer credit.

16.   The Directive defined the mathematical procedure for calculating the annual percentage rate of charge as well as the elements of cost to be included in the calculation[13]. In addition, several assumptions were made for certain forms of consumer credit e.g. open-ended credit that does not provide all the information necessary to calculate the annual percentage rate of charge at the time of conclusion of the contract.

17.   The verbal definition of the "annual percentage rate of charge" is as follows:

> "the total cost of the credit to the consumer, expressed as an annual percentage of the amount of the credit granted and calculated in accordance with Article 1a"[14]

and

> "which shall be that equivalent, on an annual basis, to the present value of all commitments (loans, repayments and charges), future or existing, agreed by the creditor and the borrower, shall be calculated in accordance with the mathematical formula set out in Annex II"[15]

18.   This verbal definition is expressed in a mathematical definition found at Annex II of the Directive. The Annex clarifies, in mathematical terms, those obligations which shall be made equal in their present values through the annual percentage rate of charge.

19.   All the mathematical formulae currently in use in the European Community and the other members of the EEA for the calculation of the annual percentage rate of charge are basically derived from the same principles of interest calculation[16]. **National deviations which lead to different forms of and results from the formulae applied do not derive from mathematical origins**

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[13]   Chapter IV *infra*

[14]   Article 1.2(e) of Directive 87/102 (as amended by Directive 90/88)

[15]   Article 1a(1)(a) of Directive 87/102 (as modified by Directive 90/88)

[16]   Annex III of this Report

but rather from differences in the assumptions applied to the calculations in certain Member States. Were these assumptions identical, so too would be the results.

20. At this point an explanation is necessary, in simple mathematical terms, of the operation of the mathematical rules, both in order to understand the rules themselves and, more importantly, the other forms of calculation (the German, French and Finnish[17] methods) which lead to different results as a result of differences in basic assumptions.

1.   Simple interest rate calculation

21. The price of a credit is defined by the combination of three factors:
- °   the capital borrowed (A_K)
- °   the charges or costs applied (C_K)
- °   the time in which a capital can be used by the borrower (t_K)

22. The interest rate (i) is therefore expressed by the equation:

$$i = \frac{\text{Charges } (C_K)}{\text{Capital } (A_K) * \text{Time } (t_K)}$$

23. Using the convention that interest rates are expressed in relation to 100 currency units (%) and for a time period of one year (p.a.), the equation reads as follows:

$$i \text{ \%p.a.} = \frac{\text{Charges } (C_K) * 100 * 1 \text{ year}}{\text{Capital } (A_K) * \text{Time } (t_{K \text{ in years}})}$$

24. If time is calculated in months, then "1 year" in the upper part of the formula must be replaced by "12 months". Therefore 130.66 ECU for a loan of 1,000 ECU for one year amounts to an interest rate of

$$130,66 * 100 / 1,000 * 1 = 13.066 \text{ \% p.a.}$$

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[17] Finland has availed of Article 1a5a to retain a formula different to that in the Directive. Once a single formula is confirmed for use throughout the EC, it is prepared - according to declarations from Government representatives - to adopt this formula - the derogation is not for reasons of principle but to avoid having to enact two possibly different laws in a short space of time. Finnish legislation does require the disclosure of APR.

2. Yearly Compounded Interest

25. In the simple formula (cost divided by capital and time) no compounding is foreseen. While banks always receive their interest *by the end* of the credit contract period, a bank which receives interest payments *before* the end of this period can reinvest this money and thus earn additional interest. In this way, the real charges in the example given would be not only the 200 ECU after 18 months but also the additional 13.333% on 130.66 ECU (reduced by the amount that early payment would cost the borrower).

26. Thus the simple interest rate does not match the real cost but produces a higher amount of charges than the consumer has consented to. In other words, the annual percentage rate of charge of different consumer credit contracts are not comparable if the period during which interest is compounded is not also equal.

27. Taking the first example from Annex III of the Directive, where the lifetime of such a loan is not exactly 1 year but rather 18 months, with charges of 200 ECU, the traditional simple formula would produce the following result:

$$\frac{200 * 100 * 12}{1.000 * 18} = 13.333 \text{ % p.a.}$$

28. The example given in the Annex, however, states that the result should be 13.066 % p.a. The reason for this difference lies in the fact that credit contracts for different time periods are incomparable without a uniform decision about what to do with the interest earned after a certain time period. To use financial mathematics terms, the question is at which time interest should be "compounded".

29. The definition of an interest rate with reference to 1 year therefore means not only that all interest rates are expressed as "p.a." (which means that the lifetime interest rate of a credit is divided by the number of months and multiplied by 12) but that the compounding period for the credit should be uniformly 1 year. The formula given in Directive 90/88 and in use in the majority of Member States (henceforth referred to as the EC formula) fulfils this condition. The French method of calculation does not recognize this condition at all, thus giving rise to arbitrary compounding periods which in practice amount to 1 month. The German "Rule of 360" accepts a compounding period of 1 year, in principle, but deviates from it in every case where interest has to be calculated for less than a year, especially if the lifetime of the credit does not amount to exactly 1 or more full years. The reason is that calculating interest rates with a compounding period of 1 year is not possible with the simple formula given above.

30. Criticisms have been voiced about the complexity of the EC formula and the need for technical expertise. In this context, it should be noted that the simple formula can only be used for a period during which the capital borrowed

remains constant. In the case of credit with monthly repayments, the accurate calculation of the annual percentage rate of charge would require an approximation of many different calculations which, although simple in themselves, would need to be reiterated so many times that technical assistance would also be required.

31. As will be shown below, the EC formula which is at present successfully used in the large majority of Member States, is merely the more developed form of earlier formulae (in order to take more variables into account) and is more convenient and accurate to use than the other methods presently in use.

3. The 1 year compounding period:

32. As the compounding of interest is an integral part of the calculation of interest, one must already "know" the interest rate in order to use the simple formula (to calculate that interest rate) since the first year's interest must be added to the capital which will bear interest in the subsequent period (e.g. in our example, in the remaining six months in a credit of 18 months duration). The interest rate can no longer be directly calculated but is calculated as a growth rate (i) of the original capital.

33. An interest rate of 13.066% thus increases by $(1 + i)$ of the original capital

$$(1 + 0.13066) = 1.13066$$

1,000 ECU amounts to $1,000 * (1 + 0.13066) = 1,130.66$ ECU after one year.

34. This is also referred to as the "future value" of a capital as it describes the growth rate after a certain time period has passed. The amount can also be considered in terms of "growth" rather than "interest", as the growth can easily be calculated. Interest is the difference between the original capital and its future value after this growth.

35. In the case of a credit which is repaid in total after two years, the same result is achieved with the EC formula or the French or German formulae. The German and the French methods apply the simple formula in two steps:

Year 1	Capital$_1$	=	Capital + (Capital * i)
Year 2	Capital$_2$	=	Capital + (Capital * i) + [Capital + (Capital * i)] * i

Using the above example, another $0.13066 * 1,130.66$ ECU $= 147.73$ ECU for the interest of the second year should be added to the 1,130.66 ECU, producing a result of 1,278.39 ECU.

36.   The EC formula, on the other hand, merely simplifies the equations in a still familiar way using simple algebra:

Capital$_1$ $= (1 + i) *$ Capital
Capital$_2$ $= (1 + i) * (1 + i) *$ Capital
           $= (1 + i)^2 *$ Capital

This simple form is directly calculable with calculators or computers using the exponential form of the same formula. In our example, $(1 + 0.13066)^2 * 1.000$ ECU $= 1,278.39$ ECU. In the same way, after three years, the formula would be $(1 + i)^3 *$ capital and after t years, capital$_t$ = capital $* (1 + i)^t$.

37.   Thus the same result is achieved by the different formulae, though in a simpler way using the EC formula. However, this simplicity is not the main advantage - the formula can also be applied to fractions of a year because "t" expressed in years should properly be expressed as "t/1" which means that t supposes a compounding period of 1 year. If we express "t" in terms of months then "t" would be written as "$t_{month}/12$".

38.   A capital of 1.000 ECU for 6 months lent out at a rate of 12% p.a. would grow to

$$capital_6 = 1,000 * (1 + 0,12)^{6/12} = 1,000 * 1,12^{1/2} = 1,058.30052 \text{ ECU}$$

In the same way, instead of 6/12, this could be expressed as 182/365 days

$$capital_{182} = 1,000 * (1 + 0,12)^{182/365} = 1,000 * 1,12^{182/365} = 1,058.13624^{[18]}$$

39.   An interest rate of 12% p.a. earns 58 ECU interest in a six month period if interest is compounded annually. While 58 ECU is less than half the interest the bank would have earned after 1 year, because this interest is being paid out earlier than foreseen in the compounding period, the bank can invest these 58 ECU for 12% for the remaining six months, with a future value of 2 ECU, thus matching the 60 ECU for six months that would have been reached if compounding occured at the end of the compounding period (1 year). This result cannot be achieved with the older methods of calculation still in use in France and Germany.

40.   Using the German method, an interest rate of 12% p.a. on a capital of 1.000 ECU would yield exactly 60 ECU for six months. If fractions of a year are involved, the simple form either fails to produce a result or does so by deviating from the underlying compounding period of 1 year e.g. by reducing it to 6 months, in this case. Instead of p.a., it would be more accurate to describe it as 6% per half year.

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[18]   The result is slightly different because a 365 day year does not divide evenly

41. In fact, the French method states that a rate of 6% for a half year may be multiplied by 2 to reach the annual percentage rate of charge. The compounding period in France is therefore regarded as unimportant and can be arbitrarily convened through the repayment periods (which in the case of consumer credit are normally monthly). The French method therefore usually uses a monthly compounding period.

42. In Germany, on the other hand, the annual compounding period is prescribed as a rule. However, in order to avoid exponential calculation, it deviates from this rule for the last year of the life of a credit if this year does not amount to exactly 12 months. Consumer credit contracts with a lifespan of less than a year are therefore equally misrepresented in the German and the French calculations of the annual percentage rate of charge. The results differ from each other significantly if the life-span is more than a year[19].

43. Given the express intention in Directive 90/88/EEC that a single formula for the calculation of the annual percentage rate of charge should be used in order to facilitate the comparison between credit offers from different countries, the conditions of calculation must be uniform. One of the most basic conditions is that each annual percentage rate of charge should be calculated on the basis of the same compounding period of 1 year.

44. Only the mathematical formula in Directive 90/88, in use in the majority of Member States, follows this condition and produces comparable annual percentage rates of charge .

4. The EC formula

45. The simplest form[20] of this mathematical formula is

$$A_{K'} = A_K * (1+i)^t$$

where

$A_{K'}$ is the initial loan augmented with all charges and interest at the end of the credit's lifespan
A_K is the initial loan
i is the interest rate expressed p.a. (but not in percent)
t is the lifespan of this loan

46. It might have been closer to traditional legal understanding if the Directive had put emphasis on the total cost (C) of a credit instead of its 'present value',

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[19] Table at paragraph 86 *infra*

[20] This form does not, in practice, fully take into account all elements of a transaction

although the mathematical meaning would have been the same. The formula using total cost C would then have been:

Extended Capital + Total Cost = Extended Capital multiplied by the growth rate in the time period

$$A_K + C = A_K * (1+i)^t$$

47. The annual percentage rate of charge is the factor which represents the growth of an initial capital, taking into account all charges for a given time period with annual interest compounding expressed as a percent per annum. The calculation is based on real time, with daily precision where loans, repayments and charges are debited or credited to the debtor. For the sake of accuracy, therefore, the results should be expressed to an accuracy of 2 decimal places and the year shall be expressed as having 365 days[21].

a)   Present Value

48. The present value of all repayments and charges in consumer credit is normally the initial loan. This means that if all charges expressed by the growth-rate are subtracted, the principal (the original capital) will remain. For most normal calculations, as expressed in the examples of Annex III of Directive 90/88, the above formula would be sufficient. But where there are deviations in practice e.g. with a loan being paid out later than the date of the contract (or more precisely the date on which interest is calculated), the amount of the loan would already include interest. The amount of the loan would therefore have to be used in the calculation with its present value. The EC formula therefore takes into account the present value of a loan in the following form:

$$\frac{AK}{(1+i)^t} = \frac{A\ K}{(1+i)^{t_-}}$$

If the loan is paid out at the beginning of the calculation, t is 0

b)   Summing up different calculations: the Σ symbol

49. Most consumer credit contracts do not take the simple form of a once off repayment at the end of their lifespans but are paid back in instalments.

50. As the above mentioned formula (and the simple formulae in use in France and Germany) presupposes a constant interest bearing capital for "t",

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[21] Table at Paragraph 125 *infra*

each credit must be divided into as many credit transactions as changes occur in the interest bearing capital.

51.   Therefore the annual percentage rate of charge is only correct if it is used equally in all individual calculations and if the sum of all present values (Σ) is equal to the sum of the present values of the loans or if the growth of the loan expressed as one single growth rate is equal to all the charges and costs incurred, whether in the present or in the future.

52.   This is the formula used in the Directive, employing the Σ symbol to indicate that a sum is to be made out of multiple calculations. It is also the formula used in all Member States of the European Community and other members of the EEA with the exception of Germany, France and Finland.

III   The calculation of the annual percentage rate of charge in the EC and other members of the EEA

1.   General Observations

a)   Interest and the annual percentage rate of charge

53.   Creditors calculate the price of credit in numerous ways and under many different names[22].   Although there are some general guidelines concerning the way in which charges for consumer credit are calculated, the definitions are far from uniform.   Usually, creditors distinguish between "once-off costs" (one time only costs) such as fees and charges, and "interest" (variable or time costs that comprise all those charges which increase over the duration of the credit). Some banks put more emphasis on the (nominal) interest rate, others on fees. The method of distinguishing between fees and interest, and the methods of interest calculation differ not only between countries but also from one creditor to another.   Sometimes this is due to the internal cost benefit calculation of a bank, or the fact that the creditor must share the profits with other institutions (brokerage fees, insurance premiums), or to facilitate the individual calculation of the cost of the credit by third parties (intermediaries or brokers).

