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# **CHAMBER OF INDEPENDENT APPRAISERS IN BULGARIA**

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## **BULGARIAN VALUATION STANDARDS**

**2018**

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# **Bulgarian Valuation Standards**

## **(BVS)**

These Bulgarian Valuation Standards (BVS) have been approved by the General Meeting of the Chamber of Independent Appraisers in Bulgaria (CIAB) on the grounds of its powers under Art. 27, Para. 1, item 5 of the Independent Valuers Act (IVA), at the Extraordinary General Meeting of Delegates (EGMD) held in Shumen on 17 and 18 March 2018, and will enter into force on 1 June 2018.

***Excerpts from the message of Mr. Krzysztof Grzesik, Chairman of the Board of Directors of TEGoVA, on the creation and adoption of Bulgarian Valuation Standards:***

*“It is both an honour and a pleasure to write this congratulatory message about the adoption and application of Bulgarian Valuation Standards. The valuation profession is on the rise throughout the European Union and is increasingly regulated by European authorities as it is a key element of financial market stability and consumer protection. The European Union continues to pass legislation contributing to the development of the valuation profession, relying on TEGoVA with its 70,000 members from 37 countries to transpose the applicable legislation into high level valuation standards and practices in each member state. In line with EVS, the Bulgarian Valuation Standards will contribute to placing Bulgaria in a key position in the European project (Europe + Russia + USA: Member of TEGoVA) and to achieving the ambitions of Bulgaria and the eurozone. The advent of automated valuation models (AVM), used independently by valuers, threatens not only the valuation profession, but also the stability of financial markets and consumer safety. TEGoVA responded with the adoption of its new European Valuation Standard No. 6 on AVM and European Valuation Guidance Note No. 11 on the use of statistical tools by valuers. It is laudable that the Bulgarian Valuation Standards support the position of TEGoVA. But while AVM pose a severe challenge to our responsibility to the citizens of the EU, they are only half of the problems facing the valuation profession. The other problem is the short, simplified valuation*

*report. The future of the profession depends on the valuers and their reports, which should apply analytical judgments based on professional experience and qualifications to adequately support the opinion on market value. I look forward to the publication of the Bulgarian Valuation Standards”.*

In this introduction, the members of the Management Board of CIAB highlight the most important reason for the creation and adoption of Bulgarian Valuation Standards (BVS) by the General Meeting of CIAB, which is: the opportunity and obligation to operate in accordance with the Independent Valuers Act, the existing legislative and regulatory framework in Bulgaria, the European requirements and trends for enhancing the profession of independent valuer and policies implemented by TEGoVA as the leading organisation of valuers, where CIAB is a member.

The need to harmonize the activities of independent valuers in Bulgaria is predetermined by key legislative acts of the European Union (EU), of which the most important for the valuer’s profession are:

- Directive 2006/123/EC of the European Parliament and of the Council of 12 December 2006 on services in the internal market;
- Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No. 648/2012;
- Mortgage Credit Directive: Directive 2014/17/EU of the European Parliament and of the Council of 4 February 2014, containing provisions relevant to valuation;
- Capital Requirements Regulation (CRR) and Capital Requirements Directive (CRD IV) of 2014;

The above key legislative act and other European directives and regulations are mandatory for implementation and enforcement in EU member states. Given the existence of a special law such as the Independent Valuers Act (IVA), adopted to govern the activities of independent valuers in Bulgaria, the Chamber of Independent Appraisers in Bulgaria (CIAB) acts as the implementer of that law.

The legislature, by adopting IVA (in December 2008), has responded to the socio-economic developments and the needs of the business and the market, defining in Article 6 IVA the following valuation competences:

1. Valuation competence for real properties;
2. Valuation competence for immovable cultural properties;
3. Valuation competence for plant and machinery;
4. Valuation competence for intellectual and industrial property rights and other factual relationships;
5. Valuation competence for commercial enterprises and receivables;
6. Valuation competence for financial assets and financial institutions;
7. Valuation competence for other assets, including works of art which are not movable cultural properties;
8. Valuation competence for agricultural land and permanent crops;
9. Valuation competence for land plots in forest areas;

Valuations of properties/assets performed by independent valuers in accordance with the existing legislation find application in the operations of:

- State and municipal administrations;
- The judiciary system;
- The National Revenue Agency;
- Stock and commodity exchanges;
- Banking and financial institutions;
- Insurance companies;
- Enforcement agents;
- Attorneys and Notaries;
- In the implementation of standards laid down in the Accounting Act;
- Individuals and entities and transactions between them;
- In the forecasting and realisation in investment processes;
- Other participants and economic sectors.

The Bulgarian Valuation Standards (BVS) are a tool to develop the ability to regulate the activities of independent valuers, reflecting the actual necessities and real needs inherent in the various valuation competences.

In view of the attempts to implement automated valuation of assets without the participation of independent valuers, and considering the policy and strategy pursued by TEGoVA with the aim to protect the economic interests of the general public, best served when valuation of assets is performed by qualified independent valuers, the creation and adoption of Bulgarian Valuation Standards reflects the objectives of the Independent



Valuers Act, including preserving the essential role of the independent valuers and their public responsibility.

The Bulgarian Valuation Standards constitute in part a reception of the International Valuation Standards and the European Valuation Standards relevant to the regulation of valuations, according to the Bulgarian legislation.

## **PART ONE**

Part One of the Bulgarian Valuation Standards specifies and presents the generally applicable laws, regulations, rules and guidelines, elaborated thematically in the different sections.

### ***1.1 SECTION ONE: General legal framework; Conditions for applying the Bulgarian Valuation Standards; Valuation assignments: general and specific requirements.***

#### **1.1.1 General legal framework.**

The Bulgarian Valuation Standards have been prepared in accordance with the legislation of the Republic of Bulgaria, the applicable Community law and valuation practice, and have been aligned with the relevant European Directives and Regulations.

The status, procedures and conditions for obtaining valuer's competence and exercising the valuation profession, and the rights and obligations of the independent valuers are set out in the Independent Valuers Act (promulgated in State Gazette (SG) No. 98 of 14.11.2008, in force from 15.12.2008, amended by SG No. 49 of 29.06.2010, supplemented by SG No. 62 of 10.08.2010, amended and supplemented by SG No. 19 of 08.03.2011, in force from 09.04. 2011).

In carrying out their activities the independent valuers are bound by the norms of the Code of Professional Ethics of Independent Valuers and these standards.

An independent valuer is a person who, based on their entry in the register of independent valuers, is entitled to prepare and sign a report on the value of assets subject to valuation, by applying the approved standards. Independent valuers may be natural or legal persons. An independent valuer company is a legal entity holding a separate certificate.

The types of competences are defined in IVA.

The Bulgarian Valuation Standards are mandatory for all independent valuers entered in the register of independent valuers kept by CIAB, pursuant to IVA. When performing valuations the independent valuers must apply these standards.

### **1.1.2 Conditions for applying the Bulgarian Valuation Standards**

Deviation from these standards is not allowed, neither at the initiative of the valuer, nor at the request of the client or user of the valuation. A valuation may be challenged before CIAB in accordance with IVA, and the independent valuer is liable to disciplinary action, as prescribed by IVA.

According to IVA, the valuation of an asset constitutes the opinion of the independent valuer on that asset's value for a specific purpose at a specific point in time and in the environment of a specific market, prepared in writing in the form of a signed and stamped report. The opinion of the independent valuer is not binding on the client and/or user.

The update of a valuation is a follow-up valuation of the same asset. An update of a valuation may be assigned under the following conditions, which must be cumulatively met:

- the initial valuation was carried out by the same valuer;
- the previous valuation was made not more than one year before, according to the specifics of the subject asset;
- no change in the legal status of the subject asset has occurred;
- no change in the physical condition of the subject asset has occurred;

Confirmation of a valuation and/or extension of its validity are not allowed.

Reviews, forensic experts' opinions, statements, inspections and other activities are not valuations within the meaning of IVA.

### **1.1.3 Assigning a valuation: general and specific requirements**

A valuation is carried out after an assignment is made in writing, as prescribed in IVA.

Each independent valuer has equal opportunities for operation, training and further qualification, and to accept assignments and practice the profession irrespective of sex and gender, race, nationality, ethnicity, citizenship, origin, religion, education (subject to IVA), beliefs, political affiliation, personal or social status, age, sexual orientation, marital status and property status, and of any other characteristics established by law or international treaty to which the Republic of Bulgaria is a party.

**Information contained in the written assignment:**

General and specific information on the client, the valuer and the user of the valuation, if any.

Precise definition of the *purpose of the valuation*. The valuation may be used only for the purpose specified.

*The subject asset*: description of the subject asset; identifying data and characteristics in accordance with the specifics of the subject asset.

*Documents required* regarding: ownership; identification and characterisation of the asset; accounting records; specific documents under the specific provisions in the legislation; other documents relevant to the subject asset.

If necessary, documents and other data may be required during the valuation.

General and special assumptions.

Remuneration and payment terms.

Deadline for completion.

**Restrictions on the assignment of valuation:**

The valuation must not be assigned in violation and contradiction of IVA and BVS.

In assigning a valuation under IVA, the Clients/Users may not determine the approaches, methods, appendices, content and form of the valuation report.

Privacy Policy.

Each valuation is assigned and carried out for a specific purpose, and therefore the valuations may not be used for any purpose other than the one initially set.

The opinion of value expressed in the valuation report is not binding on the Client/User, which is why the valuer is not liable to third parties.

## ***1.2 SECTION TWO: Ethical norms in the application of the Bulgarian Valuation Standards***

### **1.2.1 Legal framework**

Under IVA, compliance with the Code of Professional Ethics is the obligation of every independent valuer. According to IVA, control of the fulfilment of this obligation is exercised by the Chamber of Independent Valuers in Bulgaria (CIAB).

Failure to comply with the Code of Professional Ethics is grounds for disciplinary action against the relevant valuer.

#### **1.2.1.1 Ethical norms related to prevention of conflicts of interest and other norms enshrined in the existing legislation**

In carrying out their activities, independent valuers are obliged to comply with and apply the provisions of IVA and the existing legislation on conflict of interest.

The independent valuers must not participate in activities or relationships that might impair their impartial valuation. Such participation includes activities or relationships that may constitute conflict of interest within the meaning of IVA, and therefore independent valuers must not:

- subject themselves to unauthorised dependence of their clients;
- participate in the governing bodies of their clients;
- represent any of the parties to a deal involving the subject asset;
- carry out valuations in conflict of interests situation, including in situations provided for in IVA or in any other circumstances that may raise doubts as to their impartiality, objectivity and independence.

#### **1.2.1.2 Ethical norms related to the professional conduct of independent valuers**

The professional and business relationships and the conduct of independent valuers are subject to the ethical norms set out in the Code of Professional Ethics, these standards and the universal ethical norms of conduct, as well as to the requirements for good professional practice.

The profession of independent valuer embodies unconditionally the principles of professional integrity, honesty, competence, consideration and respect for other independent valuers, the regulator of the profession of independent valuer, and for the general public.

### **1.2.2 Basic rights and obligations of the independent valuer**

The independent valuers have the right to exercise their profession freely and without any external influence on and interference with their professional judgment, decisions and actions.

The independent valuers shall fulfil their professional obligations responsibly, honestly and accurately, based on:

- compliance with the legal provisions and requirements in the performance of valuations;
- protection of the interests of the society, the state and the valuers' clients, and non-infringement of their rights and interests;
- high professionalism and civil consciousness, by performing their tasks and commitments independently and objectively;
- trust, respect and protection of the prestige of the profession and of the honour and dignity of the independent valuer.

#### Professional qualification

The independent valuers must maintain their knowledge and qualification at a level corresponding to the statutory and regulatory developments, the technological progress and the best professional practices.

#### The independent valuers must not:

- accept any assignment that does not correspond to their qualifications and valuer competences attested by a respective certificate;
- sign valuation reports which were not prepared by them or in whose preparation they did not take part;
- perform valuations without prior inspection of the subject asset and without knowledge of the ownership documents or other relevant documents establishing interests in the subject asset;

- disclose to third parties in any way and for any cause information and facts about the subject asset and the opinion on its value.
- participate in activities or commit to actions that are discreditable to the profession of independent valuer or the Chamber of Independent Appraisers in Bulgaria.

### **1.3 SECTION THREE: Conditions for making assumptions in valuations.**

#### **1.3.1 General assumptions based on:**

- Documents, data and other information obtained;
- The sources from which the valuer drew information;
- Statutory circumstances;
- Other, non-exhaustively listed.

#### **1.3.2 Special assumptions based on:**

- Determined by the purpose of the valuation;
- Facts or circumstances which are different from those verifiable at the valuation date;
- Socio-economic factors;
- Alternative use of the subject asset;
- Forced or voluntary sale or liquidation;
- Other, non-exhaustively listed.

### **1.4 SECTION FOUR: Minimum requirements for the contents of the valuation report**

1. General and specific information on the client and the valuer, as well as on the user of the valuation, where appropriate.
2. Purpose of the valuation.
3. The subject of the valuation (description of the subject asset; general and specific information identifying the subject asset).
4. Disclosure of general and/or special assumptions and restrictions.
5. Valuation date.

6. Bases of value.
7. Approaches and methods of their application.
8. Information on the application of the Liquidation Method (if included as a requirement and/or indicated in the purpose of the valuation).
9. Opinion on the value of the subject asset.
10. Appendices: specific to the nature of the subject asset.
11. Appendix: pictures.
12. Appendix: specific documents obtained in the course of valuation (if any).
13. Other materials, data and documents or description of circumstances relevant to the valuation approach selected by the independent valuer.
14. If in the course of the valuation the independent valuer has requested an opinion from an expert in a particular field, this fact must be disclosed in the valuation report.
15. It is essential that the valuation report contain the information necessary to understand the opinion of value.
16. Statement from the independent valuer as prescribed by Art. 21 IVA.

## ***1.5 Section Five: Definitions of the types of values.***

### **1.5.1 Definition of value:**

For the purposes of valuation of assets, “value” is the opinion of an independent valuer on the benefit and value of the subject asset, expressed in money, for a specific purpose, at a specific point in time and in the environment of a specific market, taking into account the relevant circumstances in the course of the valuation.

For the purposes of the valuation, the opinion on value does not include taxes and fees stipulated in the existing legislation.

### **1.5.2 Types of values, definitions**

#### **1.5.2.1 Market value**

The market value reflects facts and circumstances related to the potential market realisation of the subject asset. The market value does not reflect characteristics and/or advantages of an asset that have value for a

particular owner or a particular buyer, but rather the characteristics and/or advantages relating to the physical, technical, technological, geographical, economic, legal and other essential circumstances of the subject asset. In determining the market value, regard should be given only to the conditions of a free market.

#### **1.5.2.2 Alternative use value**

Alternative Use Value is the market value of the subject asset under the assumption that another use is possible, other than the current one.

#### **1.5.2.3 Fair value**

Fair value reflects facts and circumstances related to a specific actual or potential exchange of the subject asset between identified parties.

#### **1.5.2.4 Synergistic value**

Synergistic value is a special value that includes additional elements of value created by combining two or more assets. The synergistic value shows the value of the combination of interests, which is greater than the total of those interests valued separately.

#### **1.5.2.5 Investment value**

Investment value is the special value that a specific asset has to the specific investment or operational objectives of a specific investor/group of investors pursuing particular criteria.

#### **1.5.2.6 Liquidation value**

Liquidation value is the value arrived at under special conditions, and is based on the opinion of value already formed in the course of valuation. In determining the liquidation value, the predominant factor is time: a shorter than the usual deadline for realisation of the subject asset or group of assets.

### **1.6 SECTION SIX: Discount Rates and Capitalisation Rates.**

In order to determine the discount rates and capitalisation rates, the independent valuer should consider:

- Risks identified in connection with the generation of cash flows;
- The nature of the cash flows applied, relevant to the subject assets;
- Period of use of the subject asset, consistent with the inputs;
- Other parameters reflecting the specific nature of the subject asset.



#### **1.6.1 Determining discount rates based on nominal values.**

The discount rates determined on the basis of nominal values should take into account the cash flows from nominal/present values, i.e. values determined as at the base year, with each subsequent year reflecting the inflation, statutory regulation of prices and other relevant changes in the economy for which there is evidence. Nominal values are real values at a present moment. The application of nominal values is appropriate if a relative price change is expected in the future.

#### **1.6.2 Determining discount rates based on real values.**

The discount rates determined on the basis of real values should take into account the cash flows from constant values, i.e. values determined as at the base year which remain constant in each subsequent year. The application of real values is appropriate if a relative price change is not expected in the future.

