ORDINANCE No 41 of 11 June 2008 on the requirements to the content of the rationale of the prices of the shares of a listed company, including to the application of pricing methods in case of transformation, joint venture contract and commercial offering

Passed by virtue of Decision No 104-N of 11 June 2008 of the Financial Supervision Commission, promulgated, State Gazette, issue 59 of 1 July 2008, corrected issue 65 of 22 July 2008

Chapter One

GENERAL PROVISIONS

Art. 1. (1) This Ordinance shall settle the requirements to the content of the rationale of the fair value of the shares of a listed entity, including the application of the pricing models, in case of:

1. transformation of commercial entities with the involvement of at least one listed entity;
2. entering by a listed entity into a joint venture arrangement under the provisions of art. 12bb of the Law on Public Offering of Securities (LPOS).

(2) This Ordinance shall also settle the requirements to the content of the rationale of the offered price (the offered exchange value) and the fair value of the shares of a listed entity, including the application of the pricing methods, in case of:

1. liability to make a bid, arising for a person, which acquires directly, through related parties or indirectly under art. 149, para 2 of the LPOS more than 50 percent or 2/3 of the votes in the general assembly of a listed entity;

2. right to make a bid by a person, which has acquired directly, through related parties or indirectly under art. 149, para 2 of LPOS more than 90 percent of the votes in the general assembly of a listed entity;

3. purchase of shares under art. 157a of LPOS when the commercial bid through which the last threshold was reached was voluntary and the person has acquired less than 90 percent of the voting shares.

(3) This Ordinance shall be applicable to any non-listed entity, involved in the transformation under para 1, item 1.

Art. 2. The commercial bidder may provide rationale for the price offered in accordance with the provisions of the Ordinance and in commercial bid:

1. to acquire more than 3 percent of the total number of shares within one year by a person holding directly, through related parties and / or indirectly under art. 149, para 2 of LPOS more than 50 percent of the votes in the general assembly of a listed entity;
2. to acquire directly, through related parties or indirectly under art. 149, para 2 of LPOS more than 1/3 of the votes in the general assembly of a listed entity by a person holding at least 5 percent of the votes in the general assembly of the same entity;
3. to acquire by a listed entity during one calendar year more than 3 percent of its treasury voting shares in case of decrease of the equity through deregistration of shares and redemption.

Art. 3. The fair value per entity share shall be the value determined on the basis of the share price at the trading location with the highest traded number of shares and / or generally accepted valuation methods in accordance with the requirements of the Ordinance.

Art. 4. The information contained in the rationale as to the fair price of the shares shall be presented in a clear and understandable language.

Chapter Two

VALUATION METHODS AND REQUIREMENTS AS TO THEIR APPLICATION

Section I

General Provisions

Art. 5. (1) The fair value of actively traded shares shall be the average weighted price at close of business or another similar indicator on the last day during which deals have been closed during the last three months preceding the date of the rationale, at the trade location with the highest traded number of shares for the day and the value of the shares derived under the applied valuation method under para 2.

(2) If the shares of the entity shall not be traded actively during the last three months preceding the date of the rationale, the fair value of the shares shall be determined as the weighted average of the values of the shares derived using the following valuation methods:

1. the discounted cash flows method;

2. the net asset value method; and

3. the market benchmarks' multipliers method.

(3) The weighing under para 1 and 2 shall be done by multiplying the share value derived from the market and / or according to the applied valuation methods, and their relative weights. The transforming entities or entities – parties under a joint venture arrangement, respectively the bidder, hereunder referred to as the "applicant" shall determine weights which they consider shall provide well-grounded basis to determine a more realistic valuation of the fair value as of the date of its definition.

(4) The applicant may replace any of the methods set out in para 2 with another generally accepted method, when any of the methods indicated shall be inapplicable or if the application of another generally accepted method shall provide a more realistic value of one ordinary share of the entity. The rationale of the share value derived under this method shall also provide a description of its methodology.

Art. 6. (1) The fair value of the shares shall equal their liquidation value when:

1. the liquidation value shall exceed the fair value of the shares, determined under art. 5; or
2. the general assembly of the shareholders shall make a decision for liquidation of the entity or the entity is subject to bankruptcy proceedings under the provisions of art. 630 of the Commercial Act.

(2) The liquidation value of the shares under para 1, item 1 shall be calculated when a well-grounded assumption can be made that it exceeds the share price determined in accordance with art. 5.