54.   National law usually assumes that creditors are free to choose any appropriate and non-arbitrary method to define the cost of a particular credit. The only requirements are transparency and completeness in the list of charges. In some countries, there is an exception to the arbitrariness of the definition of the nominal interest rate, in connection with the requirements of Article 8 of Directive 87/102 (early repayment).   This article requires national rules for the calculation of an equitable reduction in the cost of the credit.   Some countries fix percentages of the total cost to be refunded[23] while others state that the rebate should concern only "time costs" which are expressed by the nominal interest rate[24].   The situation varies from State to State[25], as does the definition of

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[22]   A 1984 survey revealed that the term "interest" was used in 13 different ways in Germany alone.   It should be noted that this arbitrary use of terms only concerns internal calculations, not the legally prescribed disclosure of the APR.

[23]   In France, this is three times the contracted amount for the next payment, and then reverts. Décret 90-979 of 31.10.90 (Article L311-29)

[24]   The notion of "interest" in the rules on price disclosure must be distinguished from "interest" as used in restrictive rules on the refund of time-connected charges (e.g. anatocism or "interest on interest"), where courts do not interfere directly with the definition of nominal interest in the contract but rather recalculate the part of the cost for rebate by using their own definition of interest.

[25]   In Germany the Supreme Court has held that a "disagio" was to be considered not as a once-off fee but as hidden interest and therefore to be partially refunded in the event of early repayment. Bundesgerichtshof, 16.11.93, XI ZR 30/93

"equitable". The rule usually used for such calculations is the "Rule of 78"[26] which it is generally agreed is inaccurate, but acceptable in small credit transactions.

55. The Directive did not interfere with the methods of calculation of early repayment already in use or with the definitions of interest used internally in contracts. As far as interest was concerned, the Directive aimed to harmonise the notion of interest as it is used in the "interest rate" for price disclosure, i.e. to state a uniform requirement to disclose the result of this cost calculation in a Community-wide comparable credit price - the annual percentage rate of charge.

56. In this respect all Member States are in agreement - no State leaves it to the discretion of the contractors to define the method of calculation of the annual percentage rate of charge or the elements to be included although, as we have seen, France and Germany have left some arbitrary elements insofar as creditors may influence the annual percentage rate of charge by choosing special life-spans for their credit contracts.

57. The form of the regulation varies. Most countries do not simply transcribe the verbal form of the calculation into their law but leave its mathematical definition to administrative bodies.

b) Verbal Definitions of the annual percentage rate of charge

58. Directive 90/88 defines the annual percentage rate of charge directly by the method of its calculation, while Directive 87/102[27] presupposed a definition. **National legislation distinguishes between the definition of the annual percentage rate of charge and the method of its calculation**, using the traditional relationship between time, cost and capital expressed on an annual basis in percent as the most important element of definition followed by the method of its calculation[28].

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[26] Accurately defined in Section 2.510 of the US Consumer Credit Code Regulation Z §226.8(b)(7), the "Rule of 78" takes its name from the sum of the digits 1 through 12. In the first month, the creditor earns 12/78ths of the agreed interest. After 2 months, the creditor has earned 23/78ths i.e. the first 12/78th plus 11/78ths... The formula wherein the time periods are expressed as months defines those parts of the total interest earned which must be refunded as follows:

[rest of lifetime in months + 1)*rest of lifetime] * total interest
(lifetime in months + 1)*lifetime in months

For commentary, see German *Bundesgerichtshof Neue Juristische Wochenschrift* 1979 p. 542.

[27] Article 1.2e of Directive 87/102, amended by Directive 90/88

[28] Annex II of this Report contains a list of and brief analysis of national transposing legislation

- ° Denmark[29] requires the statement of the "annual costs in percent"
- ° Germany[30] defines the "initial effective interest rate" as "the total amount of charges expressed as an annual percent rate of the net capital or cash price"
- ° Spain[31] defines the "annual equivalent rate" as the total cost of credit expressed as an annual percentage of the capital lent"
- ° France defines the rate as the "global effective rate"
- ° Ireland[32] defines the rate as the total cost of credit expressed in an annual percentage of the amount of credit given ..."
- ° The Italian[33] and Portuguese[34] laws use a similar definition
- ° The Netherlands[35] defines an "effective credit remuneration percentage on a year-basis as the reward for the credit according to the agreement, expressed as a percentage for a year of the open balance"
- ° Sweden[36] defines the "effective interest" as "the credit cost to the consumer, expressed as an annual rate in percent of the amount of the credit granted, where the instalment payments made during the life span of the loan have been appropriately taken into account."

59.   Similar definitions can be found in the other Member States. The UK[37] is the only State to refer to the compounding period: "The annual percentage rate of charge is a rate per annum compounding annually expressed as a percentage such that a) the sum of present values as at the relevant date of all repayments of credit and the total charge for credit; and b) the sum of present values as at the relevant date of all credit under the agreement would, when calculated at that rate be equal." Austria combines both definitions in one article[38] and defines the annual percentage rate of charge as the "decursive percentage rate for a full year which establishes numerical equality between the sum of the credit paid out and the sum of all payments ..." and provides the explanation that "It expresses the total cost of credit in relation to the credit granted ..."

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[29] Art. 9.1.4, 1990/398 Lov om kreditaftaler of 13.6.90

[30] Art. 4 alinea 2 of the Verbraucherkreditgesetz of 17.12.90

[31] Art. 18 b of the Ley de crédito al consumo of 23.03.95

[32] Consumer Credit Act 1995, s.9

[33] Art. 19 Legge Communitaria 142 of 19.2.92

[34] Art 2, al (a) Decreto-Lei of 21.09.91

[35] Art 1.2 k Wet op het consumentenkrediet of 04.07.90

[36] Art 2 Konsumentkreditlag 830 of 1992

[37] Statutory Instrument on Consumer Credit Regulation 1980/51 Art. 9 al. 1

[38] Title VIII, Art. 33 al. 4 of Bankwesengesetz 1993/532

2. The Application of the EC formula

60. With the exception of Germany, France and Finland, all the Member States of the European Community and the other members of the EEA have incorporated the EC formula into their national legislation. The majority of them (except the United Kingdom), did so in reaction to the Directive.

61. In some cases, the wording of Article 1a was used and the mathematical equation, in Annex II was copied, though sometimes the symbols were replaced by others (because it was felt that different symbols for repayments and loans would make the formula easier to read). Some countries have literally incorporated the mathematical formula of the Directive. This is the case for Denmark, Greece, Italy, Luxembourg, Portugal, Sweden and Iceland.

62. The remaining Member States either used other symbols, elaborated different examples or gave more verbal explanations in the construction of the formula but kept to the basic equation, using the "internal rate of return" or exponential growth:

- In Belgium[39], the "balanced cash value equation" given in the Directive is restated using different symbols. An iteration procedure that can be used to solve the balanced cash value equation is described and this procedure is applied step by step to several examples
- In Spain[40], the formula is developed in two steps and examples different to those in the Directive are given in the Annex
- In Ireland[41], the conditions and applications of the formula are explained in words and, particularly, growth and cash value as well as the iteration procedure are explained. In addition, accuracy is also covered
- The Netherlands has developed "Rules on Effective Credit Yield"[42] which elaborate on the mathematical procedures in some detail. The "effective credit remuneration percentage on a year-basis" is developed on the open balance of a credit. The calculation of an open-ended credit is also explained
- Similarly, Austria[43] uses the EC formula with different symbols and also developed the "fictitious annual interest rate" for open end credit
- The UK has a vast body of rules regulating the general requirements of the Consumer Credit Act. The mathematical formula in the Directive 90/88

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[39] Arrêté Royal 2311 of 04.08.92 (amended on 29.04.93 by 1381/1993)

[40] Article 18a Ley de crédito al consumo, 23.03.95

[41] Consumer Credit Act 1995

[42] Regeling effectief kredietvergoedingspercentage of 06.11.91

[43] Title VIII Art. 33 al.4 of the Bankwesengesetz

is restated[44] and three examples are developed, demonstrating different degrees of sophistication in the mathematical procedure.

- In Norway[45], "effective interest" is calculated with the same formula as in the Directive

3. The calculation of the annual percentage rate of charge in Germany and France

63.   As mentioned above, the difference between the mathematical formulae in use in Germany and France, and the EC formula lies basically in the unwillingness of those countries to use exponential calculation. Mathematically, this results in a situation whereby neither country can apply a 1 year compounding period for all circumstances.

a)   The German Method

64.   The German method calculates interest for 12 months and compounds it at the end of this time before restarting interest calculations for the next 12 months. If the last year does not have 12 months, interest is compounded earlier. Legally, this result is achieved through a complicated reference scheme. Article 4 of the Consumer Credit Act refers to Article 4 of the Price Disclosure Regulation which, for the purpose of interest calculation, refers to Art. 608 of the Civil Code.

65.   However, Art. 608 makes no reference to "interest calculation" but deals only with the question of the time at which debtors must pay interest in the event that nothing has been agreed (in which case it establishes a rule that interest must be paid annually or, if a credit is repaid in less than 1 year, at the time of repayment). Art. 4 of the Price Disclosure Regulation applies this rule to interest calculation by citing this article as well as by using the description "cascade method" (Staffelmethode).

66.   As we have seen above, the question of the time at which interest is paid and the time at which it is compounded are not linked to each other if the exponential form of the calculation is used.

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[44] Statutory Instrument 15 of 1980 The Consumer Credit (Total Charge for Credit) Regulations 1980 of 29.01.80, Art. 6 to 11

[45] Forskrift til kredittkjøpsloven of 15.07.86, N° 1616

67.   In practice, the real source of the German method is a paper by the Bund-Länder-Kommission "Preisauszeichnung"[46]. Here the method is explained and a formula is given that uses exponential forms, though these are by definition more complicated than the EC formula because simple calculations becomes extremely complicated if expressed in correct mathematical terms. This method is known as the "360 day method" due to its additional assumption that a year has 360 days.

68.   The German formula poses a problem not only for comparisons with products in other Member States but also within Germany. In particular, credit for periods of less than a year deviates significantly if the annual percentage rate of charge is stated in the German form.

69.   If a consumer has the choice between:
-      4 consecutive credit contracts, each of 3 months duration, with an annual percentage rate of charge of 12% p.a. each, or
-      one credit contract of 1 year duration with an annual percentage rate of charge of 12.5 %
calculated according to the German "360 day method", producing 1,000 ECU net capital without additional costs, the consumer would have to pay 125 ECU in interest in the second case at the end of the year and 30 ECU every quarter in the first case. But if they had paid the interest in the first case at the end of the year (as in the second case), this would cost them an extra interest charge of:

$$[(12\% \text{ on } 30 \text{ ECU for } 9 \text{ month}) + (12\% \text{ on } 30 \text{ ECU for } 6 \text{ month}) + (12\% \text{ on } 30 \text{ ECU for } 3 \text{ month})] = 0.12 * 30 * (9 + 6 + 3)/12$$
$$= 5.40 \text{ ECU.}$$

70.   Although the German price disclosure regulation was correctly applied, the consumer would have made the wrong choice if they had chosen the "cheaper" credit. 12% p.a. in fact involves a surcharge of 5.40 ECU or an "effective interest rate" of 12.54%.

71.   Thus in Germany, a consumer contracting for 42 months and another contracting for 48 months cannot properly compare their annual percentage rate of charge because the 48 months involves compounding periods of 1 year while the other uses 1 year for the first three years and 6 months for the rest of the life of the credit. The German method is not "correct" in a mathematical sense because the rule of a 1 year compounding period is obviously not observed in

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[46] An administrative body which lays down the surveillance principles for disclosure in price regulations. The reference for the formula is: Bund-Länder Außchußes "Preisangaben" Bemeinsamen Amtsblatt des Landes Baden-Württemberg, seite 27, 05/02/93

all cases, and calculations that are based on different general assumptions and conditions are not equal[47].

72. The German system requires two different formulae for interest calculation: the "Rule of 78" for rebates and the rule of 360 for price disclosure. In cases where it is necessary to calculate the present value, it also uses the EC method. The EC method would enable the calculation of rebates with the same formula[48].

73. The main differences between the German and the EC methods are related to the time period. The most significant differences occur in short term credit covered by the annual percentage rate of charge disclosure requirements of the Directive. As the Directive partially excludes current account credit as well as credit which must be repaid in less than 3 months or with no more than four instalments and a life span of 12 months, the most striking cases are legally outside the scope of the Directive. However, the Directive does require the indication of an "annual rate of interest [49]" for such credit as well.

74. Although this rate is not covered by the requirements of the mathematical formula in Directive 90/88, many countries approach both annual interest rates in the same manner. The problem concerning short term credit of less than one year is therefore increasing. For instance, credit card credit in particular is the first form of crossborder consumer credit. But credit card credit, although expressly subject to the annual percentage rate of charge requirements, tends to be short term credit and may thus escape these prescriptions.

75. The differences between the German and EC methods as regards consumer credit for a period of more than one year are less significant.

b)   The French Method

76. The French method of calculation of the annual percentage rate of charge does not recognize the importance of a generally fixed compounding period. The

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[47] There have been some developments in recent years. The German Bundesgerichtshof has stated, in its decision of March 12, 1991 (XI ZR 190/90), that in case of early repayment of a mortgage loan a bank can only ask the „present value" of future interest as recompensation of lost profit. This present value is calculated according to the same rule as implied in the EC-formula and generally accepted by German banks. In addition, some banks now use the EC-formula for the rebate in consumer credit because the old "Rule of 78" is inapplicable in cases where instalments are not equal.

[48] At present, the use of the "Rule of 78" is necessary because the Rule of 360 cannot be applied to calculate a rebate rationally - no bank applies this rule.

[49] Article 6 of Directive 87/102

relevant Order[50] permits the use of different periods and period rates e.g. of 1 month, 3 months, half a year etc, with interest compounded within each period. The only precision is that if irregular payments are made, only one period should be used for interest compounding. The period rate for one month is then transformed into an annual interest rate simply by multiplying it by 12.

77.   This conversion is misleading because an annual rate is disclosed which is in fact not based on annual compounding periods but on invisible, mostly monthly, compounding periods. As shown below[51], this leads, especially in consumer credit with monthly instalments, to very significant differences. French consumer credit contracts thus appear artificially more favourable to the consumer than in all the other Member States of the European Community and the other members of the EEA. While the German deviation is mathematically inconsistent and creates artificial difficulties in calculation but has modest effects on ordinary instalment credit (though these may be greater if once-off fees are important), the French method deviates so significantly that the French interest rates are misleading not only to other Europeans but also to French consumers who do not get a correct idea of the differences between credit prices e.g. between credits with monthly or quarterly instalments.