#### **1.6.3 Methods used to determine the discount rates.**

Discount rates are determined by one of the following methods:

#### **1.6.3.1 Method of the accumulation of risk.**

This method reflects the cumulative effect of factors, including the risk-free rate of return, a premium for specific risk, a premium for a common risk and other specific factors relating to the subject asset.

#### **1.6.3.2 Method of the weighted average cost of capital.**

This method is based on determining the discount rate of the entire invested capital (equity and debt). Condition for the application of this method is the existence of a mixed capital structure.

#### **1.6.3.3 Method for valuation of capital assets.**

This method involves the application of a rate of return that reflects the cost of equity, with indication of value arrived at by adding a risk premium in respect of the specific subject asset to the risk-free rate of return.

#### **1.6.3.4 Other methods.**

The valuation of assets may require other methods for determining discount rates, such as yield and internal rate of return, weighted average rate of return, etc.

#### **1.6.4 Capitalisation rate**

The capitalisation rate is determined by taking into account the risks specific to the subject asset. The relevant specific risks pertain in general to: location; physical, technical and technological parameters; legal aspects, time periods and conditions determined and/or revised in relation to income/profits, liabilities and debts, etc.

### ***1.7 SECTION SEVEN: Approaches and methods used in the valuation process, their definition and the opinion of value.***

The basic and widely recognised approaches to valuation are:

- Income approach;
- Cost approach;
- Comparative approach.

#### **1.7.1 Income approach.**

The income approach provides an indication of value by converting future cash flow to a single current value. Under the income approach, the value of an asset is determined by reference to the value of income, cash flow or cost

savings generated by the asset. Depending on the specific characteristics of the subject asset, cash flows are applied on the basis of real or nominal prices.

#### **1.7.1.1 Methods for applying the income approach.**

1. Discounted cash flow method. This method indicates a value based on revenues and expenses, by applying an appropriate discount rate to a series of forecasted cash flows, in order to discount them back to the valuation date and thus determine a present value of the asset.
2. Capitalisation Method. This includes conversion of operating income and expenses to a capital amount by applying an appropriate capitalisation rate. This is usually done through the capitalisation of income by applying a capitalisation rate to a representative single period, which capitalisation rate should reflect all known risks.

#### **1.7.2 Cost approach.**

The cost approach provides an indication of value and is based on a detailed assessment of the costs necessary for the creation or acquisition of a similar or identical asset, which has the same purpose and utility as the asset being valued. The general perception is that a potential buyer would not pay more for an asset than the cost of the creation or acquisition of a new, equivalent asset that is similar or identical to the subject asset.

The cost approach concept, consisting in the cost of creation/acquisition of an equivalent similar/identical asset is based on the assumption that the subject of the valuation does not cost more than replacement cost for a suitable similar/identical asset having the same or comparable functions and technical and economic parameters.

#### **1.7.2.1 Methods for applying the cost approach**

1. Method of the depreciated replacement cost. This method is based on the determination of all direct and indirect costs of replacing the subject asset with an identical one, taking into account the different types of wear. The replacement cost should reflect all the associated direct and indirect costs of acquiring the asset that would have been incurred by a market participant in the creation of a modern equivalent asset. The assessed value of the equivalent asset is subject to adjustment for age and wear, in order to arrive at a value reflecting the asset's physical condition, functionality and economic utility.

2. Method of the depreciated reproduction cost. This method is based on the determination of all direct and indirect costs of reproducing the subject asset to an identical one, taking into account the different types of wear and the costs that would be incurred by a market participant in the creation of an equivalent asset. The assessed value of the equivalent asset is subject to adjustment for age and wear, in order to arrive at a value reflecting the asset's physical condition, functionality and economic utility.

### **1.7.3 Comparative approach.**

The comparative approach provides an indication of value by comparing the subject asset to similar assets, for which there is reliable price evidence.

#### **1.7.3.1 Method for applying the comparative approach.**

Market comparisons method. This method is based on pricing information obtained from reliable sources. In applying the method the valuer must make a comparative analysis of the qualitative and quantitative similarities and differences between the subject asset and the comparable assets. If necessary, the valuer may make adjustments, duly justified and disclosed in the valuation report.

### **1.7.4 Other methods applicable in relation to the purposes of and approaches to valuation**

There are other applicable methods for valuation of various specific groups of assets, which are dealt with in Part Two of these standards; these methods can be applied in combination. In specific situations the valuer may apply the method for assessing the liquidation value in a voluntary or forced realisation of the asset, including on a piecemeal basis. For the purposes of BVS, liquidation means realisation/cashing of an asset under special conditions, including on a piecemeal basis.

#### **1.7.4.1 Methods for assessing the liquidation value.**

1. In a voluntary realisation. The assessment of the liquidation value in a voluntary realisation is based on the concept that the asset needs to be realised within short deadlines, different from those typical for the ordinary realisation of such assets with appropriate market research, choice of specific time, location and other parameters. The liquidation value will also include all relevant direct and indirect costs. The voluntary realisation can be considered for the entire asset being valued or for parts

of it, depending on the specific conditions and decisions adopted for the realisation, as indicated in the purpose of the valuation.

2. In a forced realisation. The liquidation value in a forced realisation of the subject asset is the value that can be obtained for asset when for some reason the seller is under pressure or compulsion to sell the asset in the shortest deadlines. Forced realisation reflects the probable lowest value that can be obtained for a specific asset.

#### **1.7.5 Opinion of value**

The opinion of value is formed after applying reasonable approaches and methods in the valuation, according to BVS, and is the result of the overall valuation process.

The opinion on the value of the subject asset may be arrived at using one or several methods.

Before forming an opinion of value, the valuer should be confident enough in the results obtained from the approaches and methods applied, which must be reliable and justified.

The reported value should be clearly and unambiguously stated together with the confirmation that there had been sufficiently thorough research.

### ***1.8 SECTION EIGHT: Generally applicable legislation and special conditions and rights***

#### **1.8.1 Generally applicable legislation**

Part Two of BVA lists in its separate sections the specific legislation relevant to the different valuation competences and subject assets.

This section lists the general laws applicable to most of the valuation competences:

- Constitution of the Republic of Bulgaria
- Obligations and Contracts Act
- Independent Valuers Act
- Ownership Act
- State Property Act
- Municipal Property Act
- Inheritance Act
- Cadastre and Property Register Act
- Spatial Planning Act
- Accountancy Act

- Environmental Protection Act
- Protection from Environmental Noise Act
- Waste Management Act
- Clean Air Act
- Measurements Act
- Energy Act
- Protection of Agricultural Lands Act
- Energy Efficiency Act
- Commercial Register Act
- Investment Promotion Act
- Privatisation and Post-Privatisation Control Act
- Concessions Act
- Registered Pledges Act
- Value Added Tax Act
- Financial Collateral Arrangements Act
- Non-Profit Legal Entities Act

Amendments and supplements to the laws and regulations referred to in Part One and Part Two of BVS become applicable from the date of their respective entry into force. Repealed laws and regulations do not apply. Valuations are subject to the legislation in force at the date of the opinion of value expressed by the independent valuer.

### **1.8.2 Special conditions and rights**

The Bulgarian Valuation Standards have been compiled and prepared in Bulgarian, which will be the official language of their interpretation and application.

The rights to the overall distribution of the Bulgarian Valuation Standards in any manner belong to the Chamber of Independent Appraisers in Bulgaria (CIAB), and may be provided to third parties only with by decision of the Management Board of CIAB.

## **PART TWO**

Part Two lists and presents the specific situations and requirements referred to in Part One, classified, elaborated and detailed by competences.

## **SECTION ONE: Specifics in the valuation of real properties.**

This section deals with certain specifics of the valuation of interests in real property which are the subject of the valuation.

### **1. BASIC CONCEPTS.**

- Real Properties: In BVS the term “real properties” means the real properties located in urban areas as well as buildings and facilities in other areas.
- Land Plot: part of the territory, including one that is permanently covered with water, with boundaries defined according to the right of ownership.
- Zoned Land Plot: plot of land for which a detailed spatial plan has defined boundaries, access by road, street or alley, specific use and spatial regulation.

Valuations of real properties are carried out in accordance with Part One of BVS.

### **2. SPECIAL LEGAL FRAMEWORK: laws, regulations and other acts related to the valuation of real properties.**

The interests in real properties are defined in the Bulgarian legislation. Valuers performing valuations of real property are required to have sound knowledge of the Bulgarian legislation governing the valued interest.

#### **2.1. Laws, ordinances, etc.**

The special legal framework relevant to the valuation of interests in real properties in Bulgaria includes:

- Constitution of the Republic of Bulgaria, SG No. 56/13.07.1991, amend. and suppl.;
- Ownership Act, SG No. 92/1951, amend. and suppl.;
- State Property Act, SG No. 44/1996, amend. and suppl.;
- Municipal Property Act, SG No. 44/1996, amend. and suppl.;
- Spatial Planning Act, SG No. 1/2001, amend. and suppl.;
- Obligations and Contracts Act, SG No. 275/1950, amend. and suppl.;
- Energy Act, SG No. 107/2003, amend. and suppl.; Protection of Agricultural Lands Act, SG No. 35/96, amend. and suppl., and other laws;
- Regulations: rules, ordinances, regulations on implementation and instructions;

- general spatial plans and other regulations issued by municipal councils;
- other acts applicable to the valuation of real properties.

## **2.2. Conditions for the application of the special legislation.**

In order to comply with the requirement to indicate the scope of the research and the origins and sources of the information used, the valuation process should include an examination of the evidence for ownership of and other interests in the subject real property, the existing legal permissions for or restrictions on the use of the property and all buildings on it, as well as any expected or potential changes in them.

To comply with the requirement to identify the subject property, the independent valuer must include the following in the valuation report:

- description of the valued interest in the real property;
- identification of all primary or secondary rights that affect the value;
- special assumptions that the property is valued without taking into account other existing rights.

To comply with the requirement to indicate the scope of the research and the nature and source of the information used, the valuer should consider the following questions:

- data needed to identify the property and any related rights;
- the responsibility for the information on the size of the property, and, where appropriate, gross floor area of the building;
- legal permissions or restrictions on the use of the property and the buildings on it, and any expected or potential changes in these permissions and restrictions.

## **3. TYPES OF INTERESTS IN REAL PROPERTY: REAL RIGHTS AND CONTRACTUAL RIGHTS**

Real rights (rights in rem) can be divided into two large groups, according to the volume of powers possessed by their holder:

- full real rights: right of ownership;
- limited real rights: real rights over another person's property;

### **3.1. Right of ownership.**

It is an absolutely unlimited real right. The right of ownership is governed mainly by the Ownership Act, but there are applicable provisions contained in other laws. The right of ownership is the most important, comprehensive and absolute right. The right of ownership is a real right that gives its holder full and exclusive rights to a property within the limits set by law. Ownership



consists in the full factual and legal power over a thing, opposable against all third parties, and includes the powers of disposition, possession and use, as far as these powers are not limited by law.

The power to dispose consists in the owner's statutory ability to carry out transactions with their own property, including to sell, exchange, donate, bequeath, rent out or mortgage it, and to give up their right to the relevant property, etc., as well as in the ability to carry out a factual disposition of property. The owner of a property may destroy it. There are certain restrictions on this power in the case of land and buildings, but this does not change the nature of the right of ownership.

The power to possess constitutes the exercise of factual power over a property which the possessor holds personally or through another as his/her own. This power is manifested in factual actions related to the possession of a particular thing. The purpose of the exercise of the factual power is to receive benefits from the property.

The power to use means the statutory possibility for the holder of the ownership right to use a thing, collect income from it, derive its beneficial properties and otherwise use it. It creates the possibility for its holder to ask any person to refrain from actions infringing on the owner's property.

### **3.2. Right of construction (right of superficies).**

The right of construction is a limited real right, under which a person may construct a building on another person's land and become the exclusive owner of that building. This right is also known as "right of superficies". As a rule, the owner of the land is the owner of everything built on it, unless otherwise agreed. This "otherwise" refers to the right of construction. It invalidates the rule on acquisition by accretion.

### **3.3. Right of additional structures.**

This limited real right allows its holder to build superstructures or extensions to an existing building and to become their owner. It is a comprehensive right and is governed by the Ownership Act and the Spatial Planning Act.

### **3.4. Right of use.**

This is a limited real right derived from the right of ownership. It consists in the right to use certain property and receive income from it. The right of use is regulated primarily by the Ownership Act. When a right of use is granted, the owner of the real property can dispose of it (sell, donate, exchange, etc.), without prejudice to the established right of use.

### **3.5. Easements.**

Easements are real rights consisting in the limited power over another's property (the servient estate), held by the owner of another property (the dominant estate), and constitute a benefit from the use of the dominant estate, respectively a restriction on the use of the servient estate. The most common examples are the right of passage and the right of laying utility lines. The easement follows the estates upon any change of ownership, and remains valid as an encumbrance, without requiring explicit agreement. Easement is a bond between two properties independently of their owners.

The different types of real rights are not mutually exclusive and have their own individual characteristics. Although the absolute right of ownership lasts for an unlimited period, it may be limited by secondary rights under the existing legislation.

The sum of the values of the limited real rights on a property cannot exceed the value of the ownership of the same property.

There are also contractual rights on real property: the granting of a property for temporary use for a fee, i.e. rent.

#### **4. SPECIFIC REQUIREMENTS FOR THE CONTENT OF THE VALUATION REPORT**

Besides the general minimum requirements for the valuation report referred to in Part One of BVS, the valuation report for real properties must also contain:

- legal status of the property;
- description of the location of the property;
- access to the property by private and public transportation, parking spaces and garages, information on planned changes in road routes;
- description of the area;
- information on any changes, projects or construction activities planned for the property, its immediate vicinity or the larger area around the location of the property, as well as analysis of their possible impact on the value of the property;
- description of the land plot: legal status, existing infrastructure, environmental conditions, etc.;
- description of the building: legal status, whether the building corresponds to the submitted documents, year of construction, reconstruction and overhaul, architecture, individual units in the building, functionality, structure, physical condition, construction defects due to poor completion; current damage from normal use and/or force majeure and other factors

relevant to the construction and use of the property; its ability to generate income;

- description of the individual unit: legal status, whether the unit corresponds to the submitted documents, year of construction, reconstruction and overhaul, layout, functionality, physical condition, including construction defects due to poor completion; current damage from normal use and/or force majeure and other factors relevant to the construction and use of the unit; its ability to generate income;

- information on sales or rents of identical or similar properties;
- description of the real estate market at the valuation date;
- others.

Appendices to the report:

- documents for: ownership, limited real rights, leases and rents, construction documents under the Spatial Planning Act, if appropriate;
- drawing and/or plan of the property;
- explanatory notes and drawings in different sections of the investment project, if any;
- photo documentation;
- tables with calculations;
- others.

## **5. CONDITIONS AND ASSUMPTIONS in the valuation**

### **5.1. Basis of the value of the real property:**

*Market value:* The estimated amount for which the property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without being under compulsion.

*Market rent:* The estimated amount of rent at which the property should be leased on the date of valuation between a willing lessor and a willing lessee on the terms of the actual or assumed tenancy agreement in an arm's length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without being under compulsion.

In the valuation process, the valuer should define the basis of value used and the conditions under which the subject asset was analysed, as well as any assumptions made in the course of preparation of the valuation report, in order to achieve maximum identification of the subject asset. In the process of preparation of the valuation report, the valuer may make several assumptions

which belong to a different group. Assumptions contribute to the proper understanding by the user of the valuation report of all the conditions under which the subject asset was analysed and valued.

This section of BVS defines the following groups of assumptions:

### **5.2. General assumptions.**

Assumptions which in the process of preparing the valuation report are of major significance for the basis of value used in the report. In this connection it is possible to define key assumptions concerning specific legal status and technical and marketable condition of the subject asset at the valuation date, which assumptions are directly related to the opinion on the market value. These are assumptions related to facts existing at the valuation date (e.g. technical state of the asset, specific economic and market data, specifically identified participants in a hypothetical transaction, etc.).

### **5.3. Special assumptions.**

When the assumptions concern facts and circumstances that do not exist at the valuation date or are included in the purpose of the valuation, these are referred to as special assumptions.

Such assumptions are usually made in cases where the valuation report aims to identify possible and expected changes in the value of the asset. These assumptions are called special to indicate that the value depends on specific conditions that do not exist at the date of valuation, and that as at the valuation date many market participants would not accept the conditions laid down as special assumptions. Special assumptions may include various legally sound and economically feasible assumptions: expected change in urban planning parameters; existence of a lease contract with specific conditions; physically possible, legally permissible, technically and financially feasible future extensions or superstructures to a building; that a real property under construction is completed at the valuation date, etc.