(3) In the course of administrative proceedings initiated as provided for in art. 124, 126d or 152 of LPOS the Financial Supervision Commission, hereunder referred to as the Commission, Deputy Chair of the Commission in charge of Supervision of Investment Activities Division, respectively, may request from the applicant to prepare valuation of the entity's shares under the liquidation value method, when any of the following circumstances shall be in place:

1. during any of the last three financial years preceding the registration of a commercial bid, respectively submission to the Commission of the joint venture agreement or the development of the plan or contract for transformation, the entity has reported negative financial result (loss) and / or was decapitalised;

2. not less than 30 percent of the entity's shares represent property and equipment, which are presented in the financial statements under the cost method in accordance with the entity's accounting policies and have not been revalued as at the last audited annual financial statements;

3. the entity uses in its business assets which are significantly or fully depreciated (the book value of depreciable non-current tangible assets exceeds their carrying amount more than 4 times) ;

4. the carrying amount of shareholdings exceeds 15 percent of the entity's assets;

5. the valuation of the entity under the net asset value method (without adjustments) exceeds by more than 1.5 times the fair value offered by the applicant (exchange value);

6. the values of the entity's shares, subject to valuation, stated under the methods set out in art. 5, para 1 and 2, differ by more than 1.5 times;

7. adjustments have been made to the balance sheet values of the entity amounting to more than 20 percent of the asset value under art. 15, para 3;

8. other cases when a well-grounded assumption can be made that the liquidation value of the shares exceeds their value determined under the provisions of art. 5.

Art. 7. (1) The applicant should provide rationale for the use of any valuation method under art. 5, the weight assigned to each of the valuation methods used, as well as any assumption, statement or forecast, made in determining the entity's share values under the valuation methods.

(2) The rationale under para 1 should contain detailed information regarding:

1. the features of the valued entity, namely:

a) specifics of its business;

b) total assets and liabilities as per balance sheet;

c) strengths and weaknesses and comparison to competitors;

d) profitability ratios;

e) asset and liquidity ratios;

f) ratios per share;

g) dividend ratios;

h) development ratios;

i) leverage ratios;

j) market ratios;

k) other significant circumstances;

2. the features of the valued entity historically;

3. economic trends and conditions in the Republic of Bulgaria and globally, attributable to the entity's operations;

4. the features under item 1 for analogue entity, respectively a generally accepted benchmark and comparative analysis to the valued entity;

5. other significant circumstances due to which the applicant believes that the choice of the valuation methods, their weights, assumptions, statements and forecasts made, are appropriate.

(3) The ratios under para 2, item 1, points d – f, h and I shall be calculated on the basis of the latest published financial statements, the ratios under para 2, item 1, point g shall be calculated on the basis of the latest audited annual financial statements, and those under para 2, item 1, point k, shall be calculated based on the information under art. 17, para 3 and 4.

(4) The information under para 2, item 3, shall be presented on the basis of analysis of the macroeconomic environment and the sector in which the entity exercises it core operations.

Section II

Discounted cash flows method

Art. 8. (1) The discounted cash flows method includes a group of models to determine share values based on the time value of money.

(2) The valuation method based on the time value of money is a major method to determine the value of an entity and / or its shares through discounting the forecast future cash flows.

(3) In determining the share value under the discounted cash flows method the applicant shall use one of the following models, which should take into account the entity's specifics and the cash flows generated by it:

1. the discounted future cash flows of equity model (FCFE) in accordance with Appendix No 1;

2. the discounted future cash flows model (FCFF) in accordance with Appendix No 2;

3. the discounted dividends model (DDM) in accordance with Appendix No 3 – provided the listed entity has paid dividends during the preceding three financial years.

(4) The selected model under para 3 should be described, applied well-grounded, adjusted in case of existence of preference shares and it should take into account the life cycle of the valued entity.

(5) When any of the models under para 3 shall be impracticable to determine the entity's share values, the applicant may use another model, if it shall provide a more realistic value for the shares. The choice of this model should have its grounding in the entity's features and the specifics of the cash flows generated by it.

Art. 9. The value per one ordinary share of the entity under the models set out in art. 8, para 3 shall be determined as follows:

1. under the discounted cash flows of equity model – the equity derived as provided for in Appendix No 1 shall be reduced with the value of preference shares and the calculated value shall be divided to the number of ordinary shares outstanding;
2. under the discounted cash flows model – the value of total equity capital (equity and attracted capital) derived as provided for in Appendix No 2 shall be reduced with all debts and other legal receivables of investors having priority to ordinary shareholders and the value calculated shall be divided to the number of ordinary shares outstanding;
3. under the discounted dividends model – the value per share derived as provided for in Appendix No 3.