78.   The reasoning behind the French method seems to be that in their view, the function of the annual percentage rate of charge should indicate the burden on the consumer, (although it seems to be accepted that the current EC formula is normally used among businessmen)[52].   However, this is reasoning is erroneous, a misunderstanding of the function of the annual percentage rate of charge.   The annual percentage rate of charge does not indicate "the burden on the consumer" - consumers can evaluate the burden on their budget only if it is expressed in currency units because all their monthly income and expenditure is expressed in such currency units. In order to answer the consumer's question as to whether they should take a particular credit, the obligations set out in the Directive regarding the disclosure of instalments and the total cost, as well as the total amount of the debt, are crucial.   Only commercial clients may use the annual percentage rate of charge as an indicator for the burden because they

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[50] Art. 1 of Décret relatif au calcul du taux effectif global, N° 1985/944 of 04.09.85

[51] para 85 below. See also §381-1 of Gavalda and Stoufflet: *Droit Bancaire* (2nd ed) and §28 of Biardeaud: *Guide Pratique pour le contrôle des crédits immobiliers.*

[52] An example of this is the comment made by the Economic and Social Committee on the EC formula when initially proposed: OJ n° 337 of 31.12.88 p. 1-4 §3.3.1:
    "This formula allows for the continuous reinvestment of income as is normal among businessmen, in this case the crediting of yield from the reinvestment of repayments made by the borrower. In practice, this is how the lender, but not the consumer, assesses the value of the loan. For the consumer, the reinvestment of income in terms obtainable by the lender is deceptive. ... it is important to know the burden of the borrower."

can compare it to their own profit rate or the interest rate which they earn with other capital.

79.   The annual percentage rate of charge thus answers the consumer's question as to which credit they should take.   It is a means of comparison. In this respect, the formula in Directive 90/88, which presupposes annual compounding also in the case of monthly payments, is the *only* way of comparing equally calculated products.

80.   It should also be noted that financial developments mean that, for the consumer, the date of payment is also worth money because some credit card accounts even allow overpayment and pay interest on a positive balance.

81.   The older argument, that the annual percentage rate of charge in France is identical with the usury rate and that this rate can not be changed because it would make credit usurious which had not been usurious before, no longer applies due to a change in the French method of regulating usury.

c)   Comparison of the EC formula and the German and French methods

82.   In the following table, a fixed instalment loan of 1,000 ECU with 120 ECU interest for one year is calculated.   In this table, the top rows show clearly that in all three cases the basic items needed to calculate an annual percentage rate of charge (cost, time and principal) are the same.

83.   In the **German method**, interest is calculated every month but only compounded to the principal at the end of the year. Three different calculations are necessary:

> *Each month*
> 1. $Capital_n = Capital_{n-1} - Instalment$;
> 2. $Interest_n = Capital_n * i/12$
> *At the end of the Year*
> 3. $Capital_{12} = Capital_{12} + \Sigma [Interest_n]$

84.   In the **French method**, interest is calculated as in the German method, but compounded monthly. Only one calculation is necessary each month:

> .. *Each month*
> $Capital_n = Capital_{n-1} - Instalment + Capital_{n-1} * i/12)$

85.   The **EC formula** only requires one calculation each month because it calculates the capital growth:

> *Each month*
> $Capital_n = Capital_{n-1} * (1+i)^{1/12}$

The interest can be derived from the capital column by simply subtracting the different balances after instalments have been deducted:

Each month
$$\text{Interest}_n = \text{Capital}_{n-1} - \text{Capital}_n - \text{Instalment}$$

86.   It can be seen that, in all three cases, different interest rates lead to the same amount of interest under the same conditions. While the German method comes quite close to the EC method, the French method deviates significantly.

	GERMANY		FRANCE		EC-DIRECTIVE	
Loan (ECU)	1000.00		1000.00		1000.00	
Instalment (ECU)	93.33		93.33		93.33	
Credit Cost (ECU)	120.00		120.00		120.00	
Life Span (months)	12		12		12	
APR	*24.66%*		*21.46%*		*23.70%*	
Month	Capital	Interest	Capital	Interest	Capital	Interest
1	1000.00		1.000,00		1000.00	
2	906.67	20.55	924.55	17.88	924.55	17.88
3	813.33	18.63	847.75	16.53	847.75	16.53
4	720.00	16.71	769.57	15.16	769.57	15.16
5	626.67	14.79	690.00	13.76	690.00	13.76
6	533.33	12.88	609.00	12.34	609.00	12.34
7	440.00	10.96	526.56	10.89	526.56	10.89
8	346.67	9.04	442.64	9.42	442.64	9.42
9	253.33	7.12	357.22	7.91	357.22	7.91
10	160.00	5.21	270.28	6.39	270.28	6.39
11	66.67	3.29	181.78	4.83	181.78	4.83
12	- 26.67	1.37	91.69	3.25	91.69	3.25
	- 0.00	- 0.55	- 0.00	1.64	- 0.00	1.64
Sum	1120.00	120.00	1120.00	120.00	1120.00	120.00

87.   In the following table, we have used different life spans for a credit of 1,000 ECU, assuming that the creditor would take 10 ECU interest for every month of the lifespan of the credit. (This would be a rate of 1% using the traditional method of nominal interest calculation, which is not an interest rate but a parameter for easier interest calculation).

Life Span (months)	Cost (ECU)	German 360 day method	EC method	French method
6	60	21.49	22.29	20.29
12	120	24.66	23.70	21.46
18	180	24.27	24.00	21.65
24	240	24.34	23.84	21.58
48	480	23.09	22.86	20.75

88.   It shows that the German deviation is quite significant for periods of less than a year. For longer periods, the difference between the German method and the EC method is quite small. However, the difference between the EC method and the French method is between 2 and 3%. The crossborder implications of this are already being felt in certain areas[53].

89.   In any event, there is no direct relationship between the interest rates which would enable a consumer to simply add 2 or 3% to the French (or subtract 0.2% from the German method) because the size of the difference depends on the life span as well as the up-front fees and the interest rate.

4.   Arguments in favour of the EC formula

90.   If the annual percentage rate of charge is seen as a main factor in choosing between different products, the EC formula is mathematically the only way to guarantee that the price represents equal conditions. All the regulations concerning the costs to be considered in the annual percentage rate of charge calculation are meaningless if the mathematical procedure of their inclusion is not homogeneously defined.

91.   The annual percentage rate of charge is the only form of a credit price that can help consumers to shop across the borders in the Single European Market.   It will simplify the legal framework for consumer credit and make national transposition measures more consistent, as well as providing a proper framework for possible future legislative action at Community level as well. As some countries also apply this legislation to mortgage loans, and the differences between mortgage loans and consumer credit are vanishing (second mortgages are used for consumption purposes while the last 20% of an uncovered loan for a home is often given in the form of consumer instalment credit), it would be important, in case of harmonisation in this area, that there would be a unified system of annual percentage rate of charge calculation from the outset.   As credit card credit will be the first form of consumer credit to be offered across borders, and the use of credit cards linked to special instalment open-ended credit offers is increasingly exponentially, a uniform price disclosure system might also be needed in this context.

92.   The potential cost of adapting banks' computer programs and price structures to handle the EC formula in those countries that do not presently use the formula is not a striking argument.   The banking sector in the other Member States have already made this investment in order to adapt to their national legislation as it was transposed.   In addition, banks in France and Germany frequently adjust their programmes to take account of case law and

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[53] German banks already offer consumer credit in Alsace, while Credit Lyonnais, having purchased a German bank (BfG), are beginning operations in Germany.   Complaints have already been received from French consumers who have been misled by a mortgage loan linked to a capital life insurance, the true APR of which, as well as the dangers, had not been made clear by the German bank

administrative rulings on the subject e.g. for the calculation of rebates in the event of early repayment of consumer credit and mortgage loans; for the calculation of damages in the event of early repayment. In addition, some of the calculations are already done using the mathematically correct form.

93. Programming will also be easier using the simpler EC method. Only the EC formula offers consumers the possibility of directly calculating the increase of a capital over a period of years. Its simplicity (1000 ECU for 98 years at an interest rate of 9.6% will yield to $(1 + 0.096)^{98} * 1000 = 7,969,559.30$ ECU) is striking and merely requires the use of a home computer or even a pocket calculator.

IV.   Elements of cost to be included in the calculation

a)   Elements of Cost

94.   The Directive requires that all credit costs must be included in the annual percentage rate of charge calculation.   The "total cost of credit to the consumer" means:
> all the costs, including interest and other charges, which the consumer has to pay for the credit.

95.   The mathematical formula requires that the difference between the present and future value of the capital borrowed should include all the elements of cost to be included in the calculation i.e. not only the nominal interest but all other charges which can be attributed to the credit as such and not to other separate services of special value to the consumer.

96.   With the exception of insurance fees, the Directive uses the indirect method, allowing the omission of five types of costs which are supposed to be "credit costs".   Art 1a(2) allows the following charges to be *excluded* from the calculation of the "total cost of credit to the consumer:

i)	charges payable by the borrower for default
ii)	charges (other than the purchase price) payable regardless whether the transaction is by cash or credit
iii)	charges for accounts, transfers... (except where the consumer does not have reasonable choice or such charges are abnormally high)
iv)	membership subscriptions

b)   Situation in the Member States

97.   As the number of items which could be considered as elements of cost to be included in the calculation is, theoretically speaking, unlimited, most countries simply repeat the exemptions in Article 1a(2), definitely excluding those items from the annual percentage rate of charge calculation, regardless of how closely they are related to the credit.   Thus the regulations in Denmark, Greece, Ireland, Italy, Luxembourg, Portugal and Norway follow closely the wording of Article 1a(2) of the Directive, with practical application generally left to case law.

Art 1a2	i	ii	iii	iv	v	Comments
B	✓	✓	✓	✓	*	Open list of charges to be included. For insurance, the criteria is whether a reasonable choice is given
DK	✓	✓	✓	✓	*	Insurance which does not secure repayment is exempt, whether mandatory or not
D	✓	✓	✓	✓	✓	
EL	✓	✓	✓	✓	✓	
ES	--	--	--	--	*	All charges are included in the rate, including mandatory insurance charges (but non-mandatory ones are not listed as exempted)
F	--	--	--	--	--	All charges are included in the rate. Jurisprudence has resulted in some changes.
IR	✓	✓	✓	*	✓	If the range of services provided is wider than credit, membership fees are not included. If credit is the main activity, the fee is included
IT	✓	✓	✓	✓	✓	
L	✓	✓	✓	✓	✓	
NL	✓	✓	*	*	*	If account fees.. or insurance fees are obligatory, they must be included. There are no membership fees.
Ö	✓	--	✓	--	*	
PT	✓	✓	✓	✓	✓	
SF	--	--	✓	--	*	All charges except those for non-mandatory insurance are included
SV	--	--	--	--	*	The Act exempts no costs (including insurance).
UK	✓	✓	✓	✓	*	All mandatory costs are included.
IS	✓	✓	✓	✓	*	All costs, including non-mandatory insurance, are included
LI	✓	✓	✓	✓	✓	
N	✓	✓	✓	✓	✓	

✓ = Corresponds to Directive 90/88 i.e. these charges are specifically *excluded* from the calculation of the Global Annual Effective Rate

-- = Goes further than the Directive - there is no *specific* exemption for these items - but they may in practice be excluded

* = See individual comments and relevant paragraphs below

98. In Denmark, the costs to be included are more comprehensive than in the Directive[54]. In Belgium there is a positive list of those elements of cost to

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[54] Article 13 of the 1990 Credit Agreement Act defines the total price of credit as the sum of all charges with the exception of certain charges (corresponding to those in the Directive, but more restricted). Charges are divided into three types: those to be included in the

be included in the calculation which must be included[55] as well as a list similar to the exemptions in the Directive (although provided the consumer has a reasonable choice, neither the costs of a credit card which are not connected with credit nor insurance costs are included). Italy and Luxembourg also have an open list of charges to be included in the calculation, though the list of exemptions is closed. Member States, in practice, arrive at lists similar to that of Belgium through their reference to the term "credit cost" which includes items like brokerage fees, up-front fees, disagios... which must be included in the annual percentage rate of charge calculation.

99. The situation in other Member States differs slightly - Spain, France, Finland, Sweden and the UK are tacit on the subject of the list in Article 1a(2). This does not necessarily mean that they deviate from the practical method of annual percentage rate of charge calculation, because they assume that the general definition of the elements of cost to be included in the calculation already leads, in principle, to the exclusion of certain of the items concerned (fees for late payments, fees for bank accounts, membership fees and special cash price fees). These States do, however, make an important distinction in that they generally exclude only those elements of cost to be included in the calculation which are not mandatory - while the majority of States exclude the items listed in Article 1a2, these States apply a test of how the fees have entered into the contract. They therefore apply the distinction in Article 1a2(v) concerning insurance fees to all other charges.

100. The Spanish legislation requires all charges to be included in the calculation, including mandatory insurance charges. Non-mandatory insurance is not mentioned as specifically exempt from inclusion. The elements of cost to be included in or excluded from the calculation are not listed, except as regards insurance premiums and default fees[56].

101. In France, Article L. 313.1 of the Consumer Code states that the calculation must reflect all interest and other charges, commissions and remunerations of any kind, direct or indirect... e.g. including payments to intermediaries. The Comité Consultatif of the Comité Usagers of the Conseil

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annual percentage rate of charge but not necessarily mentioned individually (e.g. charges by the creditor or third parties); those to be listed but not included in the annual percentage rate of charge (membership fees...) and those to be neither listed nor included (cheque fees, transaction fees unless the method is compulsory...)

[55] Article 2.1 of the Arrête Royal 1381 of 4.8.1992 contains an open list of charges which should be included in the "taux annuel effectif global". These include charges for: inquiries, advertising, the creation of a file, inquiries at a credit register, administration of the file, accounting and collection, intermediaries, credit insurance, guarantees and other personal securities, and anything else the creditor requires for the credit...