### **5.4. Assumptions regarding macroeconomic and political conditions.**

Assumptions relating to various macroeconomic and political factors that have a significant bearing on the subject asset. In terms of the groups of assumptions mentioned above, facts relating to macroeconomic and political conditions can be classified under both the general and the special assumptions in the valuation report. For example, the levels of inflation existing at the valuation date can be regarded as general assumptions, while the expected growth of the economy in a particular future period should be listed as special assumption.

## **6. APPROACHES AND METHODS used in the valuation process**

These standards examine the three basic approaches and the methods for their application.

The valuer must define and justify the approaches and methods used to determine the value of the subject asset. The selected valuation approaches and methods should be consistent with the basis of the value, the type of asset and all general and special assumptions, which have been thoroughly examined and duly described beforehand. For example, the value is arrived at in terms of the highest and best use. The highest and best use of an asset is such use that is physically possible, legally permissible, financially feasible and maximally productive, and that results in the highest value.

### **6.1. Comparative approach**

The comparative approach provides an indication of value by comparing the asset with identical or comparable (similar) assets for which price information is available.

Identical or comparable/similar are such real properties, which match most closely the subject property in terms of the factors affecting the value: the rights and interests in the subject property, location, spatial indicators of zoned land plots, technical characteristics and age of buildings, market conditions at the time of the transactions and at the valuation date, etc. Even if the land and buildings have physical characteristics identical to those of other marketed land or buildings, their exact location will be different. Despite these differences, the comparative approach is often used in the valuation of assets and interests in assets.

When no reliable evidence is available for a sufficient number of transactions executed within the geographical area of the subject property, the valuer may use transaction prices for comparable properties in areas close to that of the subject property.

In the absence of sufficiently reliable publicly available information on transaction prices for similar properties in the area of the subject property, a comparison can be made on the basis of existing information on prices of market supply ("sell" prices) and market demand ("buy" prices), where the valuer must perform further analysis and make adjustments to update the offer prices examined.

The valuer must select comparable evidence (units of comparison). The most common unit of comparison in the valuation of real properties is the

price per a unit of area. Some specific assets allow for determining and observing other indicators, such as price per room or bed, price per unit of production, price of future permissible gross floor area, etc. As far as possible, each unit for comparison used should be the one that is commonly used by participants in the relevant market.

The choice of units of comparison and the premiums and discounts applied to the units of comparison of the selected similar transactions must be justified, so as to determine a value of the subject asset that is comparable to the selected transactions.

The comparative approach is appropriate when:

- there is reliable evidence for actual transactions with properties that are identical or similar to the subject property;
- there is reliable evidence for identical or similar properties that are actively traded in the current (as at the valuation date) economic environment, including offers under the conditions described above, as well as evidence for preliminary contracts of sale;
- the subject and purpose of the valuation are common and sales of properties similar to the subject property are frequent in a particular market situation.

#### **Applicable METHODS under the comparative approach:**

- 6.1.1. Direct Comparison Method: applied where market evidence for identical properties is available.
- 6.1.2. Indirect Comparison Method: applied where market evidence for similar properties is available. In this case, the valuer should take into account deviations of the characteristics of the subject property from those of the similar properties. If such deviations affect the value, the valuer must apply premiums or discounts through appropriate adjustments.
- 6.1.3. Method of anticipated revenue: applied where the above two methods are not appropriate, with the basis for comparison being the anticipated income, which the subject property would generate.

#### **6.2. Income approach.**

The income approach provides an indication of value by converting future cash flows into a single current capital value.

The value is based on actual or estimated income, which is or could be realised by the owner of the property according to the rights held. In the case of investment properties such income can be in the form of market rent, whereas the income considered in the case of owner-occupied buildings may be in the form of assumed rent determined on the basis of costs which the owner would make for renting an equivalent property.

The methods applied under the income approach can be considered as the basic and most common methods for assessing the market value of the following types of properties:

- residential properties for rent;
- administrative buildings;
- commercial properties;
- mixed-use properties;
- tourist sites;
- industrial properties.

#### **Applicable METHODS under the income approach:**

##### **6.2.1. Method of the capitalisation of future income from rent (rental revenues).**

The concept of valuation by capitalisation of future rental revenues is based on the assumption that the property will bring revenue in the future, without dependence on the amount of investments made for its construction.

The value is measured in terms of the future rental revenues, which the property could generate.

The value of the subject property is based on the income generated only by renting it out, with the rents being net cash flow in a risk-free or limited risk environment.

The essence of the method is the hypothesis that the subject property constitutes invested capital whose potential yield is functionally dependent on the time and the investment risk forms its present value. The value of the subject property is determined based on the estimated potentially possible net annual income. In order to establish a reasonable full rental value of the subject property, the valuer should take into account the costs of comprehensive repairs and removal of shortcomings.

The capitalisation rate can be derived by monitoring the return on real estate investments, established under market conditions, which is common to the land and the improvements on it.

In the case of vacant properties or buildings with a remaining useful life over 50 years, the net annual rental income is the residual amount after deducting the sum of the costs of operation, the risk of loss of rent and the costs of management from the annual amount of the gross rent, determined by comparison as a percentage of revenue accruing from the gross annual rental income generated by the property, whereby the value of the real property is derived through direct capitalisation.

Where the remaining useful life of buildings is less than 50 years, the method requires the calculation of the value using an annuity factor. The value comprises the following components:

- value of the land;
- value of the buildings and infrastructure on the unrented land.

The values are calculated separately. The sum of the values of land, buildings and infrastructure on the unrented land constitute the revenue value of the real property. In this case the value of the buildings is calculated as the capitalised value of the net annual income from buildings, calculated as the residual amount remaining after the sum of the cost of operation, the risk of loss of rent and the cost of management has been deducted from the annual amount of the gross rent, and the land's share in the annual income from the property.

To assess properties along with the existing interests in them, the valuer may use different models of discounted cash flows. These models differ in their details but share the fundamental characteristic that the cash flow in a certain future period is converted into a present value using a discount rate. The sum of the present values for individual periods (one year or more) is the opinion of value. The discount rate used in the discounted cash flows model reflects the time cost of money and the risks and rewards of the income stream in question.

#### 6.2.2. Profits method

In some real properties the ability to generate revenue is closely associated with a particular use or commercial activities, such as: hotels, restaurants, petrol stations, etc. In the case of such assets the benefit to the investor may depend on the nature of business rather than on comparable market evidence based on their location. In the absence of comparable rental transactions with such properties, the profits method can be applied.

This method requires a preliminary assessment of gross income, which can be obtained from the business carried out in the property. The net annual



income is the residual amount after deducting the value of the costs associated with the property's operation from the annual value of gross revenues, excluding any rents or interest payments on loans for the creation of the property.

The resulting amount includes the amount that is available to the user (the occupant's share) and the balance to be paid to the holder (owner) in the form of net annual income that can be capitalised, whereby the market value of the property is derived.

The occupant's share reflects two factors:

- the occupant freezes in their business a certain capital (working capital) and normally charges interest on it, with interest rate greater than that of the "risk-free alternative investment" (savings accounts).
- the occupant needs compensation for the risks taken for the organisation and management of the business.

The discount rate can be derived by monitoring the returns, which by default is included in the price paid for use of the property along with the interests in it traded in the market, or on the basis of the yield or return sought by hypothetical market participants. An appropriate discount rate can also be derived from "risk-free" return by applying adjustments to account for additional risks specific to the relevant interest in the subject property.

### **6.3. Cost approach.**

The cost approach provides an indication of value using the economic principle that a buyer would not pay for an asset more than the cost of acquisition of an asset of equivalent utility, whether through purchase or construction.

This approach enables the valuer to determine the value by considering the cost of creating the subject asset, taking into account the wear (depreciation) of the property and other applicable discounts.

The cost approach can be used as a primary approach when evidence is not available for prices of transactions with similar assets, or an actual or assumed source of possible revenue cannot be identified.

The cost approach is also suitable for valuation of public buildings, which are sold very rarely, such as hospitals, schools, libraries, police stations, etc.

In some cases, even where evidence for prices in market transactions is available, or a source of revenue can be identified, the cost approach can be used as a secondary or corroborative approach.

The cost approach is also suitable for valuation of investments, compensations for forced purchase, the utility of the construction, etc.

The cost approach is applied in determining the insurance value, the value of in-kind contributions, the value of assets acquired by enterprises, etc.

### **Applicable methods under the cost approach:**

#### **6.3.1. Method of property value**

By applying the method of property value the valuer calculates the costs of creating identical/similar asset, which include:

- value of the land (right of construction);
- costs of design and other related costs;
- value of the building(s);
- value of the infrastructure;
- financing costs of construction;
- profit from the development;
- marketing costs.

The method of property value is used to assess the replacement cost of a new asset and the depreciated replacement cost:

- replacement cost: the cost at the valuation date for a similar modern equivalent having the closest value to that of the subject asset;
- depreciated replacement cost: the costs at the valuation date for reproduction of a similar/identical asset.

The replacement cost includes the costs of creating a new asset at the date of valuation, where the value of the new construction product can be determined by aggregated unit prices, including direct costs (labour, materials and machinery), additional costs (administrative and managerial), profit, as well as incidental expenses: design, construction supervision, investment control, statutory fees charged by the competent authorities, utility companies, etc.

The depreciated replacement cost takes into account the wear (depreciation) of the subject asset. Wear is a concrete measure, which includes physical, functional and economic obsolescence.

#### **○ Physical obsolescence**

It reflects the obsolescence in time due to the quality of design and execution, natural aging, maintenance, etc. The physical obsolescence of the asset as a function of time can be determined based on:

- physical life: the period during which the asset can be used before it is worn completely or before a repair becomes economically unfeasible, under the assumption of ongoing maintenance, but without taking into account any potential for major repairs. It reflects the degree of physical impairment of the asset;
- economic life: the period during which the asset is anticipated to generate income or provide non-financial benefits under its current use. The economic life of the asset may be the same under the cost approach and under the income approach.

The physical life limits the economic life, i.e. the economic life cannot be longer than the physical.

- *Functional obsolescence*

Any loss of utility caused by the inefficiency of the relevant asset compared to the replacement asset that leads to loss of value. There are two forms of functional obsolescence, namely:

- excessive capital expenditures for the subject asset compared to modern assets with lower capital expenditures;
- excessive operating costs for the subject asset compared to modern assets with lower operating costs.

- *Economic obsolescence*

Reflects a decrease in the value of the subject asset as a result of changing economic or location-related factors, external to asset, which lead to loss of value.

When making major repairs (after permission is obtained under the Spatial Planning Act) and expenses for e.g. partial recreation and/or partial replacement of structural elements, basic parts, facilities or installations in the asset, as well as construction and installation works, the asset's operational capacity can be restored, its performance characteristics can be improved and its service life can be extended.

## **7. Other indications of values and other applicable methods**

Other indications of value and the application of other methods must be duly justified and noted in the valuation report.

### **7.1. Alternative Use Value**

Alternative Use Value should be measured where there is evidence that the subject property may not retain its current use. In this case, thorough analyses and forecasts are made regarding the subject property's future use, other than the current, and these are disclosed in the valuation report. The

alternative use value, which is a variation of the market value of the subject property, is determined using all appropriate and applicable approaches and methods.

## **7.2. Fair Value**

Fair value may be determined in the presence of indisputable data and evidence relating to the realisation of the subject property in an active market. The fair value reflects facts and circumstances related to a specific actual or potential market transaction with the subject property between identified participants. Fair value is determined based on the current use of the asset, applying all appropriate and applicable approaches and methods.

## **7.3. Synergistic Value**

Synergistic value is a special value that includes the additional elements of value created by combining two or more assets. Synergistic value shows the value of the combined interest and is greater than the sum of the values of the separate assets. Synergistic value is determined using all appropriate and applicable approaches and methods, taking into account the complementing and combining activities and factors which may create the combined value and provide additional benefits.

## **7.4. Investment Value**

Investment value is the special value that a specific asset has to the specific investment or operational objectives of a specific investor/group of investors pursuing particular criteria.

Investment properties can be divided into the following main categories:

- properties held as investments due to their capacity to generate income and/or for capital appreciation;
- properties under development;
- properties held for future development;
- owner-occupied investment properties;
- other investment properties, including in the public sector

### **Approaches and methods of valuation**

Investment value is determined by applying appropriate approaches and methods in accordance with the intended use of the property and depending on its category as described above.

### **Algorithm for determining the investment value:**

- Determine the investment costs of setting up the project. Identify the

operational costs per year in the period of creation and the life-cycle of exploitation.

- Determine the cash flows from the expected net operating income, taking into account all operating expenses, expenses for overhaul and current repairs in the operating period, depreciation, income from the liquidation value at the end of the useful life;
- Determine the risk, including all kinds of risks accompanying the development of the project, and determine the discount rate at which the estimated cash flows are discounted at the valuation date;
- Determine the present value of the expected net cash flows, deduct the present value of the investment costs at the valuation date and the value arrived at in this manner constitutes the investment value.

### **7.5. Method for determining the residual value**

The residual value is assessed after deducting all known or anticipated costs required to complete the development from the anticipated value of the project when completed, after consideration of the risks associated with completion of the project.

The residual value method is a heterogeneous method applying the comparative, income and cost approach. Under this method the valuer should determine:

- The construction value of the completed project, including the profit of the developer;
- Finance costs;
- Marketing costs for the development of the property;
- Income generated by the developed property;
- Costs for operation and maintenance of the property;
- Profit from the developed property.

These values are determined based on:

- duration of the development;
- rate of return;
- discount rate.

The capitalisation of the profit from the developed property gives an indication of residual value.

### **7.6. Method for determining liquidation value.**

The liquidation value is the value derived under special conditions and is based on the opinion of value already formed in the course of valuation. For the purposes of BVS, liquidation means the realisation/cashing of an asset

under special conditions, including on a piecemeal basis, thus arriving at the liquidation value.

The liquidation value of real properties is assessed when the purpose of the valuation provides for it and is applied in cases of forced or voluntary sale.

Assessment of liquidation value is carried out under special assumptions concerning the asset or its owner. The reported values are valid only at the valuation date.

In the realisation of assets, including on a piecemeal basis, in a forced sale, the valuer must take into account the usual selling costs, including the specific costs related to the asset and provided for in the existing legislation, in the shortest time and at the lowest value. The valuer determines the liquidation value of the asset to be realised under compulsion, and this value is usually taken into account in liquidation: the realisation/cashing of the subject asset, including on a piecemeal basis.

Upon realisation of assets, including on a piecemeal basis, in a voluntary sale, the liquidation value is determined under the conditions of an arm's length transaction, taking into account all costs relating to: the normal period for marketing, special assumptions concerning the subject asset.

#### **7.7. Other acceptable methods**

In the absence of an active market and/or in case of inability to collect reliable market evidence, other methods can be applied by way of exception, which in the valuation practice are known as:

- the Naegeli method;
- the method of compensation;
- other applicable methods.

### ***Section Two: Specific and particular requirements for assessment of immovable cultural property (ICP)***

#### **1. SPECIAL LEGAL FRAMEWORK: laws, regulations and acts related to the valuation of ICP**

##### **1.1. Legal framework.**

All laws, ordinances and other regulations that constitute the legal framework for valuation of real properties must be complied with in the valuation of ICP. The specific nature and the legal status of immovable cultural properties are set forth in:

- Cultural Heritage Act (prom. SG No. 19 of 2009);
- Ordinance No. H-12 of 21.11.2012 on the procedures for identifying, reporting and determining the status and category of immovable cultural properties;
- Ordinance No. 4 of 21.12.2016 of the Ministry of Culture and the Ministry of Regional Development and Public Works on the scope and content of documents for carrying out conservation and restoration work on immovable cultural property.

## **1.2. Conditions for the application of the special legislation.**

- The Cultural Heritage Act is in line with European regulations and abides by all international charters and documents for preservation of cultural heritage;
- The general conditions, approaches and methods set out in BVS – Part Two, Section One, relating to valuation of real properties, find application also in the valuation of immovable cultural properties. This section of the standards contains specific requirements for the valuation of immovable cultural properties, in accordance with the applicable legislation;
- Besides the usual rights on real properties, the Cultural Heritage Act enables the Minister of Culture to establish a real right to use the land where archaeological values have been found, or to take action on forced purchase of the land under the State Property Act;
- Where fortifications and conservation and restoration works on ICP which is private property are carried out by the state or municipality, a statutory mortgage is established on the property in favour of the state or the municipality (with the costs being determined on the basis of an expert valuation performed by independent valuers).