Art. 10. (1) The forecast cash flows shall be determined on the basis of well-grounded forecasts.

(2) Forecasts shall be supported by retrospective data from at least the last three annual audited financial statements of the entity and the latest published set of financial statements prior to the date of registration of the commercial bid, respectively prior to the date of filing for approval of the joint venture agreement or the preparation of the plan or contract for transformation of the entity, as well as on the basis of the features of the entity under art. 7, para 2. When the entity prepares consolidated financial statements the information under the first sentence shall be presented on the basis of the consolidated financial statements.

(3) Cash flows for the purpose of the model under art. 8, para 3, item 1 shall be the forecast equity cash flows.

(4) Cash flows for the purpose of the model under art. 8, para 3, item 2 shall be the forecast cash flows of the entity.

(5) Cash flows for the purpose of the model under art. 8, para 3, item 3, shall be those estimated for dividend distribution.

(6) Forecast cash flows shall be determined under three scenarios – pessimistic, realistic and optimistic. The value of the shares under the models under art. 8, para 3, and 5 shall be determined as

the average weighted value of the values of shares derived under the different scenarios. The relative weights shall be determined by the applicant and shall be based on the grounds of the assumptions, statements and forecasts under art. 7, para 2.

Art. 11. (1) Forecast cash flows shall be determined by years, while differentiating two periods – forecast period and post forecast period.

(2) The forecast period covering the period, during which equity cash flows can be forecast with a great deal of certainty, the cash flows of the entity, the expected dividends or other cash flows. This period shall not be less than five years and it should cover the whole term of deriving financial effects from upcoming investments.

(3) Forecast cash flows shall be determined for each individual year over the forecast period.

(4) The post forecast period shall cover the years after the expiry of the forecast period. This is the period when no significant changes shall be envisaged in the scale and profitability of operations and therefore it is forecast that cash flows shall remain constant or shall increase or decrease in a stable pattern.

(5) Cash flows after the post forecast period shall be considered to be equal to the cash flow during the first year after the forecast period or to be expressed with it in a stable pace.

(6) Forecasting investment costs and increase in the net working capital every year shall be allowed to the extent it shall be required to ensure maintaining capital and forecast pace.

Art. 12. (1) Discounting forecast cash flows shall be done using a discount rate which shall serve for the calculation of their present values.

(2) The discount rate for the models under art. 8, para 1, items 1 and 3 shall be the cost of financing through equity.

(3) The discount rate for the model under art. 8, para 3, item 2 shall be the weighted average cost of capital of the entity (WACC).

(4) In determining the relative shares for the purpose of determining the average weighted cost of capital of the entity, the carrying amounts of all financing sources shall be used. The applicant may use their market values if this shall ensure more realistic valuation of the entity's shares and the applicant shall be obliged to provide rationale as to their use.

(5) The applicant may apply a discount rate different that those set out in para 2 and 3, when the use of such discount rate shall provide a more realistic value per one ordinary share of the entity. The discount rate under the first sentence shall be well-grounded, describing the methodology for its computation and providing an analysis and assessment of the defining factors.

Art. 13. The terminal value shall be calculated through capitalisation of cash flows in the post forecast period in accordance with the appendices to the Ordinance.

Section III

Net asset value method

Art. 14. (1) The net asset value method shall include a group of models to determine the value of shares based on the net value of the assets.

(2) The net asset value method shall be a fundamental way to determine the value of an entity and / or its shares using models based on the value of the entity's assets less its liabilities.

(3) The model of the net book value of the assets shall be used by the applicant when determining the value of shares under para 2.

(4) The applicant may apply a model other than the one set out in para 3, if it shall provide a more realistic value of the shares. The choice of this model should be described and well-grounded given the features of the entity and the specifics of its assets and liabilities.

Art. 15. (1) The value of the shares under the net book value of assets model shall be determined by dividing the value of the shares as per the entity's balance sheet less the value of the current and non-current liabilities as per the balance sheet and all legal investor receivables, having priority before the holders of ordinary shares to the number of ordinary shares outstanding.

(2) The entity's assets and liabilities shall be determined on the basis of the information in the most recent published balance sheet. If the entity prepares consolidated financial statements, the information as per the first sentence should be presented on the basis of the consolidated balance sheet.

(3) Any adjustment to the book value of assets and liabilities should be well grounded by the applicant. No adjustment of the book values from the audited annual accounts shall be allowed.

Section IV

Market benchmarks' multipliers method

Art. 16. (1) The market benchmarks' multipliers method shall include a group of models to determine the entity's value per share based on the market prices of the shares of the benchmark or a group of benchmarks.

