Directive 2008/48/EC Of the European Parliament and
of the Council of 23 April 2008 on credit agreements for
consumers and repealing Council Directive 87/102/EEC

ANNEX I

I. The basic equation expressing the equivalence of drawdowns on the one hand and repayments and charges on the other.

The basic equation, which establishes the annual percentage rate of charge (APR), equates, on an annual basis, the total present value of drawdowns on the one hand and the total present value of repayments and payments of charges on the other hand, i.e.:

$$\sum_{k=1}^{m} C_k(1+X)^{-t_k} = \sum_{l=1}^{m'} D_l(1+X)^{-s_l}$$

where:

| — | X | is the APR, |
|---|---|---|
| — | m | is the number of the last drawdown, |
| — | k | is the number of a drawdown, thus $1 \leq k \leq m$, |
| — | $C_k$ | is the amount of drawdown k, |
| — | $t_k$ | is the interval, expressed in years and fractions of a year, between the date of the first drawdown and the date of each subsequent drawdown, thus $t_{1=0}$, |
| — | m' | is the number of the last repayment or payment of charges, |
| — | l | is the number of a repayment or payment of charges, |
| — | $D_l$ | is the amount of a repayment or payment of charges, |
| — | $s_l$ | is the interval, expressed in years and fractions of a year, between the date of the first drawdown and the date of each repayment or payment of charges. |

Remarks:

(a)     The amounts paid by both parties at different times shall not necessarily be equal and shall not necessarily be paid at equal intervals.

(b)     The starting date shall be that of the first drawdown.

(c)     Intervals between dates used in the calculations shall be expressed in years or in fractions of a year. A year is presumed to have 365 days (or 366 days for leap years), 52 weeks or 12 equal months. An equal month is presumed to have 30,41666 days (i.e. 365/12) regardless of whether or not it is a leap year.

(d)     The result of the calculation shall be expressed with an accuracy of at least one decimal place. If the figure at the following decimal place is greater than or equal to 5, the figure at that particular decimal place shall be increased by one.

(e)     The equation can be rewritten using a single sum and the concept of flows ($A_k$), which will be positive or negative, in other words either paid or received during periods 1 to k, expressed in years, i.e.:

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$$S = \sum_{k=1}^{n} A_k (1 + X)^{-t_k}$$

,

S being the present balance of flows. If the aim is to maintain the equivalence of flows, the value will be zero.

[^F1^II.    The additional assumptions for the calculation of the annual percentage rate of charge shall be as follows:

(a)    If a credit agreement gives the consumer freedom of drawdown, the total amount of credit shall be deemed to be drawn down immediately and in full.

(b)    If a credit agreement gives the consumer freedom of drawdown in general but imposes, amongst the different ways of drawdown, a limitation with regard to the amount of credit and period of time, the amount of credit shall be deemed to be drawn down on the earliest date provided for in the credit agreement and in accordance with those drawdown limits.

(c)    If a credit agreement provides different ways of drawdown with different charges or borrowing rates, the total amount of credit shall be deemed to be drawn down at the highest charge and borrowing rate applied to the most common drawdown mechanism for this type of credit agreement.

(d)    In the case of an overdraft facility, the total amount of credit shall be deemed to be drawn down in full and for the whole duration of the credit agreement. If the duration of the overdraft facility is not known, the annual percentage rate of charge shall be calculated on the assumption that the duration of the credit is 3 months.

(e)    In the case of an open-end credit agreement, other than an overdraft facility, it shall be assumed that:

(i)    the credit is provided for a period of 1 year starting from the date of the initial drawdown, and that the final payment made by the consumer clears the balance of capital, interest and other charges, if any;

(ii)    the capital is repaid by the consumer in equal monthly payments, commencing 1 month after the date of the initial drawdown. However, in cases where the capital must be repaid only in full, in a single payment, within each payment period, successive drawdowns and repayments of the entire capital by the consumer shall be assumed to occur over the period of 1 year. Interest and other charges shall be applied in accordance with those drawdowns and repayments of capital and as provided for in the credit agreement.

For the purposes of this point, an open-end credit agreement is a credit agreement without fixed duration and includes credits which must be repaid in full within or after a period but, once repaid, become available to be drawn down again.

(f)    In the case of credit agreements other than overdrafts and open-end credits as referred to in the assumptions set out in points (d) and (e):

(i)    if the date or amount of a repayment of capital to be made by the consumer cannot be ascertained, it shall be assumed that the repayment is made at the earliest date provided for in the credit agreement and is for the lowest amount for which the credit agreement provides;

(ii)     if the date of conclusion of the credit agreement is not known, the date of the initial drawdown shall be assumed to be the date which results in the shortest interval between that date and the date of the first payment to be made by the consumer.

(g)     Where the date or amount of a payment to be made by the consumer cannot be ascertained on the basis of the credit agreement or the assumptions set out in points (d), (e) or (f), it shall be assumed that the payment is made in accordance with the dates and conditions required by the creditor and, when these are unknown:

(i)     interest charges are paid together with the repayments of capital;

(ii)     a non-interest charge expressed as a single sum is paid at the date of the conclusion of the credit agreement;

(iii)     non-interest charges expressed as several payments are paid at regular intervals, commencing with the date of the first repayment of capital, and if the amount of such payments is not known they shall be assumed to be equal amounts;

(iv)     the final payment clears the balance of capital, interest and other charges, if any.

(h)     If the ceiling applicable to the credit has not yet been agreed, that ceiling is assumed to be EUR 1 500.

(i)     If different borrowing rates and charges are offered for a limited period or amount, the borrowing rate and the charges shall be deemed to be the highest rate for the whole duration of the credit agreement.

(j)     For consumer credit agreements for which a fixed borrowing rate is agreed in relation to the initial period, at the end of which a new borrowing rate is determined and subsequently periodically adjusted according to an agreed indicator, the calculation of the annual percentage rate shall be based on the assumption that, at the end of the fixed borrowing rate period, the borrowing rate is the same as at the time of calculating the annual percentage rate, based on the value of the agreed indicator at that time.**]**

**Textual Amendments**

**F1**     Substituted by Commission Directive 2011/90/EU of 14 November 2011 amending Part II of Annex I to Directive 2008/48/EC of the European Parliament and of the Council providing additional assumptions for the calculation of the annual percentage rate of charge (Text with EEA relevance).