## **2. CONDITIONS AND ASSUMPTIONS in the valuation of ICP.**

### **2.1. Specific assumptions**

- Immovable cultural property comprises immovable cultural heritage, which is permanently attached to the land, including underwater, as well as the adjacent environment;

- The scientific, cultural and artistic value of immovable cultural properties is not identical to their market value, but it affects the determination of their market value.

## **2.2. Assumptions about socio-economic and political conditions**

- Immovable cultural properties are carriers of historical memory and national identity, and have scientific and cultural value;
- Immovable cultural properties are subject to statutory and other legal protection. The laws and regulations prescribe certain prohibitions or restrictions on the use and disposal of these objects, as well as specific requirements for their protection, conservation and restoration.

## **3. TYPES OF IMMOVABLE CULTURAL PROPERTIES**

The Bulgarian legislation defines the following types of immovable cultural properties:

**3.1.** In terms of their belonging to a specific historical period, immovable cultural properties are: prehistoric, ancient, medieval, Renaissance, belonging to new and modern times.

**3.2.** In terms of the research and cultural field to which they pertain, immovable cultural properties are:

- Archaeological: material traces of human activity which are inseparable from the environment in which they were created, identified through archaeological research;
- Historical: buildings, installations, other structures and memorable sites related to historical landmark events and personalities;
- Architectural and structural: buildings, installations, structures, parts or combinations thereof, which have historical, aesthetic, technical, cultural, technological, spatial and functional value;
- Artistic: works of fine and applied arts, which are inseparable elements of the environment in or for which they were created;
- Urban: distinguishable parts of settlement territories and communities whose elements are spatially interconnected and may be discerned topographically;



- Cultural landscape: the set of spatially distinguishable lasting cultural layers resulting from the interaction between humans and nature, which are characteristic of the cultural identity of a given territory;
- Park and garden art: historic parks and gardens of importance to the enhancement of park and garden development art and science;
- Ethnographic: material evidence of lifestyle, craftsmanship, skills, rituals and beliefs related to the spatial environment;
- Cultural route: the combination of the historical route of a traditional road and the adjoining sites of the immovable cultural heritage and landscapes.

**3.3.** In terms of spatial structure and territorial scope, immovable cultural properties are:

3.3.1. Single.

3.3.2. Group:

- ensemble: territorially distinguishable structure of sites of the immovable cultural heritage, whose elements have specific conceptual, spatial and aesthetic interconnections among themselves and with the adjacent environment;
- compound: a variety of the ensemble, whose elements are functionally interconnected;
- series: consisting of two or more immovable cultural heritage sites, regardless of their location, which are united by clear cultural, temporal, social and/or functional relationships;
- historical settlement: urban structure filled with cultural and historical values from one or more epochs;
- historical zone: distinct urban, non-urban or underground territory or part of aquatory filled with cultural and historical properties from one or more epochs;
- archaeological reserve: a distinct territory or part of aquatory, rich in archaeological immovable properties, whether already discovered or subject to discovery and whether above or below ground, including

archaeological and/or cultural strata unearthed as a result of construction activities.

**3.4.** In terms of their degree of endangerment, immovable cultural properties are:

- 3.4.1. Cultural properties at risk: for which there is a potential danger of damage or destruction;
- 3.4.2. Endangered cultural properties - for which there exists a real threat of damage, vandalism, destruction or serious impairment of their integrity.

**3.5.** In terms of their cultural and research value and social significance, immovable cultural properties fall into the following categories:

- 3.5.1. “of universal importance”: those entered in the World Heritage List;
- 3.5.2. “of national importance”: archaeological reserves and other cultural values of outstanding importance to the nation's culture and history;
- 3.5.3. “of local importance”: those related to the culture and history of settlements, municipalities or regions;
- 3.5.4. “of ensemble importance”: those supporting the spatial characteristics and architectural typology of the group of cultural values to which they belong;
- 3.5.5. “for reference only”: self-contained sites of low individual value that contribute with information on the scientific or cultural area to which they belong.

Determining the type of the relevant immovable cultural property is preconditioned by the requirement to identify the subject asset.

#### **4. SPECIAL ASSUMPTIONS relating to the valuation of immovable cultural properties.**

In the valuation of immovable cultural properties the valuer must take into account a number of factors related to the urban environment, the nature and importance of the subject asset, and the regulatory restrictions or incentives.

**4.1. Urban restrictions.** These determine the manner of spatial development in the respective areas containing immovable cultural property, the protection schemes, prescribed use of the land and protection zones.

**4.2. Restrictions depending on the type and category of the immovable cultural property.**

- The category of the asset determines the degree of physical changes with a view to maximum preservation of its authenticity. The source of information about the type and category of immovable cultural properties are the National Register of Immovable Cultural Properties, in which the acts issued by authorities referred to in article 65 are registered, and the Public Register containing declaratory acts issued under article 59, paragraph 1, and acts to terminate the temporary scheme.
- Interventions threatening the authenticity of immovable cultural properties “of universal importance” are not allowed.
- Depending on the social significance and the category of the immovable cultural properties, certain restrictions on their use or change of use apply.

**4.3. Statutory restrictions.** The responsibility and obligations related to the protection of immovable cultural properties, including maintenance, conservation and restoration, are fully borne by their owners.

## **5. APPROACHES AND METHODS applied in the valuation of immovable cultural properties**

The same methods as with the valuation of real properties apply, taking into account the special assumptions.

### **5.1. Income approach**

#### **5.1.1. Methods for applying the income approach**

Immovable cultural properties used for commercial purposes (renting out) can be valued using the income approach. It is necessary to consider whether the type and category of the asset have a positive or negative impact on revenues. In this sense, restrictions on the use of the relevant immovable cultural property must also be considered. It is important to accurately reflect the costs of maintenance, which are usually substantial due to the specific nature of the conservation and restoration work.

#### **5.1.2. Assumptions about the use as a prerequisite for value**

The actual use is not always the highest and best use of the immovable cultural property being valued. Restrictions may arise in terms of urban spatial planning or in terms of the category of the object, which determine the level of interference in the original substance of the asset, and in the manner of its

use. The probability that such restrictions be changed is very small and such change would require a complex and lengthy legal procedure.

## **5.2. Cost approach**

### **5.2.1. Methods for applying the cost approach**

Since immovable cultural properties are specific in nature, each with their individual characteristics in terms of artistic and historical value, it would be difficult to find suitable comparables in the market. In this case, as there is no market evidence due to the specialized nature of the property, an appropriate valuation approach for such properties is the cost approach.

### **5.2.2. Special assumptions**

- When determining the physical depreciation of immovable cultural properties it is necessary to pay attention to the longer overall useful life. The valuer should take into account the influence on the remaining useful life of conservation and restoration works carried out: structural strengthening, restoration and strengthening the typical architectonic elements, etc.
- In determining the replacement cost of the asset it is necessary to consider the type and technique of the conservation and restoration works carried out, or the need to carry out such works. The modern equivalent should reflect the replacement cost using the original materials and techniques or if this is not possible, the replica should be made with modern materials and techniques, but with traits and characteristics similar to the subject asset. Alternatively, conservation and restoration works may be allowed where the authenticity of the building's façade is preserved, but its spatial and voluminous structure is rebuild using modern materials, thus changing the function. In all cases, the higher costs of both maintenance and specific conservation/restoration works need to be reflected.
- The functional and economic depreciation of buildings which are immovable cultural properties are interrelated. The longer overall service life of these assets determines their greater functional and economic depreciation. Throughout the period of the physical existence of immovable cultural property up to the valuation date, the economic, social and technological conditions of life have changed dynamically, which in the best case scenario makes the property inefficient at the time of the valuation, and in other cases completely useless. In determining the functional and economic obsolescence it is

necessary to consider the existence or lack of a concept developed at the national, regional or municipal level for the socialisation of the relevant immovable cultural property or existence of approved investment projects for conservation, restoration and socialisation.

- In determining the value under the cost approach it is necessary to take into account the existence of works of plastic arts permanently attached to the immovable cultural property. In this case of synthesis in the architecture the works of art and the immovable cultural property will have a single common value.

### **5.3. Comparative approach**

This approach is applied as with the other real properties, i.e. by comparison with identical or similar assets. When applying the methods under this approach, the valuer must have sufficient and reliable information about similar or identical immovable cultural properties, so as to be able to adjust for any differences between the subject asset and selected comparables.

5.3.1. The criteria for selection of comparable assets include:

- Specificity of artistic, historical and architectural value;
- Belonging to the respective era and style;
- Spatial zoning, specific urban planning restraints;
- Permissible use and scope of intervention;
- Specific methods of restoration (in the case of restored properties).

5.3.2. The comparable values obtained are subject to various types of adjustments, taking account of differences in location and the criteria listed above.

Since immovable cultural properties are specific in nature, each with individual and unique characteristics in terms of both artistic and historical value and restrictions on the manner of use and restoration, it is rarely possible to find market evidence of transactions involving identical assets. The lack of market evidence of fair value due to the specific nature of the property, and the need for substantial adjustments indicates that the use of another approach to valuation would be more appropriate.

### **5.4. Regulatory method**

In the valuation of a property of archaeological value, the comparative approach is inapplicable due to the specificity of archaeological sites, in light

of Art. 146, Para. 3 of the Cultural Heritage Act, under which they are designated as being of “national importance” until their status is finally defined, which makes them virtually unmarketable.

#### **5.5. Residual value method**

The residual value method can be applied in valuations of immovable cultural properties, taking into account all conditions and assumptions, including the main condition: existence of an approved investment project for restoration of the immovable cultural property by the method of rebuilding, by reproducing the original with a possible change of prescribed manner of use.

#### **6. Valuation of immovable cultural properties for accounting purposes under the current legislation**

The appropriate method of valuation is selected in accordance with the available data.

All characteristics specific to the subject immovable cultural property are defined.

Immovable cultural properties have unique individual and specific characteristics, due to their artistic and historical value and restrictions on the manner of their use and restoration. No active market is observable for such assets in terms of transactions carried out in sufficient number and with sufficient frequency. In these circumstances the specific assets are valued by means of inputs that are not observable in an active market.

#### **7. Assessing the liquidation value of immovable cultural properties, where applicable**

- The liquidation value of immovable cultural properties is assessed in cases where the subject assets constitute part of the property of legal entities, including state and municipal bodies, or of individuals.
- Upon realisation of assets, including on a piecemeal basis, in a forced sale, the valuer must take into account the usual selling costs and the cost of emergency reinforcement and conservation and restoration activities prescribed by the competent municipal and other public bodies, under the current legislation.
- Upon realisation of assets, including on a piecemeal basis, in a voluntary sale, the liquidation value is determined under the conditions of an arm's length transaction, taking into account all costs relating to:

the normal period of marketing and special assumptions concerning immovable cultural properties as enshrined in the laws on their protection.

**Section Three: Specific and particular requirements for valuation of plant and machinery, including equipment (PM)**

**1. SPECIAL LEGAL FRAMEWORK: laws, regulations and other acts related to the valuation of plant and machinery**

The special legal framework relevant to the valuation of plant and machinery includes:

- Technical Requirements for Products Act (TRPA), prom. SG No. 86 of 1 October 1999, as amended and supplemented;
- Registration and Control of Agricultural and Forestry Machinery Act (RCAFMA), prom. SG No. 79 of 10 July 1998, as amended and supplemented;
- Preservation of Agricultural Property Act (PAPA), prom. SG No. 54 of 12 July 1974, as amended and supplemented;
- Safety and Health at Work Act (HSWA), prom. SG No. 124 of 23 December 1997, as amended and supplemented;
- Medicinal Products Act (MPA), prom. SG No. 46 of 12 June 2007, as amended and supplemented;
- Registered Pledges Act (RPA), prom. SG No. 100 of 22 November 1996, as amended and supplemented.
- Safe Use of Nuclear Energy Act (SUNEA), prom. SG No. 63 of 28 June 2002, as amended and supplemented;
- State Reserves and Wartime stocks (ZDRVZ) prom. SG No. 9 of 31 January 2003, as amended and supplemented;
- Other special laws regulating the development, implementation and operation of plant and machinery, vehicles and equipment;
- Regulations: rules, ordinances and instructions;
- Other, including technical requirements standards.

**2. SPECIFIC CONDITIONS for the preparation of the valuation report.**

The valuation process involves considerations of facts, circumstances and evidence related to the subject asset. Extensive research on the condition is needed: the technical, technological, economic and other parameters, with indication of the sources of information used. Any legal restrictions or reliefs associated with the normal operation of the asset should also be identified.

To comply with the requirement to identify the subject asset, the valuer must include the following in the valuation:

- description of the technical, technological and other identification parameters;
- identification of any primary or secondary factors that affect the subject asset;
- special assumptions that the asset is valued “as is and in place”, or that other existing facts and circumstances are taken into account;

To comply with the requirement to indicate the scope of research and the nature and source of the information to be used, the valuer should consider the following:

- data and documents necessary to identify the asset;
- responsibility for the information on the technical and production parameters of the asset;
- legal permits for or restrictions on the use of the asset, including regulations issued by the Fire Safety Department of the Ministry of Interior, Regional Inspectorate of Environment and Water, Labour Safety, Technical Supervision Agency, etc.

### **3. CONDITIONS AND ASSUMPTIONS in the valuation of PM**

All assumptions that can reasonably be accepted as facts in the context of the purpose of the valuation, without conducting special studies and surveys, must be indicated in the valuation report. The valuation report must contain all assumptions and indicate clearly the instructions relating to the valuation, the purpose and context of the valuation, the scope of research, the reliance on the accuracy, completeness and reliability of the sources of information used that have significant influence on the opinion of value expressed in the report.

#### **3.1. Special assumptions**



The special assumptions for the purpose of arriving at an opinion of value can include, without limitation:

- Data on ownership and other circumstances defining the asset may not be available, including encumbrances, restrictions or obligations that could affect the value of the subject asset. In this case, the valuer will need to make the assumption believed to be the most reasonable, and waive responsibility for the actual legal status of the ownership and other real rights pertaining to the asset.
- Assumptions may be necessary in the light of the applicable legal or administrative permits for the commissioning and use of plant and machinery, along with an indication of policies or proposals from government authorities which could have a positive or negative impact on the value. Such policies may be associated with the legislation on the conditions and emissions in the working environment, ergonomics and working conditions, environmental protection, fire protection, etc.
- The independent valuer should report on risks of contamination, the presence of dangerous substances, and the influence of harmful physical factors. In forming an opinion of value the valuer may need to make assumptions that such risks exist/do not exist, or that the valuer will rely on information provided by other experts.
- The independent valuer must report that all network and engineering services for the subject asset are available and function properly, and are sufficient for the intended use of the asset.
- The independent valuer can make the assumption whether the subject asset was or was not affected by a natural disaster (force majeure) or industrial accident, and whether conditions exist that the asset could be affected by natural disasters (force majeure) or industrial accidents in the future, and on the possibility of other environmental factors affecting the opinion of value.
- Where the asset is used under lease, the valuer should examine the extent to which the duration of the lease matches the remaining useful life of the subject asset and of the real property in which the asset is located and operated.
- The independent valuer must establish the existence of spatial plans related to the construction of roads, underground or above-ground communication facilities or engineering networks and facilities which could lead to imposition of forced measures by the state, municipality or another owner, or otherwise influence the opinion on the value of

the subject asset.

- The independent valuer may assume that plant and machinery that are normally considered part of the service installations in the building will be conveyed along with the property upon change of ownership.
- The independent valuer should reflect the degree to which the asset is attached to, or integrated with, other assets. For example:
  - a machine can be part of an integrated production line as its functionality depends on the work of other assets and/or units;
  - certain assets may be permanently attached to the land and may not be subject to removal without substantial demolition of either the asset or any surrounding structure or building.
- Because of the diverse nature and transportability of many items of plant and equipment, additional assumptions will normally be required to describe the situation and circumstances in which the assets are valued. Examples of special assumptions include:
  - that the plant and machinery assets are valued as a whole, in place and as part of an operating business,
  - that the plant and machinery assets are valued as a whole, in place but on the assumption that the business ceases its operations,
  - that the plant and machinery assets are valued as individual items for removal from their current location.
  - In some circumstances, it may be appropriate to report on more than one set of assumptions, e.g. in order to illustrate the effect of business closure or cessation of operations on the value of plant and machinery.
- Where facts or circumstances exist other than those observable at the date of valuation, the result is an assessment of value under special assumptions such as:

degree of loading; whether users of the subject asset exist; limited opportunity for realisation of the production; investments that are needed to improve the working conditions or the environment based on instructions from the relevant authorities, etc. Exploration of opportunities for other specific use other than the current one.