(2) The method based on the market prices of shares of benchmarks is a fundamental method to determine the value of an entity and / or its shares using one or more models comparing the valued entity to a similar company having a market price or a generally accepted benchmark.

(3) One of the following models shall be used by the applicant in determining the value of the shares:

1. market benchmarks multipliers model; or

2. market multipliers of a generally accepted benchmark, which shall take into account the features of the valued entity and the analogue entity or the generally accepted benchmark.

(4) The analogue entity, the generally accepted benchmark respectively, shall be an entity or entities which shall provide sufficiently good basis for comparison with the investment and risk features of the valued entity. The choice of an analogue entity, generally accepted benchmark respectively, should be based on comparative analysis and assessment of the investment and risk features, as well as the level of similarity to the valued entity.

(5) The generally accepted benchmark shall be determined as an average value of the market multipliers of the analogue entities.

(6) When any of the models under para 3 shall be impracticable to determine the value of the entity's shares, the applicant may choose to apply another model, if it shall ensure more realistic valuation of the shares. The choice of another model should be well-grounded taking into account the features of the valued entity and the specifics of its assets and liabilities.

(7) The chosen model under para 3 and 6 should be described and applied with a good rationale.

Art. 17. (1) The market benchmarks multiplier models, generally accepted benchmarks respectively, shall be applied through calculating the value of the shares of the valued entity by multiplying the:

1. net profit by a market multiplier, which shall represent the ratio between the market price of the shares of the analogue entity, the generally accepted benchmark respectively and its net profit (P/E); or
2. the accounting value (equity) by a market multiplier which shall represent the ratio between the market price of the shares of the analogue entity, the generally accepted benchmark respectively, and its accounting value (equity) (P/B); or
3. net sales by a market multiplier, which shall represent the ratio between the market price of the shares of the analogue entity, the generally accepted benchmark respectively, and its net sales revenue (P/S); or

4. the profit before interest and tax by a market multiplier, which shall represent the ratio between the market price of the shares of the analogue entity, the generally accepted benchmark respectively, and its profit before interest and tax (P/EBIT).

(2) The applicant may choose to apply another market multiplier other than those set out in para 1, if it shall provide a more realistic value of the entity's shares. The choice of another market multiplier should be well-grounded given the features of the valued entity and its specifics.

(3) The net profit, accounting value (equity), net sales and profit before interest and tax for the analogue entity, the generally accepted benchmark respectively, and those of the valued entity shall be determined on the basis of the latest published set of financial statements. When the entity prepares consolidated financial statements, the information under the first sentence should be presented on the basis of the consolidated financial statements.

(4) The multipliers under para 1 shall be calculated on the basis of market prices of the analogue entity, the entities included in the generally accepted benchmark respectively, defined as closing price or another similar indicator on the last day during which transactions have been closed during the 3 months preceding the date of the rationale for the price, at the location of the highest traded volume of shares for the day.

Section V

Liquidation value method

Art. 18. (1) The liquidation value of the entity shall be the sum of the liquidation values of its assets, less its current and non-current liabilities, liquidation costs and all legal investor receivables having priority before the holders of ordinary shares.

(2) The liquidation value per share shall be calculated by dividing the liquidation value of the entity by the number of shares outstanding.

(3) The liquidation value of the entity shall be calculated by independent experts having the required qualification and experience.

(4) The liquidation value shall be prepared as at the date of the most recent published financial statements of the entity.

(5) The liquidation value shall be determined using methods based on the valuation of the liquidation value of the entity's assets and liabilities. All adjustments made by the appraiser in the financial statement data and liquidation costs should be well-grounded and explained in detail.

Art. 19. When the entity's valuation under any of the models under art. 8, 14 and 16 shall be negative, the model may not be applied for the purpose of determining the fair price under art. 5.

Chapter Three

CONTENT OF THE RATIONALE AS TO THE SHARE PRICE

Art. 20. (1) The rationale behind the offered price (the offered exchange value), respectively the fair value of the shares of a listed entity, should include:

1. summary of the valuation data;
2. explanation of the valuation carried out;
3. summarised financial information;
4. sources of the information used in the rationale.

(2) The rationale should be prepared as at a date not earlier than 5 days prior to the date of registration of the commercial bid with the Commission and not earlier than one month prior to the date of filing

with the Commission of the joint venture agreement or the preparation of the plan or contract for transformation of the entity.