[56] Article 6.2c of the 1995 Consumer Credit Act states that debt insurance, if required by the lender, must be indicated in the total cost. It also exempts from the calculation charges in the event of default

National du Crédit, in a Report, produced a detailed list of such charges[57], though the list does not appear to be binding in nature:

Charge included	Charge not included
establishment and administrative costs	book-keeping fees
costs for securities and warranties	fees for not using a credit granted[58]
guaranteeing a bill of exchange	
notary costs	service charges
stamp duty	postage
compulsory death insurance premiums	non-compulsory death insurance premiums
overdraft charges	
fee for keeping money available	
fee for confirmation	
account statement fees[59]	
fees for endorsements	

Case law and administrative precedent have included certain elements in the calculation e.g. account fees and insurance premiums. Companies in France are prohibited from selling both credit and insurance, and mandatory insurance is not required for consumer credit but rather for mortgages.

102. Credit costs in Finland are defined as "the total amount of interest, costs and other payments that the consumer shall pay on the basis of the consumer credit relationship. No list of items to be included or excluded is provided. Since 1993, insurance premiums are excluded and must be listed separately.

103. Credit costs in Sweden are defined as the total sum of all cost elements (interest, additional costs and other charges). In theory, there are no exemptions - all elements of cost to be included in the calculation must be included in the annual percentage rate of charge. In practice, the exemptions in the Directive are used. Insurance charges, however, are not mentioned in the regulations. If credit is combined with insurance, or if a separate insurance is mandatory, these costs must be included. Charges to third parties, which arise in connection with mortgages (which are within the scope of the Act) are not mentioned.

104. The UK also defines the total charge as the interest and other charges at any time payable under the transaction. The exemptions[60] are much more

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[57] *Report on the Reform of Usury Legislation, December 1992.* The list is described as being given "under the reservation of the sovereign appreciation by the courts"

[58] Listed under different names as a cost to be included (commission d'immobilisation, commission d'engagement sur autorisation, commission de confirmation) and under two names as a cost to be excluded (commission de nonutilisation, commission d'attente).

[59] Though there also appears to be an obligation to provide these free of charge

[60] Defined in Article 5 of the Statutory Instrument The Consumer Credit (Total Charge for Credit) Regulations 1985

detailed than in the Directive - there is differentiation between different forms and purposes of credit. All premiums for life insurance are exempted[61]. Initial fees (e.g. for administration costs) are common in UK consumer credit, and may be either added to the balance or paid up front. Rest debt insurance (against accident, sickness or unemployment) is common but usually only covers the instalments during that period of illness or unemployment and may be of limited duration. Life insurance cover is often required for larger loans.

105. As regards the remaining Member States, an initial administration fee is usually required for consumer credit in Germany, but some banks claim to use no other ancillary charges (periodic fees, statement fees...). Germany uses the same exemptions as in the Directive. Rest debt insurance is offered, but is usually not mandatory for consumer credit. Where it does apply, it is usually paid as a lumpsum in advance, and the costs must be listed separately. Insurance which does not secure repayment is excluded from the calculation, whether mandatory or not.

106. The Austrian regulation defines the cost elements to be excluded from the calculation. These exceptions differ from those in the Directive in that Austria does not mention charges other than the purchase price which must be paid regardless whether the transaction is by cash or credit, or membership fees. These does not necessarily mean that these are to be considered as interest, as they could be considered as part of the purchase price. Nor do charges required by the State have to be included. Customers must also pay for their annual bank statements.

107. In the Netherlands, only direct credit charges (including mandatory rest debt insurance), fees in case of default and compensation in the event of premature repayment are permitted to be included in the calculation[62]. No other charges are permitted for consumer credit, either as initial charges or periodic fees. If services connected with the credit (e.g. death, unemployment, invalidity and other insurance) are offered, the charges must be included in the annual percentage rate of charge, may not be counted as separate payments, and must not surpass the maximum rates listed in the order on Credit Remuneration[63]. Rest debt insurance is common, but compulsory insurance with consumer credit is not allowed.

108. In Iceland, the total cost of credit includes all interest and other charges to be paid by the consumer, with the exemptions listed in the Directive. Charges for the transfer of funds and for keeping an account (except collection charges) are

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[61] Statutory Instrument: The Consumer Credit (Total Charge for Credit) (Amendment) Regulations 1985

[62] Article 34 of the Consumer Credit Act prohibits all "rewards for the lender" other than these charges.

[63] Besluit Kredietvergoeding, Stb. 1991/549 of 16.10.91

exempted only when the consumer has reasonable freedom of choice in the way funds are transferred or collected and the charges are not abnormally high. The inclusion of insurance costs is not restricted to compulsory insurance.

109. Unlike the exemptions listed in Article 1a(2)(i)-(iv), Article 1a(2)(v) of the Directive indicates the only positive item to be included in the calculation of annual percentage rate of charge. It exempts charges for insurance or guarantees from inclusion in the calculation, except death, invalidity, illness or unemployment insurance which are to be included in the calculation, as are other charges which have to be imposed by the creditor "as a condition for credit being granted". All countries have, in one way or another, referred to this in their legislation. Interpretations differ, however. Some countries assume that such insurance premiums are always mandatory and therefore regularly included, while others e.g. Germany repeat the text of the Directive literally but in practice assume that credit life insurance is never mandatory. This is because of their legal definition of the concept of "condition" whereby insurance is interpreted as being "imposed by the creditor as a condition for the credit being granted" only if the credit contract is legally linked to the insurance contract whereas in practice creditors offer two separate contracts which are only linked by the fact that the bank will only grant the credit if the insurance is also taken. In this respect, Belgian legislation takes the other view, asking whether a rational choice between a credit contract, with or without such an insurance coverage, has been offered. In practice, this usually lead to the inclusion of such premiums[64]. The UK appears to be the only country which expressly excludes life insurance premiums from the annual percentage rate of charge calculation even though such insurance is obligatory for credit contracts.

110. These differing interpretations of Art 1a(2)(v) can lead to differences in annual percentage rate of charge calculations for identical products in different countries. Unlike the charges excluded by Article 1a(2)(i) to (iv), insurance premiums are an important element of the burden of charges on a consumer (up to a quarter of the credit costs in some cases). It may be necessary to exclude distinctions which are easy to circumvent through simple formulations and the use of different formulae by creditors - while this would not eliminate situations where creditors refuse to grant credit without also selling insurance coverage, it would open the door to more competition for insurance premiums. This is necessary because the same life insurance purchased separately from a consumer credit contract is usually lower in price. Separate life insurance would also have the advantage that it could be used for subsequent credit contracts and other purposes without fees for age progression. Creditors should be persuaded to disclose to consumers the possibility of separate insurance coverage instead of overcharging for linked credit life insurance contracts.

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[64] Empirical surveys in Germany have revealed that instalment banks and finance companies offering credit for low income consumers insure up to 98% of the credit contracts while savings banks showed a rate of less than 5%. Credit life insurance is therefore mostly an additional security required by the creditor from low income consumers and offers the bank additional "interest" because insurance companies pay up to 3.5% as a brokerage fee to the bank

111. At the meeting with governmental experts in April 1995 to discuss this subject[65], the experts reported on the situation in their Member States with regard to the elements of cost to be included in the calculation included in their national legislation. Some experts explained the reasons why their Member States had gone further than the Directive, or that the intent of their legislation was the same even if the wording used differed, and some clarifications of certain aspects were given. Following this meeting and the results of the study by Professor Seckelmann, it was felt that Member States include almost the same elements in their calculations and that any differences that do exist are minimal in nature. The Commission does not therefore propose, at this stage, to amend the list of elements of cost to be included in or excluded from the calculation of annual percentage rate of charge.

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[65] Paragraph 6 *supra*

V. Other issues

112. While the Directive requires an evaluation and a report which "...will make it possible, in the light of experience, to apply a single Community mathematical formula..."[66], this requires an examination of other issues than the mathematical formula alone, in order to define a uniform application of the formula[67].

1. The Denomination of the annual percentage rate of charge

113. The Directive does not regulate the multitude of interest rates or parameters with which, according to the principle of freedom of contract, lenders define how they calculate the credit costs internally. The only legally defined parameter for credit cost is the annual percentage rate of charge, presupposing either a special form of disclosure[68] or a homogeneous denomination.

114. The table below indicates that there are almost as many denominations as there are Member States.

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[66] Article 1a(5)(b) of Directive 87/102

[67] While Article 14 of the Directive specifically mentions the "distribution of the amount of credit over several agreements", other circumventions occur. On several occasions, the German Bundesgerichtshof has ruled that the combination of capital life insurance and consumer credit can be transformed into one single credit with one single APR in order to find out whether it is usurious. Another circumvention is the combination of savings and credit where the consumer is required to save an amount equal to the sum of the credit in a special account (e.g. a whole life insurance account or even an instalment savings account). The credit is not reduced and only at the end are the savings used to repay the credit in one single instalment. Interest is due on the total amount of credit from the beginning to the end of the life span. The savings have earned much less interest than is to be paid on the credit, but the consumer has had to use the money for low-interest savings instead of repaying the high-interest credit. Such combinations can also be easily transformed into one credit relationship, with the EC formula applied to the total of all payments either on the credit or the savings. In such cases, the true APR is normally at least 1% higher than the disclosed APR. The problem posed by such combinations should be studied.

[68] US legislation prescribes a special form sheet wherein the APR has to be disclosed in a defined area

	Short form	Denomination	English Translation
B	Taux d'intérêt effective/ Effektieve Rentevoet	taux annuel effectif global/ jaarlijkse kostenpercentage	global effective annual rate/ annual cost percentage
DK	E. Rentefod	arlige omkostninger i procent	annual costs in percent
D	E. Zinssatz and, less often, E. Zinsfuss	effektiver Jahreszins or anfänglicher effektiver Jahreszins	effective annual interest or initial effective annual interest
EL	π.επιτοκιο, P. Epitokio	ετησιο πραγματικο επιτοκιο (ΕΠΕ), etisio pragmatiko epitokio, (EPE)	annual effective interest rate
ES	Tipo de interés E.	tasa anual equivalente + porcentaje anual de cargas financieras	annual equivalent rate + annual percentage of financial burden (tipo de interés E.)
F	Taux d'intérét E.	taux effectif global	global effective rate
IR	E. Interest Rate	annual percentage rate of charge, (APR)	also annual percentage rate
IT	Tasso D'interesse E.	tasso annuo effettivo globale, (TAEG)	global effective annual rate
L	Taux D'intérét E.	taux annuel effectif global	global effective annual rate
NL	E. Rentevoet	effektief kredietvergoedingsperce ntage (op jaarbasis)	effective credit remuneration per- centage (on the basis „year")
Ö	E. Zinssatz	(dekursiver) effektiver and fiktiver Jahres- zinssatz	(decursive) effective and fictitious annual interest rate
P	Taxa de Juro E.	taxa anual de encargos efectiva global, (TAEG)	global effective annual rate of burden
SF	Todellinen vuosikorko / effectiv ränta	todellinen vuosikorko / effectiv ränta	effective annual interest
SV	Eff. ränta	effektiv ränta	effective interest
UK	E. Interest Rate	annual percentage rate, (APR)	also annual percentage rate of charges, (APRC)
ISL	none	árleg hlutfallstala kostnaðar	annual percentage rate of costs
LI		Effektive Jahreszins	effective annual interest
N	E. Rente	effektiv rente	effective interest

115. The common elements are
- **"Rate"**
  The majority of Member States of the European Community and the other members of the EEA use the term "rate"[69]
- **"Annual"**
  Except for France, Sweden and Norway[70], other Member States use the term "annual". This is particularly important as France, for instance, still uses monthly or quarterly rates.
- **"Effective"**
  With the exception of Denmark, Spain, Ireland, the United Kingdom and Iceland, the majority of the Member States use this term. This distinguishes between other interest rates used by lenders.

116. As regards other terms found in some Member States, not all Member States include the concept of "interest" or "charge" in their term. Of those that do, Member States are fairly equally divided between those which refer to the result of the calculation (the interest rate)[71] and those who prefer to refer to what it represents (the rate of charge)[72]. The inclusion of either term does not add significantly to the transparency of the term.

117. While some Member States do use the term "Percentage"[73], it is so common as to be understood and the inclusion of the word does not add significantly to transparency. It should be noted, in any event, that the use of the term "percentage rate" is no substitute to providing accurate information to consumers.

118. Those elements which are most important for the transparency of the term are therefore those found in the Belgian, Greek, Italian, Luxembourg, Austrian and Portuguese terms i.e. "Rate", "Annual" and "Effective"[74].

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[69] With the exception of Denmark, Germany, Netherlands, Finland, Sweden and Norway. However, it should be noted that Germany uses both the term "interest" and "interest rate" and the exclusion of the word "rate" seems to be language-specific. The Directive itself uses both terms and therefore those States which transcribed the Directive exactly should be considered as using the term "rate".

[70] In Norway, the term is, by its legal definition, an annual interest

[71] Denmark, Greece, Austria, Finland, Sweden, Norway

[72] Belgium, Spain, Ireland, Portugal, United Kingdom, Iceland

[73] Belgium, Denmark, Spain, Ireland, Netherlands, United Kingdom, Iceland

[74] The original 1979 Commission proposal used the terms "Effective Annual Rate of Interest", "Taux Annuel Effectif Global" and "Effektiver Jahreszins". While different terms, proposed by the European Parliament, were accepted in the 1983 Amended Proposal: "Annual Percentage Rate of Charge", "Taux annuel des frais" and "Jährlicher Belastungssatz", these later reverted to the original terms. By the time discussions reached the Council Working Group, the original French and German terms were again used, as also in the final version of the Directive. The term in the English language

119. An additional feature, found in the French language version of the Directive, and presently used by Belgium, France, Italy, Luxembourg, and Portugal is the word "global". This word adds considerably to the transparency and comprehension of the term for the average consumer as it indicates that the totality of the costs to be paid are contained in the annual percentage rate of charge

120. The fact that the *wording* used to translate the original term (taux annuel effectif global) differs from one Member State to another and is often different in its literal meaning, has led to problems in practice because some of the denominations used in one country to denominate a certain "rate" are sometimes used in other countries to denominate other, different "rates". It would therefore be useful if some homogeneity and transparency could be achieved in order to assist in consumer comprehension. However, bearing in mind that much effort has been expended in communicating to consumers the meaning of the terms presently used in each Member State, it does not seem appropriate to propose a change in the wording used in the different languages. Nevertheless, it is desirable that a common feature be included in order to enable consumers, particularly in crossborder situations, to recognise these terms as being equivalent to those in use in their own Member States. Following discussions with governmental experts it was felt that, rather than proposing that the different terms used in the different national legislation for "annual percentage rate of charge" be harmonised, and in accordance with the principles of proportionality and subsidiarity, a common feature should be included in order to enable consumers to recognise these terms as being equivalent to the one in use in their own Member State. Following discussions with government experts, and in accordance with the principles of proportionality and subsidiarity, it is proposed that the use of a symbol in addition to the existing term will be required. This symbol will be identical in each Member State. This will not constitute a change in the language of the term and will only involve a small additional cost for transposition.