Special regulations may require special assumptions, e.g. for the purpose of tax assessments or forced liquidation, and statutory restrictions related to the environment or labour safety.

### **3.2. Assumptions about socio-economic and political conditions**

Assumptions related to the socio-economic conditions may be necessary due to the dynamic change in the legislation. Laws that could have a significant impact on the value of the assets are within the framework of:

- Social legislation;
- Legislation related to the safe and ergonomic working conditions and the environment in which the subject asset is used;
- Legislation related to environmental protection and factors that may have harmful effects, including noise, vibrations, electromagnetic fields, radiation, emissions into the air, water and soil, etc.;
- Legislation relating to technical standards and the relevant requirements contained therein.
- Legislation affecting the market mechanisms, which could lead to change in the principles of supply and demand of production produced and realised by means of the subject assets, and the markets themselves. In many cases such change may include customs duties, excise, tax and other reliefs or burdens in the case of protectionism or liberalisation of market conditions.

#### **4. APPROACHES AND METHODS used in the valuation process**

##### **4.1. Income approach.**

The income approach provides an indication of the present value by converting future cash flows. This approach should be applied where there are sufficient data and information on revenue, expenditure and profits generated by the subject asset. The approach must not be applied in the absence of such information.

##### Methods for applying the income approach

**4.1.1. Capitalisation method:** capitalisation of the financial result formed by the proceeds, less all operating costs for the asset in a representative single period by applying a capitalisation rate that reflects all known risks.

**4.1.2. Discounted cash flows method:** a discount rate is applied to a series of future cash flows of revenues and expenses, in order to arrive at a present value.

##### **4.2. Cost approach**

The cost approach is applied in the valuation of assets by determining the

depreciated reproduction or replacement cost. This approach is typically used where there is no evidence of transaction prices for similar assets or any identifiable actual or notional income stream that would accrue to the owner of the subject asset.

#### Methods for applying the cost approach

##### **4.2.1. Method of the depreciated replacement cost.**

This method is based on the assessment of all direct and indirect costs of replacing the subject asset with an identical asset, taking into account the different types of wear. The replacement cost should reflect all direct and indirect costs would have been incurred by a market participant in the creation of a modern equivalent asset. The determined value of the equivalent is subject to adjustment for age and wear, to reflect the impact on value of physical condition, functionality and economic utility.

##### **4.2.2. Depreciated replacement cost.**

The first step requires a replacement/reproduction cost for the asset to be calculated. This is the cost of replacing the asset with another with the same purpose and functions at the relevant valuation date. The replacement/reproduction cost must reflect all incidental costs for the acquisition of assets, including engineering structures and networks necessary for the normal functioning of plant and machinery, transport costs, civil works, including building foundations, frames and the like, designer remuneration and financial costs that would be incurred by a market participant in the creation of an equivalent asset.

The replacement/reproduction cost is then subject to adjustment for obsolescence and wear, to reflect how much the asset is less valuable in terms of its physical, technological and technical condition, obsolescence, functionality and economic utility.

##### **4.3. Comparative approach.**

The comparative approach provides an indication of value by comparing the subject asset with identical or similar assets for which price information is available.

##### **4.3.1. Market comparisons method.**

The first step with this method is to consider the transaction prices of identical or similar assets recently realised on the market. In order to reflect any differences in the conditions of the actual transaction, the price information about other transactions and the basis of value should be adjusted, or other assumptions should be made in the valuation. Adjustments should also be made where a difference is found between the economic and

physical characteristics of the comparable asset and the subject asset, respectively.

## **5. Other methods providing indication of value**

### **5.1. Method for measuring the Investment value.**

#### Application algorithm:

- Determine the investment costs of setting up the project. Identify the operational costs per year in the period of creation and the life-cycle of exploitation.
- Determine the cash flows from expected net proceeds from the sale of production, the productivity curve in the lifetime of the asset and selling prices of products; operating costs, expenses for overhaul and current repairs, depreciation and liquidation value;
- Determine the risk, including all kinds of risks accompanying the development of the project, and determine the discount rate at which the estimated cash flows are discounted at the valuation date;
- Determine the present value of the expected net cash flows, deduct the present value of the investment costs at the valuation date and the value arrived at in this manner constitutes the investment value.

## **6. Determining the INVESTMENT VALUE of plant and machinery, where appropriate**

The liquidation value is the value derived under specific conditions, and is based on the opinion of value already formed in the course of valuation. Liquidation value is normally determined where the subject asset is part of the property of legal entities, including state and municipal bodies, as well as of individuals. The liquidation value is arrived at under special assumptions concerning the asset or its owner. The reported values will only be valid as at the valuation date due to potential changes in conditions. Upon realisation of assets, including on a piecemeal basis, in a forced sale, the valuer must take into account the usual selling costs, including the specific costs related to the asset and provided for in the existing legislation.

Upon realisation of assets, including on a piecemeal basis, in a voluntary sale, the liquidation value is determined under the conditions of an arm's length transaction, taking into account all costs relating to: the normal period for marketing, special assumptions concerning the subject asset.

## **7. Alternative Use Value**

Alternative Use Value is the market value of the subject asset under the assumption that another use is possible, other than the existing.

***Section Four: Specific and particular requirements for valuation of intellectual and industrial property rights and factual relationships (IIPRFR).***

**1. SPECIAL LEGAL FRAMEWORK: laws, regulations and other acts related to valuation of IIPRFR.**

**1.1. Special legal framework.** Specific laws, regulations, etc.

- Patents and Registration of Utility Models Act;
- Marks and Geographical Indications Act;
- Industrial Design Act;
- Integrated Circuits Topography Act;
- Copyright and Related Rights Act;
- Protection of Competition Act;
- Accountancy Act;
- Paris Convention for the Protection of Industrial Property of 20.03.1883, prom. State Gazette No. 75 of 24.09.1965.

**1.2. Conditions for the implementation of the special legal framework.**

Intangible asset valuations are performed for a variety of purposes. It is the valuer's responsibility to understand the purpose of a valuation and to determine whether intangible assets should be valued independently, individually or grouped with other assets. A non-exhaustive list of examples of circumstances that commonly include an intangible asset valuation component is provided below:

1. for financial reporting purposes, valuations of intangible assets are often required in connection with accounting for business combinations and asset acquisitions and sales.
2. For tax reporting purposes, intangible asset valuations are frequently needed in connection with transfer pricing, estate and gift tax planning and reporting, and ad valorem taxation.
3. Intangible assets may be the subject of litigation, requiring valuation analysis in circumstances such as shareholder disputes, damage calculations and marital dissolutions (divorce), etc.
4. Other statutory or legal events may require the valuation of intangible assets such as compulsory purchases/eminent domain proceedings.

5. Other types of valuations related to rights arising from other factual relationships, such as concessions, etc.

## **2. CONDITIONS AND ASSUMPTIONS for the valuation**

### **2.1. Special assumptions**

Special assumptions should result from the analysis of facts and/or studies available at the valuation date, and be consistent with the purpose of the valuation. Some of the more significant special assumptions are:

#### **2.1.1. Economic life and remaining useful life of intangible assets.**

An important consideration in the valuation of an intangible asset, particularly under the income approach, is the economic life of the asset. This may be a finite period limited by legal, technological, functional or economic factors; other assets may have an indefinite life. The economic life of an intangible asset is a different concept than the remaining useful life for accounting or tax purposes. These factors must be considered individually and in combination in making an assessment of the economic life. For example, a pharmaceutical technology protected by a patent may have a remaining legal life of five years before expiry of the patent, but a competitor drug with improved efficacy may be expected to reach the market in three years. This might cause the economic life of the patent to be assessed as only three years. In contrast, the expected economic life of the technology could extend beyond the life of the patent if the knowhow associated with the technology would have value in production of a generic drug beyond the expiration of the patent. In estimating the economic life of an intangible asset, a valuer should also consider the pattern of use or replacement. Certain intangible assets may be abruptly replaced when a new, better or cheaper alternative becomes available, while others may be replaced slowly over time.

#### **2.1.2. Customer-related intangible assets.**

Attrition is a key factor in estimating an economic life as well as the cash flows used to value the customer-related intangibles. Attrition applied in the valuation of intangible assets is a quantification of expectations regarding future losses of customers. While it is a forward-looking estimate, attrition is often based on historical observations.

The application of any attrition factor should be consistent with the way attrition was measured. Correct application of attrition factor in the first projection year (and therefore all subsequent years) must be consistent with the form of measurement.

If attrition is measured based on the number of customers at the beginning-of-period versus end-of-period (typically a year), the attrition should be applied using a “mid-period” convention for the first projection year (as it is usually assumed that customers were lost throughout the year). If attrition is measured by analysing year-over-year revenue or customer count, the resulting attrition factor should generally be applied without a mid-period adjustment. Revenue-based attrition may include growth in revenue from existing customers unless adjustments are made. It is generally a best practice to make adjustments to separate growth and attrition in measurement and application.

**2.2. Assumptions related to the technological and functional factors having impact on intellectual and industrial property and other factual relationships.**

The main assumptions are related to the pattern of use and/or replacement.

**2.3. Assumptions about socio-economic and political conditions**

- Maintain or change the national and EU policy.
- Maintain or change the demographic development;
- Maintain or change the credit policy;

**3. Types of intellectual and industrial property rights and factual relationships**

An intangible asset is a non-monetary asset that manifests itself by granting rights and economic benefits to its owner.

**3.1.** Specific intangible assets are defined and described by characteristics such as time horizon, ownership or other rights arising out of factual relationships, including copyright, right of protection, concession rights, business and contract-related rights, right to inviolability and other rights in accordance with the existing legislation.

**3.2.** Intellectual and industrial property rights and factual relationships protected by law or other legal instrument are related to: patents for inventions; utility models; industrial designs; trademarks and logos; service marks; company names; industrial design; know-how; integrated circuits topology; indications of origin or name of place of origin and other factual relationships, including concession rights.

**3.3.** The different intangible assets can be considered and differentiated on the basis of the following criteria:



- **Research and marketing-related:** Intangible assets are used primarily in the marketing or promotion of products or services. Examples include: trademarks, trade names, unique trade designs and internet domain names.
- **Customer-related:** these include customer lists, backlog, customer contracts, and contractual and non-contractual customer relationships.
- **Artistic-related:** Intangible assets arising from the right to benefits from artistic works such as plays, books, films and music, and from non-contractual copyright protection.
- **Contract-related:** Intangible assets which represent the value of rights that arise from contractual agreements. Examples include licensing and royalty agreements, service or supply contracts, lease agreements, permits, broadcast rights, servicing contracts, concession contracts, employment contracts and non-competition agreements and natural resource rights.
- **Technology-related:** Intangible assets arising from contractual or non-contractual rights to use patented technology, unpatented technology, databases, formulae, designs, software, processes, recipes, etc.

#### **4. APPROACHES AND METHODS used in the valuation process**

##### **4.1. Income approach**

Under the income approach, the value of an intangible asset is determined by reference to the present value of income, cash flows or cost savings attributable to the intangible asset over its economic life.

Income related to intangible assets is frequently included in the price paid for goods or services. It may be challenging to separate the income related to the intangible asset from income related to other tangible and intangible assets. Many of the income approach methods are designed to separate the economic benefits associated with a subject intangible asset.

The income approach is frequently used to value intangible assets including the following: technology; customer-related intangibles (e.g. backlog, contracts, relationships); tradenames/trademarks/brands; operating licenses (e.g. franchise agreements, gaming licenses, broadcast spectrum); non-competition agreements; concession contracts and other cash flow generating intangibles.

##### **Income Approach Methods:**

###### **4.1.1. Excess earnings method**

The excess earnings method estimates the value of an intangible asset as the present value of the cash flows attributable to the subject intangible asset after excluding the proportion of the cash flows that are attributable to other assets (“contributory assets”). Contributory assets are assets that are used in conjunction with the subject intangible asset in the realisation of prospective cash flows associated with the subject intangible asset. Assets that do not contribute to the prospective cash flows associated with the subject intangible asset are not contributory assets.

The excess earnings method should be used only in cash flow generation with distinct revenues and earnings. The excess earnings method can be applied both for the valuation of a single asset and the valuation of many different assets involved in the generation of revenues and earnings.

The excess earnings method can be applied using: several periods of forecasted cash flows, a single period of forecasted cash flows or by capitalising a single period of forecasted cash flows.

Capitalisation of excess earnings should only be applied if the intangible asset is operating in a steady state with stable growth/decay rates, constant profit margins and consistent contributory asset levels/charges.

As most intangible assets have economic lives exceeding one period, they frequently follow non-linear growth/decay patterns and may require different levels of contributory assets over time, the multi-period excess earnings method is the most commonly used excess earnings method.

Application algorithm:

Whether applied in a single-period, multi-period or capitalised manner, the key steps in applying an excess earnings method are to:

- 1) forecast the amount and timing of future revenues driven by the subject intangible asset and related contributory assets;
- 2) forecast the amount and timing of expenses that are required to generate the revenue from the subject intangible asset and related contributory assets;
- 3) adjust the expenses to exclude those related to creation of new intangible assets.
- 4) identify the contributory assets that are needed to achieve the forecasted revenue and expenses.
- 5) determine the appropriate rate of return on each contributory asset based on an assessment of the risk associated with that asset.
- 6) in each forecast period, arrive at the excess earnings attributable to only the subject intangible asset.

- 7) determine the appropriate discount rate for the subject intangible asset and present value or capitalise the excess earnings, and
- 8) calculate and add the tax amortisation benefit (TAB) for the subject intangible asset.

#### **4.1.2. Relief-from-Royalty Method**

Under the relief-from-royalty method, the value of an intangible asset is determined by reference to the value of the hypothetical royalty payments that would be saved through owning the asset, as compared with licensing the intangible asset from a third party. Conceptually, the method may also be viewed as a discounted cash flow method applied to the cash flow that the owner of the intangible asset could receive through licensing the intangible asset to third parties.

##### Application Algorithm:

The key steps in applying a relief-from-royalty method are to:

- 1) develop projections associated with the intangible asset being valued over its useful life. The most common metric projected is revenue, as most royalties are paid as a percentage of revenue. However, other metrics such as a per-unit royalty may be appropriate in certain valuations.
- 2) develop a royalty rate for the subject intangible asset. Two methods can be used to derive a hypothetical royalty rate. The first method is based on market royalty rates for comparable or similar transactions. A prerequisite for this method is the existence of comparable intangible assets that are licensed at arm's length on a regular basis. The second method is based on a split of profits that would hypothetically be paid in an arm's length transaction by a willing licensee to a willing licensor for the rights to use the subject intangible asset.
- 3) apply the selected royalty rate to the projections to calculate the royalty payments avoided by owning the intangible asset.
- 4) estimate any additional expenses for which a licensee of the subject asset would be responsible. The royalty rate should be analysed to determine whether it assumes expenses are the responsibility of the licensor or the licensee.
- 5) determine the appropriate discount rate for the subject intangible asset and present value or capitalise the savings associated with ownership of the intangible asset.
- 6) calculate and add the TAB for the subject intangible asset.

The royalty rate arrived at through the market transactions method or the profit split method (or both) takes into account the following factors: competitive environment; importance of the subject intangible to the owner; life cycle of the subject intangible, in view of its economic life and the risks of it becoming obsolete.

#### **4.1.3. With-and-Without Method**

The with-and-without method indicates the value of an intangible asset by comparing two cash flow scenarios: one in which the business uses the subject intangible asset (scenario “with”) and one in which the business does not use it (scenario “without”), with all other factors being kept constant.

The comparison of the two cash flow scenarios can be done in two ways:

- calculating the value of the business under each scenario with the difference in the present values being the value of the subject intangible asset. The calculation of the cash flows takes into account the tax amortisation benefit for the subject intangible asset.
- calculating, for each future period, the difference between the profits in the two cash flow scenarios. The present value of those amounts is then used to reach the value of the subject intangible asset.