Art. 21. (1) In the case of commercial bid the summary of valuation data under art. 20, para 1, item 1 shall include the following information:

1. the price or exchange value offered by the bidder;
2. the calculated fair price of the shares;
3. the value of shares calculated under each of the valuation methods used and the weight assigned to each method in determining the fair price;
4. the average weighted market price over the last 3 months, the number of shares traded at a trade location, which discloses publically information about the trade over the same period, closing price or another similar indicator as at the last day on which deals have been closed during the last three months, preceding the date of the rationale at a trade location with the biggest traded volume of shares for the day and the highest price per share paid by the bidder, its related parties or the parties under art. 149, para 2 of LPOS during the last 6 months prior to the registration of the bid;
5. information that the Commission has neither approved nor refused to approve the fair price of the shares and it is not liable as to the fairness and completeness of the data contained in the rationale;
6. the date and validity of the rationale;
7. other information as to share prices that the applicant shall consider material.

(2) In the cases of transformation of an entity and joint venture agreement the summary of the data from the valuation under art. 20, para 1, item 1 shall include the information under para 1 and forecast valuation of the newly formed entity or entities, the receiving entity in case of merger respectively.

Art. 22. The clarification of the valuation under art. 20, para 1, item 2 shall contain detailed description of the share valuation methods used, including the information under art. 7, para 1.

Art. 23. (1) The summarised financial information under art. 20, para 1, item 3 shall include data regarding the last three financial years, as well as current financial information based on the latest published set of financial statements, prepared in accordance with the applicable accounting standards, as follows:

1. income statement data:

a) net sales revenue;

b) cost of sales;

c) gross profit / loss;

d) administrative expenses and selling expenses;

e) operating profit / loss;

f) financial income and expenses;

g) profit / loss (before income tax);

h) net profit / loss;

2. balance sheet data:

a) cash and cash equivalents:

b) net working capital;

c) total assets;

d) total liabilities;

e) total equity;

3. financial ratios under art. 7, para 2, items d – k;

4. other financial statement data or financial ratios, which shall be considered material by the applicant or shall be requested by the Commission in the course of the respective administrative proceedings under art. 124, 126d or 152 of LPOS;

5. in case of transformation or joint venture agreement – the following shall also be included:

a) forecast financial information under item 1 – 4 for the newly established entity or entities, the receiving entity in case of merger respectively;

b) forecast valuation of the expected changes (post transformation) in the equity;

c) the price of the newly established entity or entities;

d) other data representing material circumstances;

6. statement that the prior financial results cannot be considered necessarily indicative of the future financial result of the entity and the interim period results cannot be considered necessarily indicative as to the annual financial results.

(2) The data under para 1, items 1 – 4 should be taken from audited financial statements and from the latest published financial statements of the entities.

(3) If the entity has used in the income statement classification of the costs by type, the data under para 1, item 1, points b and d can be replaced with the respective costs by type from the statement.

(4) When the entity is obliged to prepare consolidated financial statements, the information under para 1 should be presented also on the basis of the consolidated financial statements.

Art. 24. When any of the elements of the content of the rationale shall be inapplicable these elements should be replaced with the respective data.

ADDITIONAL PROVISIONS

§1. Under this Ordinance:

1. "Actively traded shares" shall be shares having a minimum average daily volume of trade of at least 0,01 percent of the total number of shares of the entity for the preceding 3 months as a total at all locations of trade, which provide public information on trade.

2. "Location of trade" shall be a regulated market, multilateral trading system or system participant acting as such in the Republic of Bulgaria or in another member state.

3. "Shares outstanding" shall be the issued shares of the entity less the redeemed shares.

4. "Weighted average cost of capital" shall be the price of financing of all financing sources used, net of tax effect from recognition for tax purposes of the financial interest expense, weighted with their relative shares in the total invested capital of the company.

5. "Cost of equity financing (r)" shall be determined:

a) under the capital asset pricing model (CAPM) as a sum of the risk-free rate of return Rf and the product of the coefficient b and the difference between the forecast market return Rm and the risk-free rate of return Rf, namely

$$r = R_f + \beta * (R_m - R_f)$$

or

b) as a sum between the risk-free rate of return Rf and the risk premium RP, namely:

$$r = R_f + RP.$$

6. "Equity cash flows" shall be determined by increasing the net profit after interest and income tax with the depreciation costs, the decrease in the net working capital and debt arising during the period and decreasing it with investments in non-current assets, the increase in net working capital and repayments of debt principles.
7. "Cash flows of the entity" shall be determined by increasing the profit before interest after tax with the depreciation costs and the decrease in the net working capital and by decreasing it with investments in non-current assets and increases in net working capital, without taking into account cash flows related to receiving loans and repayment of interest on loans.
8. "Net working capital" shall be the difference between current assets and current liabilities.
9. "Profitability ratios" shall include at least the following ratios: return on equity (ROE), return on assets (ROA), pre tax margin, net margin and operating cash flows / liabilities.
10. "Asset and liabilities ratios" shall include at least the following ratios: quick ratio, current ratio, asset turnover and receivables turnover.
11. "Ratios per share" shall include at least the following ratios: equity per share (BVPS), earnings per share (EPS) and sales per share.
12. "Dividend ratios" shall include at least the following ratios: dividend cover, dividend payout, retained earnings and dividend per share (DPS)
13. "Development ratios" shall include at least the following ratios: asset rate, sales rate and earnings per share rate.
14. "Leverage ratios" shall include at least the following ratios: total assets / equity ratio, long-term debt / equity ratio and loans / equity ratio.
15. "Market ratios" shall include at least the following ratios: market price / earnings (P/E), market price / book value (equity) (P/B) and market price / sales (P/S).
16. "Independent expert" shall be a person holding a license as provided for and under the terms and conditions of the Ordinance on Analyses of Legal Status and Privatisation Valuations and on the Terms and Conditions for Licensing Appraisers (State Gazette, issue 57 of 2002).

§ 2. Accounting terms used in the Ordinance for which no specific definitions have been provided, should be interpreted in the sense attached to them in the accounting standards applicable under the Accountancy Act.

CONCLUDING PROVISIONS

§3. Existing administrative proceedings under art. 124, 126d, and 152 of the LPOS shall continue as provided for in the Ordinance on the Requirements to the Content of the Rationale on the Share Price of a Listed Entity, including the application of valuation methods in case of transformation, joint venture arrangements and commercial offering (State Gazette, issue 13 of 2003).

§ 4. The Commission shall issue guidelines on the application of the Ordinance.

§ 5. The Ordinance is approved on the basis of § 16, para 1 of the transitional and concluding provisions in relation to art. 123, para 2, art. 126c, para 1 and art. 150, para 6 of LPOS and was passed by virtue of decision No 104-N of 11 July 2008 of the Financial Supervision Commission.

Appendix No 1

to art. 8, para 3, item 1

(corrected – State Gazette, issue 65 of 2008)

Discounted equity cash flows model (FCFE)

1. The value of equity through discounting forecast equity cash flows shall be calculated, as follows:

$$V_0 = \sum_{i=1}^{n} \frac{FCFE_i}{(1+r_i)^i} + \frac{P_n}{(1+r_n)^n},$$

where:

V_o is the value of equity

i – the index indicating the year of inflow in equity at

$i \in [1; t_p]$ - the period under art. 11, para 2, where t_p is a minimum of five years and

$i \in (t_p; n]$ - the period under art. 11, para 4

n – the index showing the last year of the period under art. 11, para 4

$FCFE_i$ – the forecast equity cash flow for the year i

r_i – the cost of equity financing for the year i

r_n – the cost of equity financing for the year n

P_n – the terminal value determined using the formula $P_n = \frac{FCFE_n(1+g_{n+1})}{r_{n+1} - g_{n+1}}$

$FCFE_n$ – the forecast equity cash flow for the year n

g_{n+1} – the constant growth rate until infinity of equity cash flows after the year n

r_{n+1} – the cost of equity financing until infinity after the year n

2. If the equity cash flows increase with a constant rate (g) and the rate is not higher than the cost of equity financing ($r > g$), the value per share shall be determined as follows:

$$V_0 = \frac{FCFE_0(1+g)}{r-g},$$

where:

V_o is the value of equity

$FCFE_0$ is the equity cash flow in a prior period

g – the growth rate of equity cash flows

r – the cost of equity financing

3. In case of two stages when equity cash flows grow at high rates during the first stage, followed by a second stage of lower but stable growth rate, the value of equity shall be determined as follows

$$V_0 = \left[\sum_{i=1}^{n} \frac{FCFE_i}{(1+r)^i}\right] + \left[\frac{P_n}{(1+r)^n}\right],$$

where:

V_o is the value of equity

$FCFE_i$ – the forecast equity cash flow for the year i

i – the index indicating the year of inflow in equity

n – the index showing the last year of the period under art. 11, para 4

r – the cost of equity financing (different in the different stages)

P_n – the terminal value determined using the formula $P_n = \frac{FCFE_n(1+g_{n+1})}{r_{n+1} - g_{n+1}}$

