

Guidelines on the valuation of the assets of collective investment schemes and the handling of valuation errors in the case of open-end collective investment schemes

20 June 2008

(Version 25 August 2015)

I Basic principles, aims and binding force

These guidelines are part of the self-regulatory measures implemented by the Swiss fund sector, and are subordinate to the Code of Conduct of the Swiss Funds & Asset Management Association SFAMA (SFAMA Code of Conduct). **1**

The guidelines are aimed at ensuring the uniform implementation of the legal provisions on the valuation of the assets of collective investment schemes, the calculation of net asset values, and the issue and redemption of units in the case of open-end collective investment schemes. They also set down general principles for the handling of valuation discrepancies in the case of open-end collective investment schemes. **2**

The guidelines apply to Swiss fund management companies pursuant to Art. 28 et seq. CISA and investment companies with variable capital (SICAVs) pursuant to Art. 36 et seq. CISA in respect of **3**

- securities funds pursuant to Art. 53 et seq. CISA, and **4**
- other funds for traditional and for alternative investments pursuant to Art. 68 et seq. CISA. **5**

The guidelines apply to investment companies with fixed capital (SICAFs) pursuant to Art. 110 et seq. CISA only with regard to the valuation of the assets of the collective investment scheme for financial statements (cf. Art. 117 CISA). **6**

Compliance with the present guidelines must also be ensured where tasks are delegated. The fund management company or SICAV/SICAF must ensure that its agents implement the provisions of the present guidelines in full in carrying out the functions delegated to them. **7**

II Guidelines

A Valuation of the assets of collective investment schemes

Principles

1. The assets of collective investment schemes are to be valued at their current market value. In the case of assets traded on a stock exchange or another regulated market open to the public (referred to below collectively as “exchanges”), this corresponds **8**

to the market price, which is in principle taken as being the last price paid.

2. If trading takes place on more than one exchange, the last price paid on the main market is to be used (Art. 88.1 CISA). **9**

If there is no paid price available for the main market, a paid price from a representative secondary market may be used instead. Such prices must be checked for plausibility against the bid and ask prices available on the main market. **10**

Deviations / special cases

3. Assets for which there is no reliable price, or which are not traded on an exchange, are to be valued at the price that would probably be obtained in a diligent sale at the time of valuation (Art. 88.2 CISA). The following methods may be used to determine such prices (please note that this is not an exhaustive list): **11**

Shares and other equity-type securities and rights

- Enquiries with a number of different brokers that are independent of each other. **12**

Bonds and other debt securities and rights (including discounted paper)

- Valuation on the basis of the current price of securities which are comparable in terms of maturity and credit rating and are traded on an exchange, or **13**
- Valuation on the basis of the current market return on comparable securities. **14**

Convertible and warrant bonds

- Valuation on the basis of the price or the calculated value of the individual components. **15**

Units and shares of other open-end collective investment schemes that are issued and redeemed on a daily basis

- Valuation in principle at the net asset value. **16**

Units and shares of other open-end collective investment schemes that are not issued and redeemed on a daily basis

- Valuation on the basis of the last reported net asset value, taking into account any market fluctuations which have occurred. **17**

Structured products

- Valuation on the basis of the prices of the underlying assets using appropriate valuation models that are recognized in practice (Art. 26.2 in conjunction with Art. 32.2 CISO-FINMA). **18**

Derivative financial instruments

- Valuation on the basis of the prices of the underlying assets using appropriate valuation models that are recognized in practice (Art. 32.2 CISO-SFBC). **19**

Mortgage investments

- Valuation on the basis of recognized guidelines for mortgage investments. **20**

Private equity holdings

- Valuation on the basis of internationally recognized standards for the valuation of such companies and projects (Art. 85.1 CISO-FINMA). **21**

Money market instruments (i.e. instruments with an original term to maturity or interest rate adjustment period of up to 12 months)

- Valuation at cost, with straight-line deferment of the difference vis-à-vis the redemption price until maturity. In the case of more marked changes in the market environment or the credit rating of the asset, the valuation is to be adjusted accordingly. **22**