#### **Application Algorithm:**

The key steps in applying the with-and-without method are to:

- 1) prepare projections of revenue, expenses, capital expenditures and working capital needs for the business assuming the use of all of the assets of the business including the subject intangible asset. These are the cash flows in the “with” scenario.
- 2) use an appropriate discount rate to present value the future cash flows in the “with” scenario, and calculate the value of the business in the “with” scenario.
- 3) prepare projections of revenue, expenses, capital expenditures and working capital needs for the business assuming the use of all of the assets of the business except the subject intangible asset. These are the cash flows in the “without” scenario.
- 4) use an appropriate discount rate to arrive at the present value the future cash flows in the “without” scenario, and calculate the value of the business in the “without” scenario.
- 5) deduct the present value of cash flows or the value of the business in the “without” scenario from the present value of cash flows or value of the business in the “with” scenario.

- 6) The differences in value between the two scenarios should be reflected solely in the cash flow projections rather than by using different discount rates in the two scenarios.

#### **4.1.4. Greenfield Method**

Under the greenfield method, the value of the subject intangible is determined using cash flow projections that assume the only asset of the business at the valuation date is the subject intangible. All other tangible and intangible assets must be bought, built or rented.

The greenfield method is conceptually similar to the excess earnings method; however, instead of subtracting contributory asset charges from the cash flow to reflect the contribution of contributory assets, the greenfield method assumes that the owner of the subject asset would have to build, buy or rent the contributory assets. When building or buying the contributory assets, the cost of a replacement asset of equivalent utility is used rather than a reproduction cost.

The greenfield method is often used to estimate the value of “enabling” intangible assets.

#### **Application Algorithm:**

The key steps in applying the greenfield method are to:

- 1) prepare projections of revenue, expenses, capital expenditures and working capital needs for the business assuming the subject intangible asset is the only asset owned by the subject business at the valuation date, including the time period needed to achieve stabilised levels.
- 2) estimate the timing and amount of expenditures related to the acquisition, creation or rental of all other assets needed to operate the subject business, calculating if necessary the tax amortisation benefit for the subject intangible.
- 3) using an appropriate discount rate for the business, present value the future cash flows to determine the value of the subject business with only the subject intangible in place.

#### **4.1.5. Distributor Method**

The distributor method is a special case of the multi-period excess earnings method and is used to value customer and distributor bases as intangible assets. The underlying theory of the distributor method is that profits are expected to be generated by distributors performing various functions. As distributors generally only perform functions related to distribution of products to customers rather than development of intangible assets,

information on profit margins earned by distributors is used to estimate the excess earnings attributable to customer-related intangible assets.

The distributor method is appropriate to value intangible assets when another intangible asset (for example, technology or a brand) is deemed to be the primary or most significant intangible asset.

Application Algorithm:

The key steps in applying the distributor method are to:

- 1) prepare projections of revenue associated with existing customer relationships. This should reflect expected growth in revenue from existing customers.
- 2) identify comparable distributors that have customer relationships similar to the subject business and calculate the profit margins achieved by those distributors.
- 3) apply the distributor profit margin to the projected revenue.
- 4) identify the contributory assets related to performing a distribution function that are needed to achieve the forecast revenue and expenses. Generally distributor contributory assets include working capital, fixed assets and workforce.
- 5) determine the appropriate rate of return on each contributory asset based on an assessment of the risk associated with that asset.
- 6) in each forecast period, deduct the required returns on contributory assets from the forecast distributor profit to arrive at the excess earnings attributable to only the subject intangible asset, taking into account the statutory amortisations.
- 7) determine the appropriate discount rate for the subject intangible asset and present value the excess earnings.

#### **4.2. Cost Approach**

Under the cost approach, the value of an intangible asset is determined based on the replacement cost of a similar asset or an asset providing similar service potential or utility.

Consistent with these criteria, the cost approach is commonly used for intangible assets such as the following:

- acquired third-party software;
- internally-developed and internally-used, non-marketable software;
- assembled workforce.

Cost Approach Methods

There are broadly two main methods that fall under the cost approach: **replacement cost** and **reproduction cost**. However, many intangible assets do

not have physical form that can be reproduced and assets such as software, which can be reproduced, generally derive value from their function/utility, which is why the replacement cost is most commonly applied to the valuation of intangible assets.

#### **4.2.1. Replacement Cost Method**

The replacement cost method assumes that a participant would pay no more for the asset than the cost that would be incurred to replace the asset with a substitute of comparable utility or functionality. Valuers should consider the following when applying the replacement cost method: the direct and indirect costs of replacing the utility of the asset, including labour, materials and overhead; whether the subject intangible asset is subject to any form of depreciation and obsolescence, including economic and technological obsolescence; whether it is appropriate to include opportunity costs, which reflect costs associated with not having the subject intangible asset in place for some period of time during its creation.

#### **4.2.2. Reproduction Cost Method**

Where this method can be applied, the valuer should adhere to the general requirements of Part One of BVS and take into account the specifics of the subject intangible asset.

### **4.3. Comparative (Market) Approach**

Under the comparative approach, the value of an intangible asset is determined by reference to market activity (for example, transactions involving identical or similar assets and their realisation). Transactions involving intangible assets frequently also include other assets, such as a business combination that includes intangible assets.

Independent valuers should only apply the comparative approach to the valuation of intangible assets if both of the following criteria are met:

- Information is available on arm's length transactions involving identical or similar intangible assets on or near the valuation date;
- Sufficient information is available to allow the valuer to adjust for all significant differences between the subject intangible asset and those involved in the transactions.

The heterogeneous nature of intangible assets and the fact that intangible assets seldom transact separately from other assets means that it is rarely possible to find market evidence of transactions involving identical assets.

#### **Comparative Approach Methods**

Where evidence of either prices or valuation multiples is available, valuers should make adjustments to these to reflect differences between the subject

asset and those involved in the transactions. These adjustments are necessary to reflect the differentiating characteristics of the subject intangible asset and the assets involved in the transactions. Such adjustments may only be determinable at a qualitative, rather than quantitative, level. However, the need for significant qualitative adjustments may indicate that another approach would be more appropriate for the valuation.

#### **4.3.1. Guideline Transactions Method**

This method is generally the only comparative (market) approach method that can be applied to intangible assets. In rare circumstances, a security sufficiently similar to a subject intangible asset may be publicly traded, allowing the use of the **guideline method**. One example of such securities is contingent value rights (CVRs) that are tied to the performance of a particular product or technology.

#### **4.3.2. Rating Method**

This method requires the existence of comparables with parameters similar to the subject intangible asset.

##### Algorithm of the method:

- 1) choice of comparable assets and valuation criteria depending on the type of the subject intangible asset,
- 2) establish a rating system and point scale for the comparable parameters,
- 3) apply appropriate weightings to the parameters to determine their place in the valuation, and examine the results.

#### **4.4. Discount Rates/Rates of Return for Intangible Assets**

Selecting discount rates for intangible assets can be a challenging process as observable market evidence of discount rates for intangible assets is rare.

In selecting a discount rate for an intangible asset, valuers should perform an assessment of the risks associated with the subject intangible asset and consider observable discount rate benchmarks.

When assessing the risks associated with an intangible asset, a valuer should consider factors including the following:

- intangible assets often have higher risk than tangible assets,
- if an intangible asset is highly specialised to its current use, it may have higher risk than assets with multiple potential uses,
- single intangible assets may have more risk than groups of assets (or businesses),
- intangible assets used in risky (sometimes referred to as non-routine) functions may have higher risk than intangible assets used in more low-



risk or routine activities. For example, intangible assets used in research and development activities may be higher risk than those used in delivering existing products or services,

- intangible assets with more readily estimable cash flow streams, such as backlog, may have lower risk than similar intangible assets with less estimable cash flows, such as customer relationships.

Discount rate benchmarks are rates that are observable based on market evidence or observed transactions. The following are some of the benchmark rates that a valuer should consider:

- risk-free rates with similar maturities to the life of the subject intangible asset;
- cost of debt or borrowing rates with maturities similar to the life of the subject intangible asset;
- cost of equity or equity rates of return for participants for the subject intangible asset;
- weighted average cost of capital (WACC) of participants for the subject intangible asset or of the company owning/using the subject intangible asset;
- in contexts involving a recent business acquisition including the subject asset, the Internal Rate of Return (IRR) for the transaction should be considered.

## **5. Valuation of intangible assets for financial and accounting purposes**

Such valuations are performed in accordance with Part One of the BVS and this special section, and pursuant to the existing legislation for the relevant fields.

### **6. Assessing the liquidation Value of Intellectual and Industrial Property Rights, where applicable or necessary**

The liquidation value of intangible assets is assessed in cases where the subject assets constitute part of the property of legal entities, including state and municipal bodies, or of individuals.

**6.1.** Upon realisation of assets in a *forced sale* the valuer must take into account all the usual selling costs and special assumptions related to intangible assets with the lowest period of realisation and the lowest market value.

**6.2.** Upon realisation of assets in a *voluntary sale* the liquidation value is determined under the conditions of an arm's length transaction, taking

into account all costs relating to: the normal period of marketing, special assumptions concerning the intangible asset.

***Section Five: Specific and particular requirements for the assessment of commercial enterprises and receivables (CER)***

**1. SPECIAL LEGAL FRAMEWORK – laws, regulations, etc., related to the valuation of CER.**

**1.1. Special legal framework**

The special legal framework relevant to the valuation of commercial enterprises and receivables comprises laws, regulations, etc., including:

- Small and Medium Enterprises Act;
- Investment Promotion Act;
- Privatisation and Post-Privatisation Control Act;
- Concessions Act;
- Registered Pledges Act;
- Value Added Tax Act;
- Financial Collateral Arrangements Act;
- Accountancy Act;
- Non-Profit Legal Entities Act;
- Other laws and regulations.

**1.2. Conditions for the implementation of specific regulations.**

The valuation process involves considerations of facts, circumstances and evidence related to the subject asset. Extensive research on the circumstances is needed: legal status, financial and economic condition, market presence, analysis of the sector in which the enterprise operates; technical and technological condition, etc., with indication of the sources of information used. Any legal restrictions or reliefs associated with the normal operation of the asset should also be identified.

To comply with the requirement to identify the subject asset, the valuer must include the following in the valuation:

- Analysis of legal status, analysis of ownership and the respective rights and obligations of the owners, as well as other legal and tax identification parameters;
- financial, socio-economic and managerial analysis of the operations of the subject asset, arriving at key indicators of profitability, return, liquidity, critical points, bottlenecks, solvency, diagnostics, etc.;
- analysis of the educational structure and qualifications of employees, qualifications of the executives, analysis of employment and turnover rate, existence/lack of policies for the development of workforce and upgrade of qualifications, existence/lack of associations and organisations of employees, etc.;
- market analysis, product development analysis, analysis of technical, technological and other identification parameters, utilisation of production capacity, opportunities for developing new products and services and entry into new markets;
- identification of any primary or secondary indicators that affect the subject assets, including working environment, natural environment, level of safety, etc.

## **2. CONDITIONS AND ASSUMPTIONS in the valuation of CER.**

### **2.1. Special assumptions**

The assumptions made in the valuation of commercial enterprises and receivables must be in line with all the assumptions set out in Part One. These assumptions refer to facts or circumstances that are different from those observable at the date of valuation. The special assumptions affect the determination of the value of the subject asset.

Where the terms of the assignment involve specific instructions related to the purpose of the valuation, if any special assumptions have been made, these must be noted in the valuation report.

Special assumptions are made in the course of valuation in terms of the effect of the relevant circumstances on the valuation. Examples include circumstances where the valuer should make special assumptions about the value of the subject asset, such as:

- Type of the assessed interest – majority or minority interest
- Value in a state of bankruptcy or insolvency;
- Value in a state of liquidation;

- Compulsory purchase of land and buildings in order to meet pressing public needs; such land and buildings will be written off the assets of the enterprise and it will be compensated;
- Description of the contracts defining the type of receivable(s): receivables between related parties, trade receivables, assignments, etc.

Special laws and regulations may also require special assumptions, e.g. for the purpose of tax assessments or forced payment of debts to the state or municipality, etc.

Such assumptions may also include:

- Assumptions that the subscribed capital will not be transferred as a whole;
- Assumption that shares will be transferred as a whole as majority/minority interest, or on a piecemeal basis;
- Assumption that the enterprise will not retain its legal form;
- Assumption that the enterprise will not retain its current operations, but will change or extend its scope of business;
- Assumption that the enterprise is in negotiations to obtain external financing or construction of new production facilities and the like, to which effect there already are contracts, but they are not yet reflected in the documents submitted.

The valuation of commercial enterprises must include analysis of the following circumstances:

- 1) Existence of *Non-operating Assets*: an enterprise may own substantial assets that are in use but are not related to its principal economic activity.
- 2) Existence of *Redundant (Surplus) Assets*: an enterprise can have significant extra investment in assets which are not currently needed for its principal economic activity and are not used at the valuation date, but if necessary they can be put into use. Example: an enterprise may have excess inventory, buildings, plant, equipment or land which were acquired for a future expansion or have become redundant due to the reduction of its market share.
- 3) *Lack of assets/liabilities*: an enterprise may lack assets that are important to its business (such as inventory), or operational liabilities.

## **2.2. Assumptions about socio-economic and political conditions at the time of valuation**

Assumptions relating to macroeconomic and political factors that are substantially relevant to the subject asset. These assumptions may be both general and special assumptions in the valuation report, such as assumptions about:

- change of the Strategy for public debt management;
- changes in the Convergence Program for development of Bulgaria in the short term;
- specific levels of inflation;
- the expected growth of the economy in a particular future period;
- continuation or change of the state, social and tax policy and legislation;
- continuation or change of the credit policy;

### **2.3. Documentary support**

The documentary support in the preparation of the valuation report includes any factual information regarding: financial condition; existing contracts; annual financial reports; analytical and synthetic trial balances; accounting records; statements on the technical and technological capabilities of the subject asset; documents concerning the legal status; documents relating to environmental protection; documents relating to patents, licenses, trademarks and other characteristics of the subject asset.

## **3. TYPES OF COMMERCIAL ENTERPRISES AND RECEIVABLES**

### **3.1. Types of Commercial Enterprises: sole proprietor, single-member limited liability company, limited liability company, company limited by shares/joint-stock company, etc., pursuant to the Commerce Act.**

Assessment of commercial enterprises and receivables are carried out for:

- **Natural person merchant:** a natural person possessing legal capacity, registered as a sole proprietor with domicile in Bulgaria;
- **Legal person merchants:**
- **Limited Liability Company:** an entity with two or more members. The share capital comprises the members' contributions in cash or in kind.

- **Single-Member Limited Liability Company:** established by one person. The share capital comprises the contribution in cash or kind of the sole shareholder.
- **Company Limited by Shares / Joint-Stock Company:** established by two or more persons. The share capital is divided into shares certifying the contractual rights of the shareholders.
- **Single-Member Company Limited by Shares / Single-Member Joint Stock Company:** a company set up by one person. The share capital consists of the shares of the sole shareholder.
- **General Partnership:** established by two or more partners.
- **Limited Partnership:** established by two or more partners.
- **Partnership Limited by Shares:** established by general partners. The contributions of limited partners are materialised in shares.

### 3.2. Types of interests that a member of a company may have:

- **majority stake:** a package of shares or contributions in the subscribed capital of the company, amounting to more than 50% of its total subscribed capital.
- **minority stake:** a package of shares or contributions in the subscribed capital of the company, amounting to less than 50% of its total subscribed capital.

**3.3.** In assessing minority stakes, adjustments should be made to the value of capital derived upon valuation of 100% of the capital, with application of relevant premiums and/or discounts.

**3.3.1. Discount for lack of control:** takes into account the lack of ability to take management decisions about changes that could have been made by exercising majority control.

**3.3.2. Discount for lack of marketability (liquidity):** takes into account the lack of ability to take own decision to sell the minority stake. The discount for lack of marketability must be assessed using a reasonable method. The normally applicable methods are models for option pricing, research, etc.

**3.3.3. Control premium:** takes into account the ability to make decisions and the changes that can be made as a result of exercising control. All else being equal, participants would generally prefer to have control over a subject asset than not. Control premiums may be quantified using any reasonable method, but are typically calculated based on either an analysis of

the specific cash flow enhancements or reductions in risk associated with control or by comparing observed prices paid for controlling interests in publicly-traded securities to the publicly-traded price before such a transaction is announced.

**3.3.4. Discount for lack of right to distribute dividend:** takes into account the lack of ability to take own decision on the distribution of dividend.

**3.3.5. Other premiums/discounts,** non-exhaustively listed above.

### **3.4. Types of receivables (cross-company, state, in-kind, etc., in accordance with the existing legislation).**

#### **3.4.1. General characteristics.**

Receivables arise under: contract between legal entities; contract between a legal entity and a natural person; state and municipal receivables. Any financial relationship will create rights and obligations.