$FCFE_n$ – the forecast equity cash flow for the year n

g_{n+1} – the constant growth rate until infinity of equity cash flows after the year n

r_{n+1} – the cost of equity financing until infinity after the year n

4. In case of three stages when equity cash flows increase at higher rates during the first stage, followed by a stage of decreasing growth rate and third stage of stable growth rate, but at a rate lower than that during the first stage, the value of equity shall be determined as follows:

$$V_0 = \sum_{i=1}^{t} \frac{FCFE_i}{(1+r)^i} + \sum_{i=t+1}^{n} \frac{FCFE_i}{(1+r)^i} + \frac{P_n}{(1+r)^n},$$

where:

V_o is the value of equity

$FCFE_i$ – the forecast equity cash flow for the year i

i – the index indicating the year of inflow in equity, where $i \in [1; t]$ for the first stage, $i \in [t+1; n)$ for the second stage and $i \in [n; n+1)$ for the third stage

n – the index showing the last year of the period under art. 11, para 4

P_n – the terminal value determined using the formula $P_n = \frac{FCFE_n(1+g_{n+1})}{r_{n+1} - g_{n+1}}$

r – the cost of equity financing (different in the different stages)

P_n – the terminal value determined using the formula $P_n = \frac{FCFE_n(1+g_{n+1})}{r_{n+1} - g_{n+1}}$

$FCFE_n$ – the forecast equity cash flow for the year n

g_{n+1} – the constant growth rate until infinity of equity cash flows after the year n

r_{n+1} – the cost of equity financing until infinity after the year n

5. In case of multi stage development of the entity the theory of the time value of money should be applied at different rates and cost of equity financing.

Appendix No 2

to art. 8, para 3, item 2

(corrected, State Gazette, issue 65 of 2008)

Discounted future cash flows model (FCFF)

1. The value of total capital of the entity through discounting the forecast cash flows shall be calculated as follows:

$$V_0 = \sum_{i=1}^{n} \frac{FCFF_i}{(1+WACC_i)^i} + \frac{P_n}{(1+WACC_n)^n},$$

where:

V_o is the value of equity

i – the index indicating the year of inflow in equity at

$i \in [1; t_p]$ - the period under art. 11, para 2, where t_p is a minimum of five years and

$i \in (t_p; n]$ - the period under art. 11, para 4

n – the index showing the last year of the period under art. 11, para 4

$FCFE_i$ – the forecast equity cash flow for the year i

$WACC_i$ – the weighted average cost of capital in the year i

$WACC_n$ – the weighted average cost of capital in the year n

P_n – the terminal value determined using the formula $P_n = \frac{FCFF_n(1+g_{n+1})}{WACC_{n+1} - g_{n+1}}$

$FCFE_n$ – the forecast equity cash flow for the year n

g_{n+1} – the constant growth rate until infinity of equity cash flows after the year n

$WACC_{n+1}$ – the weighted average cost of capital until infinity after the year n

2. If the cash flows of the entity shall increase by a constant rate (g) and the rate shall not be higher than the weighted average cost of capital (WACC > g) the total capital of the company shall be determined as follows:

$$V_0 = \frac{FCFF_0(1+g)}{WACC - g},$$

where

V_o is the value of equity

$FCFF_0$ – the entity's cash flow in a prior period

g – the growth rate of the entity's cash flows

WACC – the weighted average cost of capital

3. In case of two stages when the cash flows of the entity increase at higher rates during the first stage, followed by a second stage of a lower but stable growth rate, the total capital value of the entity shall be determined as follows:

$$V_0 = \left[\sum_{i=1}^{n} \frac{FCFF_i}{(1+WACC)^i}\right] + \left[\frac{P_n}{(1+WACC)^n}\right],$$

where:

V_o is the value of total capital

$FCFF_i$ – the forecast cash flow for the year i

i – the index indicating the year of inflow of the entity

n – the index indicating the last year of the period under art. 11, para 4

WACC – the weighted average cost of capital (different during the different stages)

P_n – the terminal value determined using the formula $P_n = \frac{FCFF_n(1+g_{n+1})}{WACC_{n+1} - g_{n+1}}$

$FCFE_n$ – the forecast equity cash flow for the year n

g_{n+1} – the constant growth rate until infinity of equity cash flows after the year n

$WACC_{n+1}$ – the weighted average cost of capital until infinity after the year n