Other assets and liabilities held by a collective investment scheme

- Bank deposits at sight and term deposits (including fiduciary investments), claims, etc., are to be valued at their nominal value. If the credit rating of the asset changes, the valuation is to be adjusted accordingly. Broken-period interest is to be deferred to each valuation day. **23**
 - Liabilities (e.g. debit interest) and accrued costs are to be deferred to each valuation day. **24**
4. For the translation of the prices of assets denominated in foreign currencies, the middle rates supplied by a recognized quotation service are to be used. **25**

Organizational measures

5. The valuation of the assets is to be conducted by a unit which is independent from those responsible for the asset management and securities trading in respect of the collective investment scheme (cf. SFAMA Code of Conduct). **26**
6. The prices used for the valuation must be drawn from a recognized external source which is independent of the fund management company or the SICAV/SICAF and its agents. Once selected, the price source and the times at which prices are recorded may only be changed in justified exceptional cases. Any deviations must be readily verifiable at all times and must be officially documented. **27**
7. In the case of assets that cannot be satisfactorily valued through external sources or the methods listed under section 3 above, a valuation by the asset manager may be used in justifiable exceptional cases pertaining to a minor portion of the assets of a collective investment scheme. Valuations made by the asset manager must be readily verifiable by the fund management company or the SICAV/SICAF at all times and must be officially documented. In the case of additional purchases and partial sales, the valuation price delivered by the asset manager and used previously is to be compared with the actual transaction price and adjusted where necessary. **28**
8. The prices received from external sources are to be subjected to a plausibility check prior to the calculation of the net asset value. This applies especially to unlisted **29**

assets and/or assets that are seldom traded. In checking the reliability of the prices supplied, the fund management company or the SICAV/SICAF focuses on criteria including the following (the situations given in parentheses can be indications of erroneous prices or prices unsuitable for valuation purposes):

- deviations in price compared with the previous day and compared with the actual prices of additional purchases and partial sales (the deviations exceed certain tolerance levels or the reported price has remained unchanged for several days); **30**
- ensuring the last paid price is up to date (reported price is dated several days previously). **31**

If the fund management company or the SICAV/SICAF identifies an instance where a supplied price may be erroneous, or if, for other reasons, it regards the prices received from the external source as being inadequate for the valuation of the assets of the collective investment scheme, it may set the prices itself in accordance with a recognized method (see section 3 for examples). All deviations from the prices received from the external source must be readily verifiable at all times and are to be officially documented accordingly. **32**

B Calculating the net asset value of open-end collective investment schemes

Basic principle

9. The net asset value per unit is determined by the market value of the assets, minus all the fund's liabilities, divided by the number of units in circulation (Art. 83.2 CISA). In calculating the net asset value, all assets and liabilities held by the open-end collective investment scheme at the moment in question are to be taken into account. Adequate provision is to be made for transactions which have been concluded but not yet settled, as well as for pending corporate actions. **33**

Organizational measures

10. The calculated net asset values and the issue and redemption prices of the units are to be systematically checked (i.e. validated) before publication. The following measures, among others, can be used to identify errors: **34**
- plausibility check of the calculated net asset value, e.g. by comparison with the prior calculation (where the change is not plausible, the prior valuation is to be checked as well); **35**
 - regular matching of holdings with the custodian bank. **36**

C Issue and redemption of units

Using the forward pricing method for the issue and redemption of units

11. The forward pricing method is to be used for the issue and redemption of units. With this method, orders for the acquisition and redemption of units received by a certain time (cut-off time) are settled by the fund management company/SICAV at a net **37**

asset value it determines on the basis of market prices paid after the cut-off time. For the purposes of determining the net asset value, assets for which there are no reliable market prices are also to be valued for a point in time **after** the cut-off time in accordance with section 3 of these guidelines.