2. Accuracy

121. The Directive does not define the degree of accuracy required in the calculation of annual percentage rate of charge. The examples given in Annex III presuppose that Member States may prescribe an accuracy of one or two decimal places. It thus seems clear that the Directive demands at least accuracy to one decimal place.

122. Most countries in fact demand accuracy to one decimal place. This, however, can make consumer credit contracts for ECU 20,000 over 60 months look equivalent although they may actually differ in cost by about ECU 50 (5 * 0,0999 * 20,000/2 = 49.99). As the scope of consumer credit legislation in many Member States covers much higher amounts and longer terms, the difference may be up to ECU 500. In those Member States which include mortgage credit in the

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version alternated between "effective annual rate of interest" and "annual percentage rate of charge" up until the final draft of the Directive.

scope of the Directive, the difference may amount to several thousand ECU. Such a discrepancy is not tolerable.

123. More accuracy should therefore be required for higher amounts of credit. At least two decimal places should be prescribed (though with the possibility of allowing one decimal place if one decimal represents costs of less than ECU 50).

3. Time definitions

124. Different definitions of time are in use in the Member States. The Directive implicitly states that all calculations should be made with daily correctness ((Remark b) of Annex II). It also states that intervals "shall be expressed in years or in fractions of a year"[75]. This assumes that a day, week or month can be expressed in a constant fraction of a year.

	Practice of nominal Interest	APR rules	Comments
B	365 / 52 / 12	←	12 months of different lengths
DK	365 / 360	365.25	Valuation is calculated for one day and converted to 365.25 days (4 year average)
D	360 / 12	360	12 months of 30 days. 365 day year for certain transactions
EL	365 / 52 / 12	←	12 months of equal lengths. 360 day years for loans, 365 for savings
ES	365 / 12	365	Valuation is calculated for one month and converted to 365 days
F	365 / 12	←	Valuation is calculated for a period and converted to 365 days. 12 months of equal days.
IR	365 / 52 / 12	←	12 months of equal lengths
IT		←	
L	366 / 365	366/365	Each year equals the calendar year
NL	365 / 12	←	Actual months (28, 30, 31 days)
Ö	365/360/12	360	12 months of 30 days. 360 days for savings and consumer loans, 365 for commercial loans
P		←	
SF	360/12	←	Each year equals the calendar year
SV	360 / 12	←	12 months of 30 days
UK	365 / 52 / 12	←	12 months of equal length
ISL		←	
LI	360		
N	360 / 12	←	12 months of 30 days

← = same as for nominal interest calculation

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[75] Remark c of Annex II

125. As can be seen from the above table, which indicates practice in different Member States, most countries (except for Germany, Austria, Sweden, Liechtenstein and Norway) have already introduced the correct calendar into their calculations. For default interest, German banks also use the 365 day year. For annual percentage rate of charge calculation, Denmark, Luxembourg and Spain prescribe 365 day years while Germany, Austria and Liechtenstein prescribe 360 day years. All other countries assume that the same year will be used as is used in nominal interest calculation.

126. The differences in the results achieved through these variations are significant. For instance, a nominal interest rate of 18% p.a. for an open-ended credit used for one day gives an annual percentage rate of charge of 19.422% p.a. if calculated at 360 days a year, and gives 19.716% p.a. if calculated at 365 days a year[76].

127. There is no reason why calendar days should not be prescribed as the basis of a calculation while a year could generally be assumed to have 365 or 366 (or 365.25 days to take account of leap years, though the difference caused by the loss of one day every 4 years would not be significant enough to be noticed even with accuracy to two decimal places). Nor is there any need to compensate for a credit taken out in a shorter month.

128. Annex II should therefore be amended to state that a year is presumed to have 365 or 366 days.

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[76] The easiest way to do such calculations using computers is by using the calendar day because each computer has an inbuilt calendar. Calendar dates can be easily subtracted and the number of days defined. However, computers have extreme problems of definition when using the 360 day formula - a test of the relevant function in a popular spreadsheet program showed that their offer of a 360-day function is not correct because the sum of the days of 10 years differs by more than 10 days if calculated in one or in several intervals. A correct 360-day calculation is therefore impossible

VI. Slutsatser och rekommendationer

129. I bilaga II finns en lista över nationell lagstiftning som inlemmade direktivet i EG- och EEA-länderna.

130. En del ändringar måste göras i den engelska och grekiska versionen av direktivet beträffande den **språkliga definitionen** av effektiv ränta. Den föreslagna ordalydelsen för artikel 1a1a i den engelska versionen är följande:

> *The annual percentage rate of charge, which shall be that rate, on an annual basis, which equalises the present value of all commitments '(loans, repayments and charges), future or existing, agreed by the creditor and the borrower, shall be calculated in accordance with the mathematical formula set out in Annex II.*

och den föreslagna ordalydelsen för artikel 1a1a i den grekiska versionen är följande:

"Το συνολικό ετήσιο πραγματικό ποσοστό επιβάρυνσης που εξισώνει σε ετήσια βάση τις παρούσες αξίες του συνόλου των τρεχουσών ή μελλοντικών υποχρεώσεων (δανείων, εξοφλήσεων και επιβαρύνσεων) που έχουν αναληφθεί από το δανειστή και το (δανειζόμενο) καταναλωτή, υπολογίζεται σύμφωνα με το μαθηματικό τύπο που παρατίθεται στο παράρτημα ΙΙ".

131. Ett krav på att bredvid medlemsstatens term för "effektiv ränta" placera en symbol föreslås. Symbolen skall vara identisk i alla staterna.

132. Beträffande den **matematiska formeln**[77] föreslås, på grundval av diskussionen i denna rapport, att formeln i direktiv 90/88 bör bibehållas och bli den i EG och EEA-länderna allmänt förekommande. Därför bör artikel 1a(5) strykas från direktivet eftersom den spelat ut sin roll.

133. Beräkningen bör ske med krav på två decimalers **noggrannhet** samt utifrån ett år på 365 eller 366 dagar. Detta medför att ändringar behöver göras i bilagorna till direktivet. En rättelse borde också gjorts i det fjärde exemplet[78] i bilaga III, men detta har skett genom att exemplen beräknats om med två decimalers noggrannhet samt utifrån ett år på 365 eller 366 dagar.

134. Beträffande vilka **kostnadsfaktorer** som skall ingå i beräkningen så har inlemmandet av direktivet i medlemsstaterna medfört att det nu finns en harmoniserad miniminivå för konsumentskydd inom hela EG- och EEA-

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[77] Se professor Seckelmanns studie över beräkningsmetoden för "effektiv ränta" i EES för de matematiska aspekterna - Fotnot 6 ovan

[78] Ett misstag skedde i beräkningen. Resultatet borde vara 13,1855 % enligt kalkylbladsberäkningen. Misstaget påverkar inte riktigheten i den allmänna formeln, och övriga exempel är korrekt beräknade.

området. Medlemsstaterna innefattar för närvarande nästan samma faktorer i sin beräkning och de uppkomna skillnaderna är minimala. Därför föreslås inte att listan över undantag i artikel 1a(2) bör ändras.

135. Ett förslag till direktiv läggs fram i enlighet med artikel 1a(5)(b) i direktiv 87/102 ändrat genom direktiv 90/88. Direktivet kommer att genomföra de ovan rekommenderade ändringarna[79].

136. Vad andra väsentliga delar av direktiv 90/88/EEG beträffar, så skulle alla förslag till ändringar i det här avseendet kunna beaktas tillsammans med förslag om ändringar i det ursprungliga direktivet om konsumentkrediter 87/102[80].

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[79] Det kommer även föreslå att artikel 1a3 i direktivet stryks, eftersom denna åtgärd inte har använts av någon av medlemsstaterna.

[80] En rapport över tillämpningen av direktiv 87/102 publicerades i maj 1995 och kommissionen överväger för närvarande reaktioner på rapporten. Alla därpå följande lagförslag skulle kunna innefatta ändringar till direktiv 90/88.

Annex I - Articles 1 and 1a of Directive 87/102
(as amended by Directive 90/88)

Article 1

1. This Directive applies to credit agreements.

2. For the purposes of this Directive:

(a) 'consumer' means a natural person who, in transactions covered by this Directive, is acting for purposes which can be regarded as outside his trade or profession ;

(b) 'creditor' means a natural or legal person who grants credit in the course of his trade, business or profession, or a group of such persons ;

(c) 'credit agreement' means an agreement whereby a creditor grants or promises to grant to a consumer a credit in the form of a deferred payment, a loan or other similar financial accommodation.

Agreements for the provision on a continuing basis of a service or a utility, where the consumer has the right to pay for them, for the duration of their provision, by means of instalments, are not deemed to be credit agreements for the purpose of this Directive.

(d) 'total cost of credit to the consumer' means all the costs, including interest and other charges, which the consumer has to pay for the credit.

(e) 'annual percentage rate of charge' means the total cost of the credit to the consumer, expressed as an annual percentage of the amount of the credit granted and calculated in accordance with Article 1a.

Article 1a

1. (a) The annual percentage rate of charge, which shall be that equivalent, on an annual basis, to the present value of all commitments (loans, repayments and charges), future or existing, agreed by the creditor and the borrower, shall be calculated in accordance with the mathematical formula set out in Annex II.

(b) Four examples of the method of calculation are given in Annex III, by way of illustration.

2. For the purpose of calculating the annual percentage rate of charge, the "total cost of the credit to the consumer" as defined in Article 1(2)(d) shall be determined, with the exception of the following charges:

(i) charges payable by the borrower for non-compliance with any of his commitments laid down in the credit agreement;

(ii) charges other than the purchase price which, in purchases of goods or services, the consumer is obliged to pay whether the transaction is paid in cash or by credit;

(iii) charges for the transfer of funds and charges for keeping an account intended to receive payments towards the reimbursement of the credit the payment of interest and other charges except where the consumer does not have reasonable freedom of choice in the matter and where such charges are abnormally high; this provision shall not, however, apply to charges for collection of such reimbursements or payments, whether made in cash or otherwise;

(iv) membership subscriptions to associations or groups and arising from agreements separate from the credit agreement, even though such subscriptions have an effect on the credit terms;

(v) charges for insurance or guarantees; included are, however, those designed to ensure payment to the creditor, in the event of the death, invalidity, illness or unemployment of the consumer, of a sum equal to or less than the total amount of the credit together with relevant interest and other charges which have to be imposed by the creditor as a condition for credit being granted.

3. (a) Where credit transactions referred to in this Directive are subject to the provisions of national laws in force

on 1 March 1990 which impose maximum limits on the annual percentage rate of charge for such transactions and, where such provisions permit standard costs other than those described in paragraph 2(i) to (v) not to be included in those maximum limits, Member States may, solely in respect of such transactions, not include the aforementioned costs when calculating the annual percentage rate of charge, as stipulated in this Directive, provided that there is a requirement, in the cases mentioned in Article 3 and in the credit agreement, that the consumer be informed of the amount and inclusion thereof in the payments to be made.

(b) Member States may no longer apply point (a) from the date of entry into force of the single mathematical formula for calculating the annual percentage rate of charge in the Community, pursuant to the provisions of paragraph 5(c).

4. (a) The annual percentage rate of charge shall be calculated at the time the credit contract is concluded, without prejudice to the provisions of Article 3 concerning advertisements and special offers.

(b) The calculation shall be made on the assumption that the credit contract is valid for the period agreed and that the creditor and the consumer fulfil their obligations under the terms and by the dates agreed.

5. (a) As a transitional measure, notwithstanding the provisions of paragraph 1(a), Member States which, prior to 1 March 1990, applied legal provisions whereby a mathematical formula different from that given in Annex II could be used for calculating the annual percentage rate. of charge, may continue applying that formula within their territory for a period of three years starting from 1 January 1993.

Member States shall take the appropriate measures to ensure that

only one mathematical formula for calculating the annual percentage rate of charge is used within their territory.

(b) Six months before the expiry of the time limit laid down in point (a) the Commission shall submit to the Council a report, accompanied by a proposal, which will make it possible in the light of experience, to apply a single Community mathematical formula for calculating the annual percentage rate of charge.

(c) The Council shall, acting by a qualified majority on the basis of the proposal from the Commission, take a decision before 1 January 1996.

6. In the case of credit contracts containing clauses allowing variations in the rate of interest and the amount or level of other charges contained in the annual percentage rate of charge but unquantifiable at the time when it is calculated, the annual percentage rate of charge shall be calculated on the assumption that interest and other charges remain fixed and will apply until the end of the credit contract.

7. Where necessary, the following assumptions may be made in calculating the annual percentage rate of charge:
- if the contract does not specify a credit limit, the amount of credit granted shall be equal to the amount fixed by the relevant Member State, without exceeding a figure equivalent to ECU 2 000.
- if there is no fixed timetable for repayment, and one cannot be deduced from the terms of the agreement and the means for repaying the credit granted, the duration of the credit shall be deemed to be one year.
- unless otherwise specified, where the contract provides for more than one repayment date, the credit will be made available and the repayments made at the earliest time provided for in the agreement.

Annex II

National Legislation transposing Directive 90/88/EEC

Further details on the national legislation can be found in the Report prepared by Professor Seckelmann on the Method of calculation of APR in the EEA States, available from DG XXIV.

Belgium

Transposing Legislation: Loi relative au crédit à la consommation / Wet op het consumentenkrediet 1991/1723 of 12.6.91, supplemented by Arrêté Royal relatif aux coûts ... du crédit à la consommation / Koninklijk besluit betreffende kosten ... van het consumentenkrediet 1992/2311 of 4.8.92, both of which have been amended since.