4. In case of three stages where the entity's cash flows have high rates during the first stage, followed by a stage of decreasing increase and a third stage of stable growth rate but at a level lower than during the first stage, the value of the total capital shall be determined as follows:

$$V_0 = \sum_{i=1}^{t} \frac{FCFF_i}{(1+WACC)^i} + \sum_{i=t+1}^{n} \frac{FCFF_i}{(1+WACC)^i} + \frac{P_n}{(1+WACC)^n},$$

where:

V_o is the value of total capital

$FCFF_i$ – the forecast cash flow for the year i

i – the index indicating the year of inflow of the entity, where $i \in [1;t]$ for the first stage, $i \in [t+1;n)$ for the second stage and $i \in [n;n+1)$ for the third stage

n – the index indicating the last year of the period under art. 11, para 4

WACC – the weighted average cost of capital (different during the different stages)

P_n – the terminal value determined using the formula $P_n = \frac{FCFF_n(1+g_{n+1})}{WACC_{n+1} - g_{n+1}}$

$FCFE_n$ – the forecast equity cash flow for the year n

g_{n+1} – the constant growth rate until infinity of equity cash flows after the year n

$WACC_{n+1}$ – the weighted average cost of capital until infinity after the year n

5. In case of multi stage development of the entity the theory of the time value of money shall be applied at varying rates and weighted average cost of capital.

Appendix No 3

to art. 8, para 3, item 3

(corrected State Gazette, issue 65 of 2008)

Discounted dividends model (DDM)

1. The value per share through discounted forecast dividends shall be determined as follows

$$V_0 = \sum_{i=1}^{n} \frac{DPS_i}{(1+r_i)^i} + \frac{P_n}{(1+r_n)^n},$$

where

V_o is the value per share

i – the index indicating the year of receipt of dividend per share at

$i \in [1; t_p]$ - the period under art. 11, para 2, where t_p is a minimum of five years and

$i \in (t_p; n]$ - the period under art. 11, para 4

n – the index showing the last year of the period under art. 11, para 4

DPS_i – the forecast dividend per share for the year i

r_i – the cost of equity financing for the year i

r_n – the cost of equity financing for the year n

P_n – the terminal value determined using the formula $P_n = \frac{DPS_n(1+g_{n+1})}{r_{n+1} - g_{n+1}}$

DPS_n – the forecast dividend per share in the year n

g_{n+1} – the constant growth rate until infinity of dividends per share after the year n

2. If the dividend per share shall increase at a constant rate (g) and the rate is not higher than the cost of equity financing (r > g) the value per share shall be determined as follows:

$$V_0 = \frac{DPS_0(1+g)}{r-g}$$

where

V_o is the value per share

DPS_0 – the dividend per share in a prior period

g – the dividend per share increase rate

r – the cost of equity financing

3. In case of two stages when dividends per share increase at higher rates during the first stage followed by a second stage of lower but stable growth rate, the value per share shall be determined as follows:

$$V_0 = \left[\sum_{t=1}^{n} \frac{DPS_0(1+g_s)^t}{(1+r)^t}\right] + \left[\frac{DPS_0(1+g_s)^n(1+g_l)}{(1+r)^n(r-g_l)}\right],$$

where:

V_o is the value per share

i – the index indicating the year of receipt of dividend per share

n – the index showing the last year of the period under art. 11, para 4

DPS_0 – the dividend per share in a prior period

g_s - the dividend per share growth in the first stage

g_i – the dividend per share growth in the second stage

r – the cost of equity financing (different in the different stages)

4. In case of three stages when the dividend per share increases quickly during the first stage, followed by a stage of decreasing growth rate, and a third stage of stable growth but at a level lower than the one during the first stage, the value per share shall be determined as follows:

$$V_0 = \sum_{t=1}^{t=n_1} \frac{DPS_0(1+g_s)^t}{(1+r)^t} + \sum_{t=n_{1+1}}^{t=n_2} \frac{DPS_t}{(1+r)^t} + \frac{DPS_{n_{2+1}}}{(r-g_n)(1+r)^n}$$

where

V_o is the value per share

i – the index indicating the year of receipt of dividends per share, where $t \in |1; n_1|$ for the first stage, $t \in [n_{1+1}; n_2)$ for the second stage and $t \in [n_2; n_{2+1})$ for the third stage

DPS_0 – dividend per share in a prior period

DPS_i – dividend per share during the second stage

$DPS_{n_{2+}}$ - dividend per share during the third stage

g_s - the dividend per share growth in the first stage

g_n – the dividend per share growth in the third stage

r – the cost of equity financing (different in the different stages)

5. In case of multi stages in the entity's development the theory of the time value of money shall be followed at different rate levels and cost of equity financing.