#### **3.4.2. Receivables are divided into three main types:**

3.4.2.1. *Financial receivables:* all rights of financial nature, regardless of their holder;

3.4.2.2. *Public financial receivables:* rights of financial nature whose holder is the state or a municipality;

3.4.2.3. *Public receivables:* a broader concept pertaining to rights of the state or a municipality, which include receivables of non-financial nature (fines, fees, local taxes, seizures, etc.).

#### **3.4.3. Types of public receivables and their origin**

3.4.3.1. **of financial nature:** Besides the general taxes, these include customs duties and fees. They have a statutory tax nature because they are determined unilaterally by the state, but unlike the general taxes these are collected on different legal grounds and flow regularly into the budget. The principle is the greater the revenue, the shorter the maturity.

3.4.3.2. **sanctions:** criminal or administrative charges (fines, coercive administrative measures, seizures, etc.).

3.4.3.3. **under the civil legislation:** such receivables are the result of participation of the state in relationships where it is not a bearer of power, but on an equal footing with the legal entities and individuals, and are divided into two groups:

1. receivables of a contractual nature;

2. receivables in the form of damages – these are not revenue to the budget.

3.4.3.4. **Other public receivables:** other state receivables – from privatisation, unclaimed winnings from lottery, defaulting scholarship students, etc.

#### **4. APPROACHES AND METHODS applied in the valuation process**

##### **4.1. Income approach**

The income approach is a principal manner of determining the value of a company, a stake, a separate part thereof or financial assets, whereby the value is determined by converting the expected revenues/profits.

The income approach involves estimation of cash flows. Each cash-flow projection is made after taking into account factors such as the nature of the cash flow; the reliability of the information available for the determination of the cash flow; capital structure; the efficiency of the asset in the past; the expected development prospects for the asset; expected development of the relevant industries and economic indicators. According to the nature of the asset, cash flow projections can rely on elements such as: net cash flow formed by profits; dividends; coupons and other sources of profit.

##### **Conversion of projected cash flows**

Projected cash flows are converted into value, taking into account the expected growth and timing of flows, the nature of the risk associated with their inflow, using the theory of the time cost of money.

The conversion of projected cash flows into a present value requires the determination of a discount rate and/or a capitalisation rate. In estimating the appropriate rate, the valuer should consider factors such as the level of interest rates, expected rates of return, capital structure, risk inherent in the anticipated cash flows.

The methods based on discounted cash flows take into account the expected change in the forecasted income. With the capitalisation methods, the expected change is reflected in the capitalisation rate.

The choice of a specific type of cash flows and the application of an appropriate capitalisation rate or discount rate depends on the nature of the cash flows and the type of subject asset.

#### **Methods for applying the income approach**

##### **4.1.1. Discounted cash flows method**



In applying this method, the valuer should make the general assumptions pertaining to it as described in the general part of these standards.

The choice of the most appropriate type of cash flow depends on the nature of the subject asset and the purpose of the valuation. In applying this method, the formation of cash flows is projected for each of several successive periods. The end of the period will not necessarily coincide with the end of the calendar year. The number of forecast periods depends on the specifics of the subject asset.

A terminal value is determined (value after a forecast period).

The terminal value is determined by capitalisation of the financial result for an infinite period of time, taking into account certain factors, namely:

- It is based on the last year of the forecast period.
- The potential growth after the forecast period is determined, and this growth rate is taken into account in determining the capitalisation rate.

In preparing the forecast, various different factors should be considered, such as:

1. The financial forecast should be based on assumptions about a “normal” future activity. The adjustment of revenues and expenses is to levels that are reasonably representative of expected continuing operations.
2. The key factors or assumptions that form the basis of the forecast are identified.
3. The key factors and assumptions are supported by reasonable evidence.
4. The terminal year is the first year after the forecast period.
5. The valuation report reflects and indicates the information received from all sources used in the forecasting.

In preparing the projected financial statements, the valuer should exclude the impact of the following factors:

1. Non-operating or redundant assets;
2. Extraordinary revenues and expenses, beyond the ordinary operational (production) activities of the enterprise;
3. Depreciation allowances, if these are larger than those used in the relevant industry or do not correspond to those provided for in the Corporate Income Tax Act;
4. Analysis of revenues and expenses which are excessive or unusual for the operational activities.

5. The forecast must not include revenues and expenses from exchange rate differences.
6. Cash flows formed in transactions and contractual relationships that are not concluded under arm's lengths conditions.
7. Cash flows formed by labour costs or other costs associated with the lease of assets (if not typical for the enterprise's operations), subscription contract or contract between related parties, to their market equivalents.
8. Cash flows impacted by non-recurring events from historic revenue and expense items.
9. Cash flows formed by differences regarding the creation and storage of inventory so that in value terms they reflect the real economic conditions in which they were created and are currently stored.
10. Other adjustments designed to reflect factors that are not taken into account in the cash flow forecasts and in the determination of discount rate.

The value of the enterprise is arrived by discounting either future net gains or net cash flows (with the discount rate being appropriate for the selected stream of benefits).

The *discount rate* is determined.

The discount rate is applied to the estimated future cash flows, including the terminal value, if any.

The *terminal value* is determined.

The value of an enterprise/a business is normally assessed using cash flows, which do not include long-term debt, and a discount rate determined on the basis of weighted average cost of capital. Long-term debt and available non-operating assets (if any) are added after arriving at an indication of value via the discounted cash flow and discounted terminal value;

When determining the value of the equity, the cash flows include the repayment schedule for the long-term debt, and a discount rate is determined based on a method for assessing the capital assets or other suitable method for the relevant asset.

#### **4.1.2. Income Capitalisation Method**

In applying this method, the valuer should make the general assumptions pertaining to it as described in the general part of these standards.

With the income capitalisation method, a representative amount of income is multiplied by the capitalisation rate in order to convert income into value.

The value of the asset is assessed by taking the following steps:

1. Obtaining the financial data for a representative period of time.
2. Adjusting the financial data.
3. If the stream of benefits to be capitalised is cash flow, make further adjustment of net profit to determine the gross or net cash flow.
4. Determine the capitalisation rate.
5. Determine the operational period, which will be capitalised.
6. Determine the value of the asset by adjusting the net profit using the capitalisation rate;
7. If adjustments to the financial position to reflect the impact of non-operating or redundant assets or shortage of assets have been made, an appropriate value of these assets should be determined at the valuation date and this value is added/subtracted, and the capitalised cash flow is adjusted as follows: the assessed value is added to the value of non-operating assets; the assessed value is added to the value of redundant assets; the assessed value is added to the value of lack/shortage of assets.

#### **4.2. Comparative approach**

The income approach is a principal manner of determining the value of an enterprise, a stake, a separate part thereof or financial assets, whereby the value is determined by comparing the subject asset with similar enterprises, shareholdings or securities that have already been sold.

The comparative approach includes methods such as the comparable transactions method (comparison of transactions with similar enterprises and/or analysis of previous transactions with property of the subject enterprise), the publicly traded comparable transactions method (public trading of stocks, shares and other capital instruments).

The comparable asset used for comparison must be described with sufficiently representative comparative data.

The factors to be considered in assessing whether appropriate benchmarks exist include:

- Existence of analogy/similarity in terms of qualitative and quantitative characteristics of the comparable asset.
- Scope and verifiability of the evidence for the comparable/similar asset.
- The circumstances in which the price for the comparable/similar asset was achieved: an ordinary or a forced transaction.

##### **4.2.1. Methods of comparison**

The comparisons are typically made using ratios or multiples. The use of ratios must comply with all relevant factors, some of which are:

- Selection of underlying evidence for the ratio.
- Selection of underlying period of time and/or method for the evidence.
- Method of calculating and comparing the evidence for the subject asset.
- Information on the date/period of time of the price evidence used in the ratio.

#### **Methods of applying the comparative approach**

The comparable enterprises must be selected among those operating in the same industry as the subject business or in an industry that responds to the same economic variables. Factors that should be considered in assessing whether a reasonable basis for comparison exists include:

- Similarities between the subject enterprise and the comparable enterprise in terms of qualitative, quantitative and financial performance indicators.
- Ability to verify the authenticity and reliability of data on the comparable enterprise.
- Whether the price of the comparable enterprise represents an arm's length and orderly transaction and what share of the property it concerns.

#### **Application Algorithm:**

1. Research and analysis of financial statements for each of the selected comparable enterprises for a representative period of time.
2. Based on the financial statements, determining appropriate financial parameters of the subject enterprise, in order to create a basis of comparison with the comparable enterprises.
3. Selection of appropriate market multiples for the subject enterprise.
4. Estimation of the selected market multiples for each comparable enterprise.
5. When more than one market multiple exist, a weighting of the results obtained is undertaken to arrive at a single value. The selected market multiples for the comparable enterprises are used to adjust the selected parameters for the subject enterprise.
6. After the adjustment of the selected parameters for the subject enterprise, the present value is derived.
7. Non-operating assets (if any) are added.

8. The value of the enterprise is derived.
9. If necessary, adjustment for majority or minority stake is made.

#### **4.3. Other methods for assessing commercial enterprises and receivables**

##### **4.3.1. Net Asset Value Method**

The Net Asset Value method is used for valuation of enterprises whose value is primarily the sum of the values of their investments, assets and liabilities.

The Net Asset Value method is characterized by restating the balance of the subject enterprise. All assets, liabilities and equity are adjusted in accordance with their market value.

##### Application Algorithm:

1. assessment of each of the constituent assets that are part of the subject enterprise, using appropriate approaches and methods of valuation;
2. assessment of each of the constituent liabilities that are part of the subject enterprise or asset, using appropriate approaches and methods of valuation;
3. adding together the values of the constituent assets and liabilities in order to derive the value of the subject enterprise.
4. the values of assets, liabilities and equity reported in the adjusted balance are derived in accordance with Part Two: valuation standards for different types of assets.

#### **5. Methods for assessing the liquidation value.**

The liquidation value is the value derived under special conditions and is based on the opinion of value already formed in the course of valuation.

Determination of the liquidation value of commercial enterprises and receivables, if provided for in the purpose of the valuation, is carried out in cases of forced or voluntary sale.

**5.1.** When commercial enterprises and receivables subject to valuation are realised in a forced sale, the liquidation value is assessed by taking into account all the costs of sale under conditions of a shorter period of time and at the lowest value.

**5.2.** When commercial enterprises and receivables subject to valuation are realised in a voluntary sale, the liquidation value is assessed in terms of

an ordinary transaction, taking into account all the costs under conditions of normal marketing period and special assumptions about the market.

## **6. Goodwill**

In connection with assessing the value of a commercial enterprise, where appropriate and in accordance with the Accounting Act, the Corporate Income Tax Act, the applicable accounting standards and these Bulgarian Valuation Standards, the valuer should consider the value of goodwill.

**6.1.** Goodwill is an intangible asset consisting in any future economic benefit arising from a business, an interest in a business or from the use of a group of assets which has not been separately recognised in another asset. The value of goodwill is typically measured as the residual amount remaining after the values of all identifiable tangible, intangible and monetary assets, adjusted for actual or potential liabilities, have been deducted from the value of a business as determined by the net asset value method.

**6.2.** As the amount of goodwill is dependent on which other tangible and intangible assets are recognised, its value can be different when calculated for different purposes.

**6.3.** The amount of goodwill may vary depending on the purpose of valuation and includes elements such as:

**6.3.1.** company-specific synergies arising from a combination of two or more businesses (e.g., reductions in operating costs, economies of scale or product mix dynamics);

**6.3.2.** opportunities to expand the business into new and different markets;

**6.3.3.** the benefit of an assembled workforce (excluding any intellectual property developed by members of that workforce);

**6.3.4.** the benefit to be derived from future assets, such as new customers and future technologies.

Applicable accounting standards (IAS 22 Accounting for business combinations and IFRS 3 Business Combinations) recognise only externally generated goodwill arising on a business combination.

Under IFRS 3, Business Combinations, the acquirer in a business combination recognises goodwill as the excess of the aggregate of the consideration transferred, the amount of any non-controlling interest in the

acquiree in a business combination achieved in stages, the fair value at the date of acquisition of the previously held equity interest in the acquiree over the net amount of identifiable assets acquired and liabilities assumed.

IAS 22 defines **goodwill** as any excess of the original cost of acquisition over the acquirer's share in the fair value of net assets acquired (identifiable assets less identifiable liabilities).

IAS 22 defines **negative goodwill** as any excess of the acquirer's share in the fair value of net assets acquired (identifiable assets less identifiable liabilities) over the original cost of acquisition at the date of acquisition.

IFRS 3 provides for an annual review for **impairment**. According to the requirements of IAS 36, an asset is impaired when its carrying amount exceeds its recoverable amount. An impairment loss recognised for goodwill cannot be reversed in a subsequent period.

### ***Section Six: Specific and particular requirements for measurement of financial assets and financial institutions (FAFI)***

In the valuation of Financial Assets and Financial Institutions (FAFI), the laws and regulations mentioned in Part One of a BVS must be taken into account.

#### **1. SPECIAL LEGAL FRAMEWORK: laws, regulations, etc. related to the valuation of FAFI.**

##### **1.1. Special legal framework**

- **Commission Regulation (EC) No.809/2004** of 29 April 2004 implementing Directive 2003/71/EC of the European Parliament and of the Council as regards information contained in prospectuses as well as the format, incorporation by reference and publication of such prospectuses and dissemination of advertisements;
- **Commission Regulation (EC) No. 1287/2006** of 10 August 2006 implementing Directive 2004/39/EC of the European Parliament and of the Council as regards record-keeping obligations for investment firms, transaction reporting, market transparency, admission of financial instruments to trading, and defined terms for the purposes of that Directive;
- **Regulation (EC) No. 1060/2009** of the European Parliament and of the Council of 16 September 2009 on credit rating agencies.

##### **1.1.1. LAWS**

- Accountancy Act and IFRS and IAS, with particular reference to IFRS 9 effective from 01.01.2018.
- Measures Against Market Abuse With Financial Instruments Act.

**Bulgarian National Bank – Laws:**

- Bulgarian National Bank Act
- Credit Institutions Act
- Payment Services and Payment Systems Act
- Recovery and Resolution of Credit Institutions and Investment Firms Act

**1.1.2. REGULATIONS**

**Bulgarian National Bank – Ordinances:**

- Ordinance No. 2 of the BNB of 22 December 2006 on the Licenses, Approvals and Permissions Granted by the Bulgarian National Bank According to the Credit Institutions Act
- Ordinance No. 3 of the BNB of 16 July 2009 on the Terms and Procedure for the Execution of Payment Transactions and Use of Payment Instruments
- Ordinance No. 4 of the BNB of 21 December 2010 on the Requirements for Remunerations in Banks
- Ordinance No. 5 of the Ministry of Finance and the BNB on the Terms and Procedure for Acquisition, Registration, Redemption and Trade in Government Securities
- Ordinance No. 6 of the BNB on Extending Collateralized Lev Loans to Banks
- Ordinance No. 7 of the BNB of 24 April 2014 on Organisation and Risk Management of Banks
- Ordinance No. 8 of the BNB of 24 April 2014 on Banks' Capital Buffers
- Ordinance No. 9 of the BNB of 26 July 2017 on the Information and Documents Proving Compliance with the Requirements to Temporary Administrators or Special Managers of a Bank
- Ordinance No. 10 of the BNB on the Internal Control in Banks
- Ordinance No. 11 of the BNB on Bank Liquidity Management and Supervision
- Ordinance No. 12 of the BNB of 29 September 2016 on the Register of Bank Accounts and Safe Deposit Boxes
- Ordinance No. 13 of the BNB of 18 August 2016 on the Application of International Bank Account Numbers and BAE Codes



- Ordinance No. 14 of the BNB of 4 February 2010 on the Content of the Audit Report for Supervisory Purposes (effective as of 1 March 2010)
- Ordinance No. 15 of the Ministry of Finance and the BNB on the Control over Transactions in Government Securities
- Ordinance No. 16 of the BNB on Licensing of Payment Institutions, Electronic Money Institutions and Payment System Operators
- Ordinance No. 18 of the BNB on the Control over Quality of Banknotes and Coins in Cash Circulation
- Ordinance No. 19 of the BNB of 20 October 2016 on Credit Intermediaries
- Ordinance No. 20 of the BNB on the Issuance of Approvals to the Members of the Management Board (Board of Directors) and Supervisory Board of a Credit Institution and Requirements for Performing their Duties
- Ordinance No. 21 of the BNB on the Minimum Required Reserves Maintained with the Bulgarian National Bank by Banks (effective as of 4 January 2016)
- Ordinance No. 22 of the BNB of 16 July 2009 on the Central Credit Register
- Ordinance No. 23 of the BNB of 16 December 2016 on the Terms and Procedure for Payout of Covered Deposit Amounts
- Ordinance No. 24 of the BNB on the Exchange of Old Banknotes and Coins for New Banknotes and Coins in Connection with the Redenomination of the Bulgarian Lev
- Ordinance No. 25 of the BNB under § 4, para. 2 of the Transitional and Final Provisions of the Redenomination of the Bulgarian Lev Act
- Ordinance No. 26 of the BNB on Financial Institutions
- Ordinance No. 27 of the BNB on the Balance of Payment Statistics, International Investment Position and Securities Statistics
- Ordinance No. 28 of the MF and BNB on Information and Documents Submitted to Payment Service Providers about Crossborder Transfers and Payments to a Third Party (effective as of 1 March 2013)
- Ordinance No. 29 of the BNB on Establishing the Procedure for Financing the Administrative Costs of the Bulgarian Deposit Insurance Fund
- Ordinance No. 30 of the BNB on Calculation of the Premium Contributions Due by Banks under the Law on Bank Deposit Guarantee
- Ordinance No. 31 of the BNB on Government Securities Settlement

- Ordinance No. 32 of the BNB on Reporting Requirements and Assignee's in Bankruptcy Budget
- Ordinance No. 33 of the BNB on the Assignee's in Bankruptcy Remuneration
- Ordinance No. 34 of the BNB on Collecting Information and Conducting Inspections Regarding Assignee's in Bankruptcy Activity
- Ordinance No. 35 of the Ministry of Justice and the BNB on the Procedure for Auction Sale of Movables Placed as Collateral with a Bank
- Ordinance No. 36 of the BNB on Custodian Banks under the Social Security Code
- Ordinance No. 38 of the BNB on the Capital Adequacy of Banks
- Ordinance No. 5 of the Ministry of Justice and the BNB on the Terms and Procedure for Inclusion in and Exclusion from the List of Experts under Article 151, paragraph 4 of the Credit Institutions Act
- Ordinance No. 6 of the Ministry of Justice and the BNB on the Manner of Calculation and Payment of the Interest on Funds in Special Accounts of Private Enforcement Agents
- Ordinance No. 81213-444 of the Ministry of Interior and the BNB on the Organisation and Control over Ensuring Security of Banks and Non-bank Financial Institutions.