Scope: Most kinds of credit (including mortgages and current accounts), marketing of credit, activities of intermediaries... Wider than the Directive, with limits on interest rates and lifespans of loans and specifies inadmissible terms

Term used: Taux Annuel Effectif Global / Jaarlijkse Kostenpercentage

Formula used: Equivalent to EC formula

Elements of cost: Open list of elements to be included. Insurance not excluded. Same exemptions as in Article 1a2 but criterion is whether reasonable choice is given.

Other: Other legislation on the subject:
Loi 1992/1833 of 6.7.92, Arrêté Royal / Koninklijk besluit 1992/2905 (Errata) of 4.8.92, Arrêté Royal / Koninklijk besluit 1992/2312 of 4.8.92, Arrêté Royal / Koninklijk besluit 1993/1226 of 27.4.93, Arrêté Royal / Koninklijk besluit 1993/1381 of 29.4.93

Denmark

Transposing Legislation: Lov om kreditaftaler 1990/398 of 13.6.90 amended by Lov n° 322 of 31.05.91, lov n° 284 of 29/04/92 and lov n° 226 of 06.04.94, supplemented by Bekendtgørelse n° 896 of 21.12.90 and Bekentsgørelse 970 of 07.12.92and Bekendtgørelse n° 497 of 13.06.94; Lov om maerkning og skiltning med pris n° 395 of 13.6.90; and Bekendetgørelse n° 902 of 12.11.92

Scope: Wider than the Directive - deals with real estate loans secured by mortgage (traded as bonds)

Term used: årlige omkostninger i procent

Formula used: EC formula

Elements of cost: Same exemptions as in Article 1a2 though more comprehensive (account and transfer costs are only exempted if consumer has reasonable choice and costs are not excessive)

Other: Other legislation on the subject:
Lov 1991/456 of 17.6.91 amended by Lov 1994/429 of 1.6.94; Bekendtgørelse n° 322 of 31.05.91, n° 284 of 29.04.92, n° 226 of 06.04.94, n° 1098 of 21.12.94, n° 970 of 07.12.92 and n° 1228 of 21.12.92

Germany

Transposing Legislation: Erste VO (von 03.04.92) zur Anderung der Preisangabenverordnung (von 14.3.85)

Scope:	In some respects wider than the Directive, with regulations on default and intermediaries.
Term used:	effektiver Jahreszins or anfänglicher effektiver Jahreszins
Formula used:	Derogation in Article 1a5a - Staffelrechnung (cascade calculation)
Elements of cost:	Literal transposition, using the exemptions in article 1a2. Insurance which does not secure repayment is exempt, whether mandatory or not.
Other:	Other legislation on the subject: Article 609a BGB; Preisangabenverordnung of 14.3.85, Ausführungshinweise zu §4 PAV of 18.12.92; Verbraucherkreditgesetz of 17.12.90, amended 27.4.93

Greece

Transposing Legislation:	Ministerial Decision φ1-983 of 7.3.91
Scope:	As in Directive
Term used:	etisio pragmatiko epitokio
Formula used:	EC formula
Elements of cost:	As in Article 1a2
Other:	Other legislation on the subject: Decision 1993/524 of the Committee of Money and Credit of the Bank of Greece, of 8.4.93; Acts of the Governor of the Bank of Greece n° 1993/2213 of 15.6.93; n° 1993/2258 of 2.11.93; n° 1994/2286 of 28.1.94

Spain

Transposing Legislation:	Ley de crédito al consumo 1995/7 of 23.3.95 and correction 12.5.87
Scope:	As in Directive, but interest rate and total cost must also be stated for mortgages.
Term used:	tasa anual equivalente and porcentage anual de cargas financieras
Formula used:	Equivalent to EC formula
Elements of cost:	All charges are included in the rate, including mandatory insurance charges (and non-mandatory insurance charges are not listed as exempted).
Other:	Other legislation on the subject: Ley 1965/50 of 21.7.65; Orden Banco de Espana of 16.6.88, Ley 1988/26 of 29.7.88; Orden 1989/303 of Min. Economia y Haciendas of 12.12.89; Circular Banco de Espana 1990/8 of 7.9.90, n° 1993/13 of 21.12.93 and 1994/5 of 22.7.94; Ley 1994/2 of 30.3.94, Orden Banco de Espana of 5.5.94;

France

Transposing Legislation:	Directive 90/88 has not been transposed in France.
Scope:	--
Term used:	taux effectif global
Formula used:	--
Elements of cost:	By existing legislation, all charges are included in the rate
Other:	Other legislation on the subject: Loi 1966/1010 of 28.12.66, Loi 1978/22 of 10.1.78 amended by 1979/596 of 13.7.79; Ordonnance 1986/./1243 of 1.12.86; Loi 1988/15 of 5.1.88; Décret 1988/293 of 31.3.88; Loi 1989/1010 of 31.12.89; Loi 1992/60 of 18.1.92; Décret 1985/944 of 8.9.85; Loi 1993/949 of 26.7.93; Décret n° 1978/372 of 17.3.78, n° 1987/509 of 24.3.78; n° 1988/293 of 25.3.88; Loi 1995/125 of 8.2.95

Ireland

Transposing	
Legislation:	1995 Consumer Credit Act, 28.7.95
Scope:	Wider than the Directive
Term used:	annual percentage rate of charge
Formula used:	EC formula
Elements of cost:	Generally the same as Art. 1a2
Other:	Other legislation on the subject:
	Consumer Information (Consumer Credit) Order SI 1987/319 of 10.12.87

Italy

Transposing	
Legislation:	Legge communitaria 1991/142 of 19.2.92; Decreto vista la legge 1992/142 of 8.7.92
Scope:	Wider than the Directive - neither loans before notaries nor loans to be repaid by 4 instalments in 12 months are not exempted, and credit purchases are included.
Term used:	tasso annuo effettivo globale
Formula used:	EC formula
Elements of cost:	As in Article 1a2. Open list of charges to be included
Other:	Other legislation on the subject:
	Legge 1992/154 of 17.2.92; Decreto on Legge 1992/154, 24.4.92; Instruzioni della Banca d'Italia in attuazione della legge 1992/154, 24.4.92; Legge in materia bancaria e creditizia 1993/385

Luxembourg

Transposing	
Legislation:	Règlement Grand-Ducal 26.8.93
Scope:	As in Directive but credit card accounts are treated the same as other accounts
Term used:	taux annuel effectif global
Formula used:	EC formula
Elements of cost:	Same as in Article 1a2
Other:	Other legislation on the subject:
	Loi 9.8.93; Avant-projet de règlement grand-ducal déterminant les modalités de calcul du montant de la réduction équitable du coût total de crédit

Netherlands

Transposing	
Legislation:	Wet op het consumentenkrediet 4.7.90 Stb 1990/395
Scope:	Wider than the Directive and very detailed. Regulation of intermediaries and obligation on lenders to advise debtors. Maximum rates.
Term used:	effektief kredietvergoedingspercentage (op jaarbasis)
Formula used:	Equivalent to EC formula
Elements of cost:	Only 1a2(i) & (ii) are used. If account fees or insurance fees are obligatory, they are not exempted.
Other:	Other legislation on the subject:
	Besluit n* 1991/515 and 1991/516 of 9.10.91; n* 548 of 17.10.91, n* 549 of 16.10.91, n* 550 of 18.10.91; Regeling 1991/220 of 6.11.91; Regeling register vergunninghouders Stcr 1991/220 of 6.11.91

Austria

Transposing
Legislation: Bankwesengesetz BGBL n° 532 of 13.07.93 (Section VIII); Verbraucherkreditverordnung n° 110 of 13.05.93

Scope: Wider than the Directive in some respects. No form of credit exempt - applies to real estate loans, mortgages and loans of any amount or duration. Certain leasing transactions also seen as being equivalent to hire-purchase.

Term used: (dekursiver) effektiver and fiktiver Jahreszinssatz

Formula used: Equivalent to EC formula

Elements of cost: Only 1a2(i) & (iii) are used. Insurance is included if mandatory.

Other: ° 360 day year used
° Other legislation on the subject:
Konsumentenschutzgesetz 1979/140 of 8.3.79, amended by 1993/247 of 16.4.93; Konkursordnungsnovelle 1993/974; Gewerbeordnung 1994/194

Portugal

Transposing
Legislation: Decreto-Lei 1991/359 of 21.9.91

Scope: Wider than the Directive in the range of credit covered. Mortgages not covered.

Term used: taxa anual de encargos efectiva global

Formula used: EC formula

Elements of cost: Same as in Article 1a2. Intermediaries' costs included.

Other:

Finland

Transposing
Legislation: Kuluttajansuojalaki / Konsumentskyddslag 1978/38 of 20.1.78, as amended by 1986/385 of 23.5.86, 1993/85 of 8.1.93 and 1994/16 of 5.1.94: Asetus / Förordning 1993/1602 of 30.12.93 as amended by 1994/16 of 1.7.94

Scope: Wider than the Directive - includes loans to buy homes and mortgages.

Term used: todellinen vuosikorko / effektiv ränta

Formula used: Derogation in Article 1a5a. Formula: Decision of Ministry of Trade and Industry on the application of certain provisions in Chapter 7 of the Consumer Protection Act (1986/874 of 30.06.86 as amended by 1994/661)

Elements of cost: All charges, except for non-mandatory insurance, are included

Other: Other legislation on the subject:
Luottolaitoslaki / Kreditinstitutslag 1993/1607 of 30.12.93

Sweden

Transposing
Legislation: Konsumentkreditlag 1992/830

Scope: Wider than the Directive - covers all forms of loans, including mortgages and those connected with credit-purchases and current accounts

Term used: effectiv ränta

Formula used: EC formula

Elements of cost: All charges are included (no exemptions are listed though in practice those in the Directive are used). Insurance is not mentioned but if it is mandatory, must be included.

Other: Other legislation on the subject:
Guidelines 1992/4 for the application of Konsumentendreditlag 1992/830; Executive Order 1992/1010 of 22.10.92

United Kingdom

Transposing
Legislation: Consumer Credit Act 1974; The Consumer Credit (Agreements)(Amendments) Regulation Statutory Instrument 1984/1600 of 22.10.94

Scope: More comprehensive than the Directive

Term used: annual percentage rate of charge

Formula used: Equivalent to EC formula

Elements of cost: As in Article 1a2. All mandatory costs included.

Other: Other legislation on the subject:

Consumer Credit Act 1974; The Consumer Credit Regulations - Statutory Instruments 1980/51 of 29.1.80, 1983/1553 of 3.11.83, 1983/1562 of 3.11.83, 1983/1564 of 3.11.83, 1985/1192, 1989/596 of 14.4.89; 1989/869 of 24.5.89; 1989/1125 of 6.7.89; 1989/1126 of 6.7.89

Iceland

Transposing
Legislation: Lög um neytendalán 1993/30, amended by 101/1993 - consolidated in Lög um neytendalán 1994/121 of 21.9.94

Scope: Hirepurchase and leasing agreements are included

Term used: árleg hlutfallstala kostnaðar

Formula used: EC formula

Elements of cost: As in Article 1a2. All costs, including non-mandatory insurance, are included.

Other: Other legislation on the subject:

Regulgerð 1993/377 of 3.9.93 and Regulgerð 1993/491 of 3.12.92

Liechtenstein

Transposing
Legislation: Gesetz vom 22 Oktober 1992 über den Konsumkredit (Liechtensteinisches Landesgesetzblatt 1993 n°50 von 9/3/93)

Term used: Effektiver Jahreszins

Formula used: EC formula

Elements of cost: As in Article 1a2

Other: 360 day year used

Norway

Transposing
Legislation: Lov om kredittkjøp 1985/82 of 21.6.85 as amended; Forskrift til kredittkjøpsloven 1986/1616 of 15.7.86; Forskrift 1990/437 of 1.6.90

Scope: Narrower than the Directive in that it only covers purchase credit, but wider in that only immovable property is exempt - covers more than consumer purchases, covers wider range of current accounts.

Term used: effectiv rente

Formula used: EC formula (to be implemented in 1996)

Elements of cost: As in Article 1a2

Other: Other legislation on the subject:

Lov om finansieringsvirksomnet og finansinstitusjoner 1988/40 and amendment 4.12.92

For the references to the German and French formulae, see footnotes 46 and 50 respectively.

Formula used for calculating APR in Finland:

Single Credits:

$$P= \frac{12 \times 200 \times R}{K \times (T + L)}$$

in which
- P = APR
- R = the amount of total costs
- K = the amount of initial loan
- T = repayment period expressed in months
- L = the interval between repayments expressed in months

Current Accounts:

$$P = \frac{100 \times \text{yearly credit costs}}{\text{typical amount of credit}}$$

[Provided by the Consumer Ombudsman's Office, Finland]

FÖRKLARANDE PM

Bakgrund – Direktiv 87/102/EEG och 90/88/EEG

1. 1975 antog rådet *Europeiska ekonomiska gemenskapens preliminära program för en konsumentskyddspolitik*[1], där man strök under hur grundläggande konsumentens rätt är att ha sina ekonomiska intressen skyddade och krävde att man bland annat skulle prioritera åtgärder på gemenskapsnivå för att harmonisera de allmänna reglerna för konsumentkredit. På inrådan av parlamentet ändrades[2] kommissionens ursprungliga förslag om konsumentkredit[3] till att avse upprättandet av en enhetlig metod för att beräkna effektiv ränta.

2. Rådet antog direktiv **87/102/EEG**[4] om tillnärmning av medlemsstaternas lagar och andra författningar rörande konsumentkredit den 22 december 1986. Det nionde stycket i ingressen och artikel 5 i detta direktiv avsåg införandet av en metod eller metoder på gemenskapsbasis för att beräkna den "effektiva räntan" på krediter. Eftersom utarbetandet av den gemensamma formeln för beräkningen av "effektiv ränta" och de delar som skulle ingå i denna beräkning emellertid hade visat sig vara omtvistade, anförde man i direktiv 87/102 att "i avvaktan på ett beslut om en metod eller metoder på gemenskapsbasis för att beräkna den 'effektiva räntan', skall medlemsstaterna kunna behålla befintliga metoder eller rutiner", och att "konsumentens totala kreditkostnad" (artikel 1.2 d) och den "effektiva räntan" (artikel 1.2 e) skall bestämmas och beräknas i enlighet med befintliga bestämmelser, rutiner och metoder i medlemsstaterna.