In setting the cut-off time, the fund management company/SICAV takes into account the trading hours on the exchanges on which the open-ended collective investment scheme's investments are traded. **38**

It values the assets of the open-end collective investment scheme at market prices paid **after** the cut-off time. **39**

If trading on an exchange closes in the morning or early afternoon Swiss time, the fund management company/SICAV may use prices that are already known at the cut-off time for accepting orders for the valuation. If the investments of an open-end collective investment scheme valued in this manner exceed 25% of its assets, the fund management company/SICAV must adjust the valuation in line with the developments known in the meantime which could have a relevant impact on the net asset value (cf. section 13 and 15). **40**

Any regulations in deviation from the above (e.g. historic pricing) are only permitted in the case of open-end collective investment schemes whose portfolios have an actual overall duration of up to 12 months. Exceptions in this regard are marked changes in the interest-rate and credit risks (cf. section 3, Money market instruments). **41**

The fund management company/SICAV must explain in the prospectus the conditions for the issue and redemption of units, as well as the principles for valuing the assets of the open-end collective investment scheme. **42**

Exchange-traded funds

12. In the case of exchange-traded funds, the fund management company/SICAV must appoint a market maker which must ensure that the difference between the net asset value – which is continually updated – and the current stock exchange price does not exceed a certain threshold limit. **43**

Deferral of repayment / suspension of the issue of units

13. Pursuant to Art. 110.1 CISO, in the cases envisaged in the fund regulations, the repayment may be temporarily deferred if a significant proportion of the assets of an open-end collective investment scheme can no longer be valued. In the cases listed under clauses a to c, units are also not to be issued. Depending on the reasons for which the calculation of the net asset value is impossible, a distinction is to be drawn between: **44**

ordinary situations such as

- regular exchange holidays in one or more investment countries, provided there are no special political or economic developments that could result in a considerable change in prices once trading resumes, and **45**

extraordinary situations such as

- instances where a market in one or more investment countries is likely to be closed for a lengthy period, or instances where there are restrictions on foreign exchange and asset transfers or other factors which prevent the normal functioning of the market. **46**
- 14. In ordinary situations, the fund management company/SICAV can maintain the issue and redemption of units for as long as the majority of the assets (in terms of value) can be valued properly. In determining the majority of the assets in terms of value, the last point in time when the assets of the open-end collective investment scheme could still be valued properly is to be taken as the basis. **47**
- 15. In extraordinary situations, the fund management company/SICAV will decide on a deferral of repayments and suspension of the issue of units on a case-by-case basis. As a general rule of thumb, the repayment should be deferred and the issue of units suspended if the proportion of the assets that cannot be valued exceeds 10% of the assets of the open-end collective investment scheme. In determining the 10% of the assets of the open-end collective investment scheme, the last point in time when the assets of the collective investment scheme could still be valued properly is to be taken as the basis. **48**
- The fund management company/SICAV together with the custodian bank must prepare strategic measures for such situations that will enable it to act quickly in the interests of the investors and fulfill its duty to disclose information. **49**

D Procedure in the case of valuation errors (cf. Appendices 1 and 2)

Definition

- 16. In principle, any difference between a published net asset value and the correct net asset value determined subsequently is deemed to be an error if it would have resulted in a different net asset value when rounded off as defined in the fund regulations. If the issue and redemption prices include or are net of the open-end collective investment scheme's incidental costs incurred in the purchase and sale of assets, the difference is based on these prices. **50**

Organizational measures

- 17. The fund management company/SICAV must implement effective organizational measures to enable it to identify, as quickly as possible, errors in the valuation of the assets and in the calculation of the net asset value or the issue and redemption prices of the open-end collective investment scheme (cf. section 10), and to rectify the causes of such errors. **51**
- The fund management company/SICAV must keep a record of all errors that occur that are directly connected with the calculation of the net asset value as well as the measures implemented to prevent a reoccurrence of the same error. It will allow the custodian bank and the auditors to inspect the error reports at any time. **52**
- The steps to be taken when errors occur are outlined in Appendix 1. **53**

Assessing the significance of errors

18. When errors occur, the decision on the steps to be taken depends primarily on whether the errors are deemed to be significant or insignificant. **54**