3. Efter diskussioner med statliga experter lade kommissionen fram ett förslag till ett direktiv.[5] Europaparlamentet[6] och ekonomiska och sociala kommittén[7] rekommenderade att man inte bara skulle reglera de matematiska aspekterna utan även de delar av kostnaden som skulle ingå i beräkningen. Eftersom de flesta medlemsstater visade sig vara villiga att utföra sina beräkningar enligt aktuariemetoden och dessutom ta itu med de delar av kostnaden som skulle ingå, lade man 1989 fram ett ändrat förslag som tog sig an dessa två aspekter.[8]

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[1]   EGT nr K 92 25.04.75.

[2]   EGT nr K 80 27.3.79

[3]   EGT nr K 183 10.07.84

[4]   EGT nr L 42 12.2.1987.

[5]   EGT nr K 155 14.6.1988, s. 10

[6]   Europaparlamentets rapport A-418/88 av den 06.03.1989; Europaparlamentets resolution av den 15.03.1989.

[7]   ECOSOC Opinion, EGT nr K 337 31.12.1988, s.1.

[8]   EGT nr K 155 23.06.1989 s. 4.

4. **Direktiv 90/88/EEG** antogs den 22 februari 1990 och införde en metod på gemenskapsbasis för att beräkna den "effektiva räntan" på konsumentkrediter och fastställa det kreditkostnadsunderlag som måste användas i beräkningen genom att ange de kostnader som man inte skulle beakta. Av denna anledning skulle alla medlemsstater[9] åtminstone se till att endast en matematisk beräkningsformel användes inom deras territorium.

5. Under en övergångsperiod fram till den 1 januari 1996 tillät man de medlemsstater som tillämpade lagar som använde en annan matematisk formel för att beräkna den "effektiva räntan" (före den 1 mars 1990) att fortsätta att tillämpa sådana lagar.[10]

6. Artikel 1a.5 b i direktiv 87/102 (tillagt genom direktiv 90/88) kräver att kommissionen lägger fram till rådet "en rapport åtföljd av ett förslag" som gör det möjligt att använda en universell matematisk formel för att beräkna den "effektiva räntan".

7. Kommissionen har utarbetat en rapport om vilken verkan direktiv 90/88[11] har haft som mer i detalj förklarar orsakerna till ändringsförslagen nedan. Denna rapport är grundad på en studie som utarbetats av en expertkonsult i ekonomisk matematik[12] om undersökningar av hur direktiv införlivas i den nationella lagstiftningen[13] och särskilt om kontakter med statliga experter.[14]

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[9] Direktiv 90/88 införlivades i överenskommelsen om Europeiska ekonomiska samarbetsområdet (EES) och denna rapport (se fotnot 11) täcker därför Island, Lichtenstein och Norge liksom också de 15 medlemmarna i Europeiska unionen.

[10] Artikel 1a.5 a i direktiv 87/102 (tillagt genom direktiv 90/88).

[11] KOM(96)79

[12] Professor Seckelmann har utarbetat en studie över beräkningsmetoderna för den effektiva räntan i Europeiska ekonomiska samarbetsområdet (kan erhållas från GD XXIV).

[13] Fotnot 3 i KOM(95)117, *Report on the operation of Directive 87/102/EEG on the approximation of the laws, regulations and administrative provisions of the Member States concerning consumer credit.*

[14] Möten hölls i Bryssel i april 1995 och januari 1996 med fortsatta direktkontakter under de mellanliggande månaderna.

[14a] Den franska och italienska versionen av direktivet hänvisar inte till ett "beslut".

8. Medan artikel 1a.5 c fastslår[14a15] att rådet på grundval av kommissionens förslag skall "fatta ett beslut", är detta inte något "beslut" enligt artikel 189 i fördraget, utan snarare ett direktiv, eftersom dess målsättning är att kräva ändringar i medlemsstaternas lagstiftning. Denna tolkning överensstämmer med vad som tidigare sagts i artikel 5 i direktiv 87/102 som hänvisade till ett "beslut" om införandet av en metod på gemenskapsbasis – metoden infördes faktiskt genom ett direktiv (direktiv 90/88/EEG).

Förslag till ändring av direktiv 87/102 (ändrat genom direktiv 90/88):

9. Som man har förklarat mer i detalj i rapporten om vilken verkan direktiv 90/88[15] har haft, finns det nästan lika många beteckningar för den "effektiva räntan" som det finns medlemsstater.

10. Av samma orsaker som det är önskvärt att man använder en enhetlig metod för att beräkna den effektiva räntan i hela Europeiska gemenskapen och i övriga EEA Länderna för att få den inre marknaden att fungera på rätt sätt och ge konsumenterna höggradigt skydd, är det också önskvärt att konsumenterna skall kunna känna igen hur andra medlemsstater anger denna räntesats. På grund av detta är det för tydlighetens skull och för att konsumenterna skall ha lättare att förstå, önskvärt att man använder ett gemensamt kännetecken så att konsumenterna kan se att villkoren är likvärdiga med dem som gäller i deras egen medlemsstat. Efter diskussioner med statliga experter och i överensstämmelse med principerna om proportionalitet och subsidiaritet, är det inte tal om att föreslå en harmonisering av de olika termerna på de skilda språken, utan snarare om att kräva att man använder en symbol utöver den aktuella termen i alla annonser om konsumentkredit och i skriftliga överenskommelser med konsumenterna. Denna symbol kommer att vara identisk i alla medlemsstater. Detta kommer att föra med sig en ändring av artikel 3 och 4.2 i direktiv 87/102 (ändrat genom direktiv 90/88) för att man skall kunna kräva en symbol utöver den existerande termen "effektiv ränta" i alla annonser om konsumentkredit och i skriftliga överenskommelser med konsumenterna.

11. För att harmonisera de olika språkversionerna av direktivet, är det nödvändigt att ändra artikel 1a.1 a i den engelska och grekiska versionen av direktivet.[16] Artikeln skall nu lyda på följande sätt (och vara identisk med den franska versionen):

"The annual percentage rate of charge which shall be that rate, on an annual basis which equalises the present value of all commitments (loans, repayments and charges), future or existing, agreed by the

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[15] Punkterna 113 – 120 i rapporten.

[16] Man har diskuterat denna ändring och nått en överenskommelse med Irland och Förenade kungariket (när det gäller orden "that rate ... which equalises").

creditor and the borrower, shall be calculated in accordance with the mathematical formula set out in Annex (II)."

Den föreslagna ordalydelsen i den grekiska versionen av artikel 1a.1 a är på följande sätt:

"Το συνολικό ετήσιο πραγματικό ποσοστό επιβάρυνσης που εξισώνει σε ετήσια βάση τις παρούσες αξίες του συνόλου των τρεχουσών ή μελλοντικών υποχρεώσεων (δανείων, εξοφλήσεων και επιβαρύνσεων) που έχουν αναληφθεί από το δανειστή και το (δανειζόμενο) καταναλωτή υπολογίζεται σύμφωνα με το μαθηματικό τύπο που παρατίθεται στο παράρτημα II."

12. Artikel 1a.3 i direktivet tillät de medlemsstater som tillämpade nationella lagar den 1 mars 1990 vilka satte maximigränser för den effektiva räntan och vilka uteslöt andra kostnader än dem som finns i artikel 1a.2, att fortsätta att tillämpa dessa bestämmelser (förutsatt att konsumenten informeras om dessa avgifter). Eftersom ingen medlemsstat har använt sig av denna möjlighet, **är det lämpligt att stryka artikel 1a.3**. I alla händelser skulle man behöva stryka denna artikel nu när den formel som föreslås i det aktuella förslaget till direktivet är fastställd.

13. Som man har visat i rapporten om vilken verkan direktiv 90/88/EEG har haft är den formel som finns i bilaga II till direktivet helt korrekt och skall träda i kraft i hela Europeiska ekonomiska samarbetsområdet. Därför är det nödvändigt att de formler som för närvarande används i Tyskland, Frankrike och Finland byts ut. Varken den tyska eller den franska formeln använder exponentiell beräkning, vilket får till följd att ingen av dem kan tillämpa en ettårig sammansatt ränteperiod för alla enskilda fall. När det gäller den tyska formeln[17], ligger huvudskillnaderna i den kortfristiga krediten, ett beräkningssätt som används mer och mer, t.ex. med kreditkort. I verkligheten använder en del tyska banker redan EG-formeln för att beräkna rabatter, eftersom det äldre systemet inte kan användas när det gäller varierande avbetalningar. Med den franska[18] formeln omvandlar man den månatliga räntesatsen till en årlig sats genom att multiplicera med tolv. Detta är missvisande eftersom formeln inte tar hänsyn till årlig sammansatt ränta och således leder till markanta avvikelser från EG-formeln. De franska kontrakten för konsumentkredit förefaller följaktligen förmånligare än sådana i andra medlemsstater. Medan det tyska systemet matematiskt sett är inkonsekvent och skapar konstlade skillnader i beräkningarna, har det bara blygsamma effekter på vanlig avbetalningskredit. Det franska systemet avviker så markant att det inte bara vilseleder icke-franska konsumenter utan också de franska.

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[17]   Se punkterna 64–75 i rapporten om direktiv 90/88.

[18]   Se punkterna 76–81 i rapporten om direktiv 90/88.

14. Med ett lån på exempelvis 1 000 ecu med 10 ecu i ränta varje månad får man följande resultat med de olika metoderna:

Termin (månader)	Kostnad	Den tyska metoden	EG-metoden	Den franska metoden
6	60	21,49	22,29	20,29
12	120	24,66	23,70	21,46
18	180	24,27	24,00	21,65
24	240	24,34	23,84	21,58
48	480	23,09	22,86	20,75

Med den tyska metoden är avvikelsen markant för perioder under ett år, medan avvikelsen med den franska är mer allmän och allvarlig.

15. Fördelarna med EG-formeln[19] är att användningen av en universell formel matematiskt sett är det enda sättet att garantera att priset står för likvärdiga villkor, att man gör det möjligt för konsumenterna att handla över gränserna inom den gemensamma marknaden, att den förenklar den rättsliga ramen för konsumentkredit i de olika medlemsstaterna och främjar överensstämmelse mellan de nationella införlivningarna i lagstiftningen. Produktionskostnaderna för mjukvaruproducenter och finansiella institutioner kommer att minska till följd av de stordriftsfördelar som uppkommer genom att man använder en universell formel genomgående på den inre marknaden. De eventuella kostnaderna i samband med anpassningen av dataprogram och prisstrukturer för att kunna hantera EG-formeln är inget vägande argument, eftersom bankerna i de länder som använder formeln redan har gjort denna investering. De banker som nu kommer att bli tvungna att göra återkommande förändringar anpassar sina program med hänsyn till rättspraxis och administrativa rutiner inom området och dessutom använder de redan EG-formeln för några (interna) beräkningar.

16. Det är därför nödvändigt att stryka artikel 1a.5, som gav en tidsfrist till den 31 december 1995 (som använts av Tyskland och Finland) åt de medlemsstater som ville behålla en annan metod för att beräkna den effektiva räntan. Såsom framgår av rapporten om vilken verkan direktiv 90/88 har haft skall den formel som finns i bilaga II till direktivet träda i kraft genomgående i Europeiska gemenskapen och i övriga EEA Länderna . Till följd av detta är artikel 1a.5 a (undantaget), artikel 1a.5 b (hänvisningen till rapporten och detta lagförslag) och artikel 1a.5 c (hänvisningen till det beslut som rådet skall ta) inte längre nödvändiga och skall strykas. Ikraftträdandet av formeln i bilaga II kommer att medföra ändringar i nu gällande lagstiftning i Tyskland, Frankrike och Finland.

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[19] Se punkterna 82–93 i rapporten om direktiv 90/88

17.	Man har också föreslagit språkliga förändringar i definitionens ordalydelse i bilaga II när det gäller vissa språkversioner – de spanska, franska och nederländska.

18.	Medan direktivet för närvarande inte fastställer vilken grad av exakthet som krävs i beräkningen av den effektiva räntan, förutsätter exemplen i bilaga III åtminstone en exakthet på en decimal. De flesta medlemsstater kräver en exakthet på åtminstone en decimal. Eftersom många medlemsstaters konsumentkreditlagstiftning täcker högre belopp och längre tidsperioder än direktivet, blir de skillnader som följer av graden av exakthet viktiga, särskilt i de medlemsstater där hypotekskrediter omfattas av deras lagstiftning. **Det är därför nödvändigt att man kräver en exakthet på två decimaler** (men en exakthet på en decimal skulle kunna tillåtas i de fall där skillnaden är mindre än 50 ecu). Detta skulle också föra med sig en ändring i bilaga II och exemplen i bilaga III.

19.	Direktivet fastslår i bilaga II att intervallen skall uttryckas i "år eller delar av ett år". Detta härrör från tiden före datoreran, då man för att enkelt kunna utföra beräkningarna fastställde att ett år har tolv lika långa månader, 52 veckor och 360 dagar. Likaledes uttryckte man sammansatta ränteperioder i hela månader och år för att kunna möjliggöra årsskiftesberäkningar. Detta leder till en situation där man inte tar hänsyn till den 31:a dagen i en del månader och lägger till två dagar i februari för att komma upp till 12 lika långa månader på 30 dagar. I praktiken har de flesta medlemsstater (med undantag för Tyskland, Österrike, Sverige, Lichtenstein och Norge) infört den korrekta kalendern i sina beräkningar. Även i dessa länder använder man det korrekta kalenderåret på 365 dagar för vissa beräkningar. Användningen av ett år på 365 dagar är dessutom förenlig med dataprogram över hela världen – datorerna arbetar automatiskt utifrån ett år på 365 dagar och antalet dagar under en given tidsperiod. Eftersom skillnaderna mellan räntesatserna på kredit som beräknas på ett år på 360 dagar och ett år på 365 dagar kan vara avsevärda, **är det nödvändigt att bilaga II ändras så att det fastställs att ett år antas ha 365 eller 366 dagar.**[20] Detta skulle också leda till ändringar i bilaga II och exemplen i bilaga III.

20.	Detta förslag skulle i praktiken endast påverka Tyskland, Österrike, Sverige, Lichtenstein och Norge vilka för närvarande använder ett år på 360 dagar i sina beräkningar.

21.	En felberäkning i det fjärde exemplet i bilaga III behövde också korrigeras – istället för 13,21 % borde svaret ha blivit 13,1855 eller 13,19 %. Denna rättelse har emellertid blivit inaktuell i och med den nya beräkningen i exemplen på grundval av en exakthet på 2 decimaler och användningen av ett år på 365 eller 366 dagar.

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[20]	Medan Danmark använder sig av ett år på 365,25 dagar under perioder på 4 år för att ta hänsyn till skottår, har man inte föreslagit detta för direktivet eftersom skillnaden inte skulle bli så märkbar att syntes i en beräkning som använder en exakthet på 2 decimaler.

22. Inga förslag läggs för närvarande fram angående förteckningen i artikel 1a.2 i direktivet (de delar av kostnaden som skall uteslutas ur beräkningen av den effektiva räntan), eftersom de flesta medlemsstater inbegriper samma delar och sådana skillnader som faktiskt uppträder är försumbara. När det gäller ändringar av några andra väsentliga delar av direktiv 90/88/EEG, skulle alla förslag i detta avseende kunna beaktas tillsammans med förslagen om ändring av det ursprungliga direktivet om konsumentkredit, direktiv 87/102/EEG.[21]

Rättssituationen i avvaktan på att det föreslagna direktivet antas

23. Till följd av ändrade förhållanden efter utvidgningen av Europeiska unionen då Österrike, Finland och Sverige blev medlemmar samt den försenade införlivningen av direktiv 87/102 och 90/88 i vissa medlemsländers lagstiftning, har det varit omöjligt för kommissionen att lägga fram den rapport och det förslag som nämns i artikel 1a5b före den 1 juli 1995, och rådet och parlamentet har inte kunnat anta det föreslagna direktivet före den 1 januari 1996.

24. Som en övergångsåtgärd tillät artikel 1a.5 b i direktiv 87/102 medlemsstaterna att fortsätta att tillämpa bestämmelserna för beräkningen av den effektiva räntan på ett annat sätt än som anges i direktivet under en treårsperiod från och med den 1 januari 1993 (dvs. till januari 1996). Kommissionen tolkar artikel 1a.5 b som en underförstådd förlängning av denna period fram till dess att man antar det direktiv som det hänvisas till i artikel 1a.5 c. Tyskland, Frankrike och Finland kan av den anledningen fortsätta att tillämpa gällande bestämmelser som skiljer sig från vad som anges i bilaga II till direktiv 87/102 tills man antar det föreslagna direktivet.

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[21] En rapport om vilken verkan detta direktiv har haft lades fram i maj 1995 [KOM(95)117 av den 11.05.95]. Reaktionerna på rapporten studeras för närvarande av kommissionen. Alla följande lagförslag skulle i detta avseende kunna inbegripa ändringar av direktiv 90/88.

EUROPAPARLAMENTETS OCH RÅDETS DIREKTIV 96/...
av den ... 1996
om ändring av direktiv 87/102/EEG (ändrat genom direktiv 90/88/EEG) om tillnärmning av medlemsstaternas lagar och andra författningar rörande konsumentkredit

EUROPAPARLAMENTET OCH EUROPEISKA UNIONENS RÅD HAR ANTAGIT DETTA DIREKTIV

med beaktande av Fördraget om upprättandet av Europeiska gemenskapen, särskilt artikel 100a i detta,

med beaktande av kommissionens förslag[1],

med beaktande av Ekonomiska och sociala kommitténs yttrande[2],

i enlighet med det förfarande som fastställs i artikel 189b i fördraget[3], och

med beaktande av följande:

För att kunna etablera den inre marknaden och få denna att fungera och för att försäkra sig om att konsumenterna åtnjuter höggradigt skydd, är det önskvärt att man använder en metod för att beräkna den årliga procentsatsen på konsumenternas kreditavgift inom hela Europeiska gemenskapen.

I artikel 5 i rådets direktiv 87/102/EEG[4] föreskrivs att man inför en metod eller metoder på gemenskapsbasis för att beräkna den årliga procentsatsen på konsumenternas kreditavgift.

För att kunna införa en sådan enhetlig metod är det önskvärt att skapa en universell matematisk formel för att beräkna den årliga procentsatsen på avgiften och för att fastställa det kreditkostnadsunderlag som måste användas i beräkningen genom att ange de kostnader som man inte skall beakta.

I bilaga II till direktiv 90/88/EEG[5] presenteras en matematisk formel för att beräkna den årliga procentsatsen på avgiften och i artikel 1.2 i direktiv 90/88/EEG anges de avgifter som skall uteslutas från beräkningen av "konsumentens totala kreditkostnad".

Under en övergångsperiod på tre år från och med den 1 januari 1993 fick de medlemsstater som före den 1 mars 1990 tillämpade lagar som tillät användning av en annan matematisk formel för att beräkna den årliga procentsatsen på avgiften tillåtelse att fortsätta tillämpa sådana lagar.

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3

4   EGT nr L 42, 12.2.1987, s. 48.

5   EGT nr L 61, 10.3.90, s. 14.

Kommissionen har lagt fram en rapport till rådet[6] som med tanke på erfarenheten gör det möjligt att tillämpa en universell matematisk formel på gemenskapsnivå för att beräkna den årliga procentsatsen på avgiften.

Då ingen medlemsstat har använt sig av artikel 1a3 i direktivet varigenom vissa kostnader undantas från beräkningen av den årliga procentsatsen på avgiften i vissa medlemsstater, är denna artikel inte längre aktuell.

Det är nödvändigt med en exakthet på två decimaler och att man ser på året såsom uppdelat på 365 / 366 dagar.

Det är önskvärt att konsumenterna skall kunna känna igen de villkor som används i olika medlemsstater för att ange den "årliga procentsatsen på avgiften" och att man gör det obligatoriskt att använda en gemensam symbol utöver det gällande villkoret i alla annonser om konsumentkredit och alla skriftliga överenskommelser med konsumenterna inom hela Europeiska gemenskapen.

HÄRIGENOM FÖRESKRIVS FÖLJANDE:

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[6]   COM(96)79

Artikel 1

När än termen "effektiv ränta" eller motsvarande term på ett annat gemenskapsspråk används såsom krävs i direktiv 87/102, skall den åtföljas av följande symbol:

Artikel 2

Artikel 1a.1 a skall ersättas med följande

- i den grekiska versionen av direktivet:

"Το συνολικό ετήσιο πραγματικό ποσοστό επιβάρυνσης που εξισώνει σε ετήσια βάση τις παρούσες αξίες του συνόλου των τρεχουσών ή μελλοντικών υποχρεώσεων (δανείων, εξοφλήσεων και επιβαρύνσεων) που έχουν αναληφθεί από το δανειστή και το (δανειζόμενο) καταναλωτή υπολογίζεται σύμφωνα με το μαθηματικό τύπο που παρατίθεται στο παράρτημα II."

- i den engelska versionen av direktivet:

The annual percentage rate of charge which shall be that rate, on an annual basis which equalises the present value of all commitments (loans, repayments and charges), future or existing, agreed by the creditor and the borrower, shall be calculated in accordance with the mathematical formula set out in Annex (II)."

Artikel 3

Artikel 1a3 skall utgå.

Artikel 4

Artikel 1a5 skall utgå.

Artikel 5

Artikel 3 skall ändras på följande sätt:

Utan att det påverkar tillämpningen av rådets direktiv 84/450/EEG av den 10 september 1984 om tillnärmning av medlemsstaternas lagar och andra författningar som rör vilseledande reklam, ändrat genom rådets direktiv /96

av den ... 1996 om jämförande annonsering, och om de regler och principer som rör otillbörlig reklam, skall all reklam eller alla erbjudanden som finns utställda i affärslokaler där en person erbjuder kredit eller erbjuder sig att ordna en kreditöverenskommelse, och där en räntesats eller någon siffra som hänför sig till kreditkostnaden finns angiven, också innehålla uppgifter om den effektiva räntan, åtföljd av den symbol som nämns i artikel 1 i detta direktiv, och i form av ett typexempel om inget annat sätt visar sig görligt.

Artikel 6

Artikel 4.2 a skall ändras på följande sätt:

a   uppgifter om den effektiva räntan, åtföljd av den symbol som nämns i artikel 1 i detta direktiv,

›

Artikel 7

Bilaga I som är bilaga till detta direktiv skall betecknas bilaga II och skall ersätta bilaga II i direktiv 87/102/EEG (ändrat genom direktiv 90/88/EEG).

Artikel 8

Bilaga II som är bilaga till detta direktiv skall betecknas bilaga III och skall ersätta bilaga III i direktiv 87/102/EEG (ändrat genom direktiv 90/88/EEG).

Artikel 9

1.   Medlemsstaterna skall sätta i kraft de lagar och andra författningar som är nödvändiga för att följa detta direktiv senast den 31 december 1996 och skall informera kommissionen om detta.

När en medlemsstat antar dessa bestämmelser skall de innehålla en hänvisning till detta direktiv eller åtföljas av en sådan hänvisning när de offentliggörs. Närmare föreskrifter om hur hänvisningen skall göras skall varje medlemsstat själv utfärda.

2.   Medlemsstaterna skall till kommissionen överlämna texterna till de bestämmelser i nationell lagstiftning som de antar inom det område som omfattas av detta direktiv.

Artikel 10

Detta direktiv riktar sig till medlemsstaterna.

Utfärdat i Bryssel den ... 1996.

DEN GRUNDLÄGGANDE EKVATIONEN FÖR ATT UTTRYCKA ÖVERENSSTÄMMELSE MELLAN LÅN Å ENA SIDAN OCH ÅTERBETALNINGAR OCH AVGIFTER Å DEN ANDRA

$$\sum_{K=1}^{K=m} \frac{A_K}{(1 + i)^{t_K}} = \sum_{K'=1}^{K'=m'} \frac{A'_{K'}}{(1 + i)^{t_{K'}}}$$

Bokstävernas och symbolernas betydelse:

K = nummer på ett lån

K' = nummer på en återbetalning eller avgiftsbetalning

A_K = storleken på lån nummer K

$A'_{K'}$ = storleken på återbetalningen K'

$\sum$ = summatecken

m = nummer på det sista lånet

m' = nummer på den sista återbetalningen eller avgiftsbetalningen

t_K = intervallet uttryckt i år och delar av ett år mellan datumet för lån 1 och de följande lånen 2 till och med m

$t_{K'}$ = intervallet uttryckt i år och delar av ett år mellan datumet för lån 1 och återbetalningarna eller avgiftsbetalningarna 1 till och med m'

i = procentsatsen som kan räknas fram (antingen algebraiskt eller genom på varandra följande approximeringar eller med hjälp av ett dataprogram) där de andra storheterna i ekvationen är kända från kontraktet eller på annat sätt

Anmärkningar:

a) Beloppen som betalas av bägge parter vid skilda tidpunkter behöver inte nödvändigtvis vara lika och behöver inte nödvändigtvis betalas med lika stora intervall.

b) Startdatumet skall vara datumet för det första lånet.

c) Intervallen mellan de datum som används i beräkningarna skall uttryckas i år eller delar av ett år. Det förutsätts att ett år har 365 eller 366 dagar.

d) Resultatet av beräkningen skall uttryckas med två decimalers exakthet. Om den tredje decimalen är större än eller lika med 5, skall den andra decimalen höjas med ett.

BERÄKNINGSEXEMPEL

Exempel 1

Lånebelopp den 1 januari 1994: S = 1 000 ecu

Beloppet återbetalas med en engångsbetalning på 1 200 ecu den 30 juni 1995, dvs. 547 dagar efter det ursprungliga lånedatumet.

Ekvationen blir

$$1\,000 = \frac{1200}{(1+i)^{\frac{547}{365}}}$$

eller

$$(1+i)^{\frac{547}{365}} = 1,2$$

1 + *i* = 1,129444207 .....

i   = 0,129444207 .....

Detta belopp avrundas uppåt till 12,94 %.

Exempel 2

Det överenskomna beloppet är 1 000 ecu, men långivaren behåller 50 ecu för kreditprövnings- och administrationskostnader, så att det faktiska lånet bara blir 950 ecu. Återbetalningen av 1 200 ecu görs precis som i det första exemplet den 30 juni 1995.

Således blir ekvationen

$$(1+i)^{\frac{547}{365}} = 1,2$$

$$950 = \frac{1200}{(1+i)^{\frac{547}{365}}}$$

eller

$$(1+i)^{\frac{547}{365}} = \frac{1200}{950} = 1,263157$$

1 + *i* = 1,1688996...
i   = 0,1688996...
Detta resultat avrundas uppåt till 16,89 %.

Kolmas esimerkki

Luoton määrä on 1 000 ecua, ja se maksetaan takaisin kahtena 600 ecun lyhennyksenä, joista ensimmäinen maksetaan yhden ja toinen kahden vuoden kuluttua.

Yhtälöksi saadaan:

$$1000 = \frac{600}{1+i} + \frac{600}{(1+i)^{730/365}} = \frac{600}{1+i} + \frac{600}{(1+i)^2}$$

Se ratkaistaan algebran avulla ja lopputulokseksi saadaan i = 0,1306623 eli pyöristettynä 13,07 prosentiksi.

Neljäs esimerkki

Luoton määrä on 1 000 ecua 1 päivänä tammikuuta 1994, ja luotonsaajan maksettavat määrät ovat:

3 kuukauden jälkeen	(1/4 vuosi)	272 ecua
6 kuukauden jälkeen	(1/2 vuotta)	272 ecua
12 kuukauden jälkeen	(1 vuosi)	544 ecua
Yhteensä		1 088 ecua

Yhtälöksi saadaan:

$$1000 = \frac{272}{(1+i)^{\frac{89}{365}}} + \frac{272}{(1+i)^{\frac{180}{365}}} + \frac{544}{(1+i)^{\frac{365}{365}}}$$

Yhtälö mahdollistaa i:n laskemisen peräkkäisten likiarvojen avulla, jotka voidaan ohjelmoida pientietokoneeseen.

Tulokseksi saadaan:

i = 0,13226, pyöristettynä 13,23 prosentiksi."

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KOM(96) 79 slutlig

DOKUMENT

SV   10   06