An error is deemed to be significant if the percentage difference between the initially determined net asset value and the correct, rounded-off net asset value determined subsequently or the issue or redemption price exceeds the following limits¹ (as a percentage of the correct value or price): **55**

Open-end collective investment schemes by type of investment	Limit	56
Money market funds	0,25%	
Bond funds	0,5%	
Equity funds	1,0%	
Mixed funds	0,5%	

In the case of other funds for alternative investments, the fund management company/SICAV will issue an internal guideline defining the parameters for assessing the significance of errors (cf. section 24). **57**

Measures to be taken in the case of errors deemed to be insignificant

19. In the case of errors deemed to be insignificant, the fund management company/SICAV will implement the measures envisaged in the internal guideline. In the case of recurring errors, errors that remain undetected for longer periods of time and errors in excess of a certain volume, the board of directors is to be formally informed by the executive management through the official channels. **58**

Measures to be taken in the case of errors deemed to be significant

20. Every error deemed to be significant is to be reported immediately to the custodian bank, the auditors and the supervisory authority. The report of the fund management company/SICAV in such instances must include the following information: **59**

- the scope and cause of the erroneous valuation; **60**
- the corrective measures implemented or an application for approval of such corrective measures; **61**
- the damage caused to the open-end collective scheme on the one hand and the investors on the other. **62**

Depending on the scope of the erroneous valuation and the damage arising as a result, the fund management company/SICAV must also observe its duty to disclose information to foreign supervisory authorities in countries where the open-end collective investment scheme in question is approved for distribution, as well as to the investors and distribution partners. **63**

¹ The limits stated under section 18 take into account aspects such as the risk/return profile, the daily price volatility and the usual bid/ask spread in the respective investment markets.

21. If **no** units were issued and/or redeemed on the basis of the erroneous net asset value, the measures to be implemented will be limited to compiling an error report and observing reporting obligations pursuant to section 20.1. **64**
22. If units were issued and/or redeemed on the basis of the erroneous net asset value, the fund management company/SICAV must at least cancel all transactions that were settled on the basis of the erroneous net asset value to the detriment of investors, and settle these transactions on the basis of the corrected net asset value. Section 23 notwithstanding, it will indemnify both the investors affected and the open-end collective investment scheme concerned. **65**
23. In minor cases where the resulting difference amounts to less than 50 Swiss francs per investor, the fund management company/SICAV may apply to the supervisory authority to be released from its obligation to cancel the settlements in question. However, the open-end collective investment scheme affected is to be indemnified in all cases. **66**

E Internal directive

24. The fund management company/SICAV will issue an internal directive setting down the principles and the operational procedures for valuing the open-end collective investment scheme's assets. The said directive will be specifically tailored to the requirements of its organizational structure and the range of funds offered, and must cover at least the following points: **67**
- structural organization and business processes, control systems (section 5); **68**
 - access to the software used for valuation and booking; **69**
 - the pertinent main markets and the price sources to be used (sections 1 and 6); **70**
 - criteria for the plausibility checks of valuation prices (including tolerance levels for price deviations compared with the previous day, maximum tolerated "age" of prices) (section 8); **71**
 - determining the frequency of the regular matching of holdings with the custodian bank (section 10); **72**
 - measures, decision-making authority and the documentation of the necessary deviations from the standard external price sources used (sections 7 and 8); **73**
 - methods for valuing positions that cannot be satisfactorily valued through external sources (section 3); **74**
 - determining the threshold values for more marked changes in the market environment or a change in the credit rating of money market instruments (section 3); **75**
 - criteria for the deferral of repayment and the suspension of the issue of units, corresponding measures and decision-making authority, taking particular account of the obligations to provide information to the supervisory authorities, auditors, the custodian bank, asset manager, distribution partners and investors (section 13 et seq.); **76**

- measures and decision-making authority when errors occur (including documentation, internal reporting), as well as the obligations to disclose information to the supervisory authorities, auditors, the custodian bank, distribution partners and investors (sections 17 and 19 et seq.); **77**
- specific definition of recurring errors, errors that remain undetected for longer periods of time and errors in excess of a certain volume (section 19); **78**
- framework for assessing the significance of valuation errors in the case of other funds for alternative investment (section 18). **79**

III Other provisions

A Implementation by the custodian bank

The custodian bank will ensure that the fund management company/SICAV complies with the law, the fund regulations and the present guidelines in calculating the net asset value of the units. **80**

B Minimum standard

The supervisory authority has recognized these guidelines as a minimum standard (FINMA Circular 2008/10 Self-Regulation as Minimum Standard). **81**

C Entry into force and transitional provisions

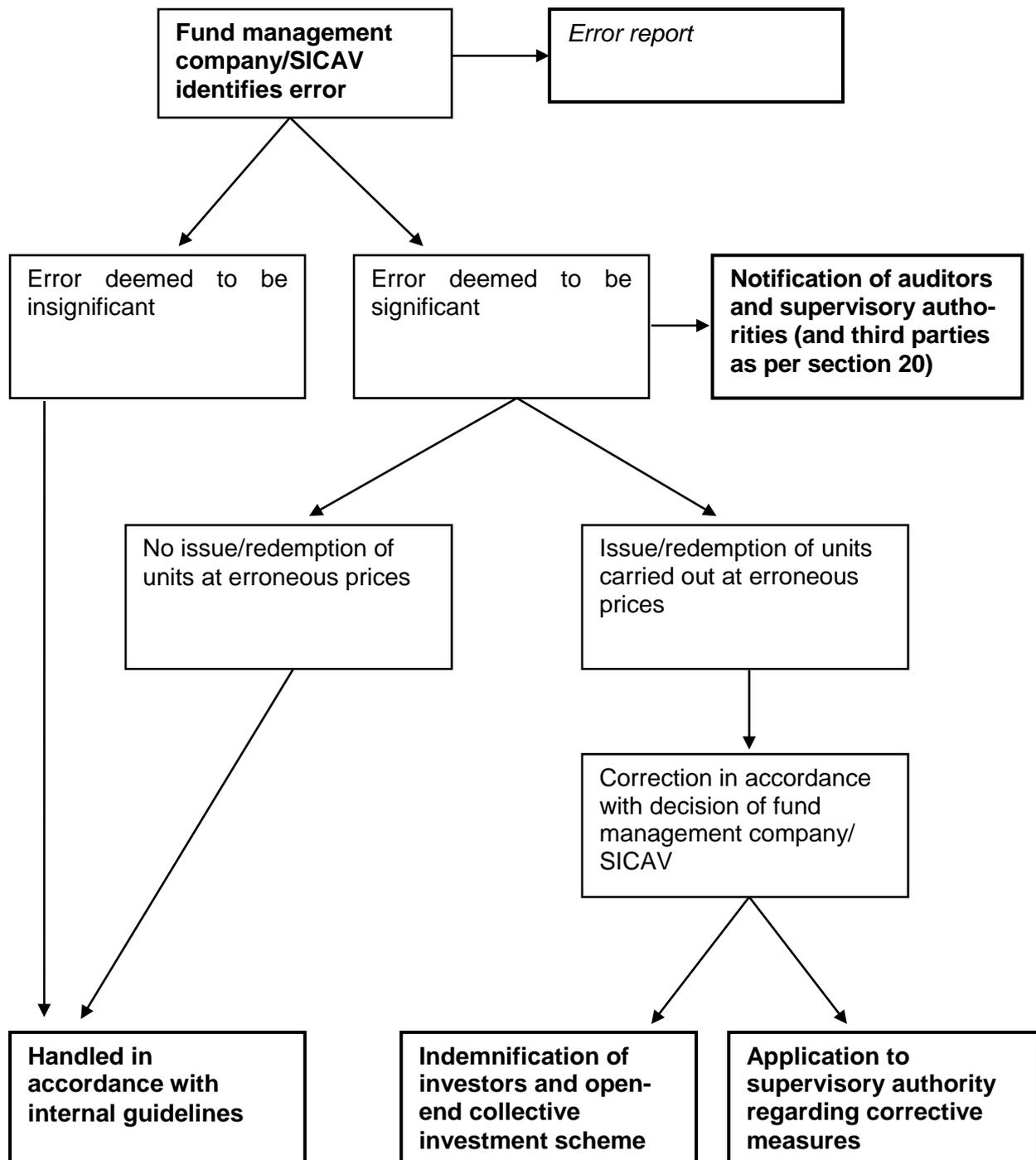
These guidelines were approved by the Board of Directors of the Swiss Funds & Asset Management Association SFAMA on 20 June 2008 and entered into force on 1 July 2008. **82**

The amendments in margin number 56 were approved by the Board of directors on 25 August 2015 and enter into force 1 July 2016. **83**

Existing internal directives pursuant to section 24 must be amended in line with the changed provisions in margin number 56 of these guidelines until 1 July 2016. **84**

Appendix 1 Guidelines on the valuation of the assets of collective investment schemes and the handling of valuation errors in the case of open-end collective investment schemes

Measures to be implemented in the case of erroneous prices (supplement to section 17 et seq.)



Appendix 2 Guidelines on the valuation of the assets of collective investment schemes and the handling of valuation errors in the case of open-end collective investment schemes

Framework for assessing corrective measures in the case of erroneously calculated net asset values (supplement to section 23)

	Measures affecting the investor	Measures affecting the open-end collective investment scheme	Compensation by the fund management company/SICAV
<u>NAV too high</u> Unit issues	Refund of the excess amount paid	Refunds to investors are debited	—
Unit redemptions	The excess amount credited on payment of the redemption price is reclaimed (debited)	Amounts reclaimed from investors and the fund management company/SICAV are credited	Amount not covered by sums reclaimed from investors is credited immediately
<u>NAV too low</u> Unit issues	The shortfall is subsequently debited	Subsequent payments by the investors and the fund management company/SICAV are credited	Amount not covered by subsequent payments by the investors is credited immediately
Unit redemptions	Refund of the shortfall in the redemption price received	Refunds to investors are debited	—

In the case of erroneously calculated net asset values in favor of the investors (NAV too low in the case of unit issues or too high in the case of unit redemptions), corrective measures affecting the investors may be waived. However, the open-end collective investment scheme is to be indemnified in all cases.

CONTENTS

Guidelines on the valuation of the assets of collective investment schemes and the handling of valuation errors in the case of open-end collective investment schemes 1

- I Basic principles, aims and binding force..... 1
- II Guidelines..... 1
 - A Valuation of the assets of collective investment schemes 1
 - Principles..... 1
 - Deviations / special cases 2
 - Organizational measures..... 3
 - B Calculating the net asset value of open-end collective investment schemes 4
 - Basic principle 4
 - Organizational measures..... 4
 - C Issue and redemption of units 4
 - Using the forward pricing method for the issue and redemption of units 4
 - Exchange-traded funds..... 5
 - Deferral of repayment / suspension of the issue of units 5
 - D Procedure in the case of valuation errors (cf. Appendices 1 and 2) 6
 - Definition 6
 - Organizational measures..... 6
 - Assessing the significance of errors..... 7
 - Measures to be taken in the case of errors deemed to be insignificant 7
 - Measures to be taken in the case of errors deemed to be significant..... 7
 - E Internal directive..... 8
- III Other provisions..... 9
 - A Implementation by the custodian bank 9
 - B Minimum standard..... 9
 - C Entry into force and transitional provisions 9

Appendix 1 Guidelines on the valuation of the assets of collective investment schemes and the handling of valuation errors in the case of open-end collective investment schemes..... 10

- Measures to be implemented in the case of erroneous prices (supplement to section 17 et seq.)..... 10

Appendix 2 Guidelines on the valuation of the assets of collective investment schemes and the handling of valuation errors in the case of open-end collective investment schemes..... 11

- Framework for assessing corrective measures in the case of erroneously calculated net asset values (supplement to section 23) 11