#### **Financial Supervision Commission – Laws:**

- Financial Supervision Commission Act.

##### **1.1.3. Laws related to the capital market:**

- Special Purpose Vehicles Act.
- Collective Investment Schemes and Other Undertakings for Collective Investments Act.
- Public Offering of Securities Act.
- Markets in Financial Instruments Act.
- Recovery and Resolution of Credit Institutions and Investment Firms Act.
- Measures against Market Abuse with Financial Instruments Act.
- Supplementary Supervision of Financial Conglomerates Act.

##### **1.1.4. Laws relating to the insurance market:**

- Export Insurance Act.
- Health Insurance Act.

##### **1.1.5. Codes:**

- Social Security Code.

- Insurance Code.

#### **Financial Supervision Commission – Ordinances:**

##### **1.1.6. Ordinances related to the capital market:**

- Ordinance amending and supplementing Ordinance No. 13 of 22 December 2003 on a tender offer for buying and exchange of shares.
- Ordinance amending and supplementing 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.
- Ordinance No. 50 on the capital adequacy and the liquidity of investment firms and the supervision of their compliance.
- Ordinance on procedures for the exchange of information and cooperation between state bodies involved in the protection of persons working under an employment contract, who have filed notices of infringement relating to market abuse with financial instruments.
- Ordinance No. 2 of 17 September 2003 on the prospectuses for public offering and admission to trading on a regulated market of securities and disclosure of information
- Ordinance No. 11 of 3 December 2003 on licenses to carry out activity as regulated market, organizer of multilateral trading facility, investment intermediary, investment company, management company and special purpose vehicle.
- Ordinance No. 8 of 12 November 2003 on the Central Depository.
- Ordinance No. 7 of 5 November 2003 of the requirements which shall be met by natural person who under a contract directly execute transactions in securities and provide investment advice with regard to securities as well as the procedure for obtaining and forfeiting the right to exercise such activity.
- Ordinance No. 15 on the maintenance and storage of records by the Financial Supervision Commission and circumstances subject to entry;
- Ordinance No. 16 of 7 July 2004 on the terms and procedure for execution of margin purchases, short sales and lending of financial instruments.
- Ordinance No. 22 of 29 July 2005 on the terms and procedures for listing and delisting of public companies and other issuers of securities

and securities issues in the register of the Financial Supervision Commission.

- Ordinance No. 23 of 8 February 2006 on the terms and procedures for client assets valuation.
- Ordinance No. 37 of 29 November 2006 on recognition of the accepted market practices.
- Ordinance No. 38 of 25 July 2007 on the requirements to the activities of investment intermediaries.
- Ordinance No. 39 of 21 November 2007 on disclosure of a holding in a public company.
- Ordinance No. 40 of 27 February 2008 on the listing of securities for trade at official markets.
- Ordinance No. 44 of 20 October 2011 on the requirements to the activity of collective investment schemes, their management companies, national investment funds and managers of alternative investment funds.
- Ordinance No. 46 of 11 April 2012 on the terms and procedure for payment of compensation from the Investor Compensation Fund.
- Ordinance of 17 December 1997 on the minimum contents of a proxy form for the general meeting of shareholders of a company whose shares have been subject to public offering.

#### **1.1.6.1. Ordinances relating to the insurance market:**

- Ordinance No. 53 of 23 December 2016 on the requirements to the reporting, valuation of assets and liabilities and establishment of technical provisions of insurers, reinsurers and the Guarantee Fund.
- Ordinance No. 49 of 16 October 2014 on compulsory third party liability insurance of motorists and accident insurance of passengers in public transport vehicles.
- Ordinance repealing Ordinance No. 42 of 2010 on the establishment and maintenance of an information system for risk assessment, management and control, including for the issuance of policies on obligatory insurances under Art. 249, items 1 and 2 of the Insurance Code.
- Ordinance No. Iz-41 of 12 January 2009 on the documents and procedure for drawing them up in case of road traffic accidents and the procedure of communication between the Ministry of the Interior, the Financial Supervision Commission and the Guarantee Fund.

- Ordinance No. 31 of 2 February 2006 on the terms and conditions for conducting the examination for the recognition of the competence of a responsible actuary, for the recognition of competence acquired outside the Republic of Bulgaria and the form of the actuarial certification, the form and content of the actuarial report and the statements under the Insurance Code certifiable by the responsible actuary.
- Ordinance No. 51 of 28 April 2016 on own funds and solvency capital requirements of insurance and reinsurance undertakings, and groups of insurance and reinsurance undertakings.
- Ordinance No. 54 of 30 December 2016 on the records of the Guarantee Fund for the exchange and protection of information and for issuance and reporting of compulsory insurances under Art. 461, items 1 and 2 of the Insurance Code.
- Ordinance No. 21 of 16 March 2005 on the own funds and solvency margin of insurers and reinsurers.
- Ordinance No. 24 of 8 March 2006 on the compulsory insurance under Art. 249, items 1 and 2 of the Insurance Code and the methodology for settlement of claims for damages caused by motor vehicles.
- Ordinance No. 28 of 10 May 2006 on terms and procedures for holding examination for professional qualification of insurance brokers and recognising qualification acquired in a Member State.
- Ordinance No. 32 of 13 September 2006 on the requirements to the organisation and activity of the internal control unit of the insurer, reinsurer and of the persons included in an insurance or reinsurance group.
- Ordinance No. 43 of 27 July 2011 on the requirements for remunerations in insurers, reinsurers and health insurance companies.

#### **1.1.6.2. Ordinances related to the social security market:**

- Ordinance No. 56 of 4 January 2018 on the minimum content of the investment policies of the supplementary pension insurance funds.
- Ordinance No. 52 of 21 October 2016 on the procedure and method of deduction of the investment fee charged by pension insurance companies in the management of supplementary mandatory pension insurance funds.
- Ordinance on the boards of trustees of supplementary mandatory pension insurance funds and the advisory boards of supplementary

voluntary pension insurance funds, adopted by Council of Ministers Decree No. 29 of 18 February 2005.

- Ordinance No. 3 of 24 September 2003 on the terms and procedures for change of participation and transfer of accumulated funds of an insured person from one supplementary pension insurance fund in another corresponding fund managed by another pension insurance company.
- Ordinance No. 9 of 19 November 2003 on the terms and procedures for valuation of assets and liabilities of supplementary pension insurance funds and pension insurance companies, the value of the net assets of the fund, on the calculation and reporting of the value of one share and on the requirements for maintaining individual files.
- Ordinance No. 10 of 26 November 2003 on the requirements to the equity's composition and structure (capital base) of a pension insurance company and to the minimum liquid funds of the company and of the supplementary pension insurance funds it manages, in force from 17 March 2004, issued by the Financial Supervision Commission.
- Ordinance No. 12 of 10 December 2003 on the manner and procedure for determining the minimum profitability of the asset management of supplementary compulsory pension insurance funds, for covering the difference to the minimum profitability and creating and using reserves to guarantee minimum profitability.
- Ordinance No. 17 of 7 July 2004 on the documents required for the issuance of permission for transformation of a pension insurance company and supplementary pension insurance fund and the requirements to the plans under Art. 327, para 1, item 3 and Art. 336, para 1 of the Social Security Code.
- Ordinance No. 19 of 8 December 2004 on the order for the setting aside of pension reserves by the pension insurance companies which manage universal pension fund and/or additional voluntary pension insurance fund, adopted by Decision No. 30-N of 8 December 2004 of the Financial Supervision Commission, prom. SG, No. 110 of 17 December 2004, in effect as of 30 December 2004.
- Ordinance No. 29 of 12 July 2006 on the minimum level of credit ratings of banks and on the definition of the countries, regulated markets and indexes of regulated securities markets in accordance with Art. 176, para. 2 of the Social Security Code issued by the Financial Supervision Commission.

- Ordinance No. 33 of 19 September 2006 on the individual applications for participation in a supplementary compulsory pension insurance fund and on resuming the participation in a universal pension fund.
- Ordinance No. 34 of 4 October 2006 on the conditions for transactions to reduce the investment risk associated with the assets of a supplementary pension insurance fund and the requirements and restraints on such transactions.
- Ordinance No. 36 of 22 January 2004 on Custodian Banks under the Social Security Code Adopted by Decision No. 12 of 22.01.2004 of the BNB Board.
- Ordinance No. 47 of 11 July 2012 on the requirements to the information systems of pension insurance companies issued by the Chairman of the Financial Supervision Commission, Prom. SG No. 57 of 27.07.2012, effective as from 28.07.2013.
- Ordinance No. 29 of 12 July 2006 on the minimum level of credit ratings of banks and on the definition of the countries, regulated markets and securities regulated market indexes under art. 176, para 2 of the Social Security Code.

## **2. CONDITIONS AND ASSUMPTIONS in the valuation**

### **2.1. Assumptions about socio-economic conditions**

Assumptions related to the socio-economic conditions are necessitated by the dynamics and nature of the changes in legislation in Bulgaria. Taking into account the current legislation of Bulgaria in the valuation of financial assets and financial institutions is critical for the preparation of the valuation report, the type and number of its appendices, including general and special assumptions reported and reliably supported with the necessary information and/or circumstances, and therefore the legislation may have a significant impact on the formation of an opinion of value, and in particular in the areas of:

- Tax legislation;
- Legislation relating to the regulation and supervision of credit and financial institutions, including regulation of capital adequacy of banks, credit and financial institutions;
- Legislation relating to lending and protection of the deposits of individuals and entities;

- Legislation relating to ensuring the financial stability of lending and insurance companies and pension and health insurance funds;
- Legislation concerning the regulation and supervision of insurance companies, pension and health insurance funds;
- Legislation relating to accounting, auditing, and financial reporting standards and the respective requirements laid down in them.
- Legislation affecting the market mechanisms, which could lead to changes in the mechanisms of supply and demand of financial assets and instruments as well as in the market itself. In many cases these can be changes in various tax and other reliefs or burdens in the case of protectionism or liberalisation of market conditions.
  - Legislation relating to the protection of the interests of individuals using the services of intermediaries, insurers, banks, etc.
  - Requirements that certain derivatives be transacted through a central counterparty, which can mitigate the risk.

## **2.2. General and Special Assumptions**

When the valuer needs to make general and/or special assumptions, these must be noted in the terms of the assignment and the valuation report.

Unlike in the case of general assumptions that the valuer must do to fulfil the purpose of the valuation, when the valuers makes special assumptions, these concern facts or circumstances other that do not exist at the valuation date. The result is indication of market value based on such special assumptions.

The client should be aware of the effect of the changed circumstances on the opinion of value. Examples include cases where the purpose of the valuation lists special assumptions about the subject asset, which may include:

- Special assumptions required by special laws or regulations, e.g. for the purpose of tax assessments or forced liquidation; statutory restrictions related to the operations of stock exchanges or the manner of trading in various financial instruments, including government securities, municipal bonds, receivables, etc.
- The financial stability and the impact of the credit risk of both the issuer and the counterparty on the financial instrument being valued.
- Analyse and differentiate between the credit risk of the instrument and the credit risk of the issuer and/or counterparty.
- Establishing the priority/subordination of the instrument, which is



essential for assessing the risk of default on commitments undertaken by issuers.

When assumptions are needed to clarify the status of the subject asset or of circumstances associated with it, these must be recorded in detail in the valuation report. Such assumptions may have a significant impact on the value, e.g.:

Where a financial instrument is valued using a yield curve different from that which a market participant would have used.

Where secondary trading in a financial instrument exists, there should be sufficient market data to provide evidence of the appropriate risk adjustment. If not, it may be necessary to examine credit indices, information available for entities with similar risk characteristics, or estimate a credit rating for the party using its own financial information. The varying sensitivities of different liabilities to credit risk should be taken into account. The risk adjustment or credit spread applied in the valuation is based on the return on the particular instrument being valued.

### **3. Types and characteristics of financial assets and financial instruments**

The national financial accounts of Bulgaria have been developed in accordance with the European System of National and Regional Accounts 2010 (ESA 2010). They reflect the financial transactions performed between institutional units (sectors).

The financial accounts examine the following financial instruments that can be both assets and liabilities of institutional sectors:

- **Monetary gold and special drawing rights:** the subcategory “monetary gold” consists of all transactions in monetary gold, i.e. gold held as a component of foreign reserves by monetary authorities. Gold is financial asset only for the subsector Central Bank.
- **Subcategory “Special Drawing Rights (SDR)”:** it includes all transactions in special drawing rights, i.e. International reserve assets created by the IMF and allocated to its members to supplement existing reserve assets.
- **Subcategory “Currency and deposits”:** it consists of all transactions in currency and deposits, i.e. currency in circulation and all types of deposits in national and foreign currency. This subcategory is divided into three subgroups of financial operations: “Currency” includes all currency transactions, i.e. banknotes and coins in circulation that are commonly used to make payments.

- **Transferable deposits:** this subcategory consists of all transactions in transferable deposits, i.e. deposits (in national or foreign currency) which are immediately convertible into currency or transferable by check, banker's order, debit order or similar means, without penalty or restriction.
- **Other deposits:** this subcategory consists of all transactions in other deposits, i.e. deposits (in national or foreign currency) other than transferable deposits. Other deposits cannot be used to make payments at any time and are not convertible into currency or transferable deposits without any kind of significant restriction or penalty. These are term deposits, savings deposits, deposits resulting from a savings scheme or contract, etc.
- **Debt securities:** this category comprises financial instruments that serve as evidence of a debt. It consists of all transactions in securities other than shares, i.e. financial assets which are bearer instruments, including government securities and bonds. These are usually negotiable and traded on secondary markets or can be negotiated on the market and do not give the holder any ownership rights in the institutional unit issuing them. *The main category Debt Securities is divided into two subcategories:*
  - **Short-term debt securities:** Debt securities with an original maturity of less than a year, payable to the lender upon request;
  - **Long-term debt securities:** Debt securities with an original maturity of more than one year or with no maturity specified.
- **Loans:** the category “Loans” consists of all transactions in loans, i.e. financial assets or liabilities which are created when lenders provide funds to borrowers either directly or through brokers, and which are either evidenced by non-tradable documents or not evidenced by documents at all. This category is divided into:
  - Short-term loans: loans with an original maturity of up to one year and loans to be repaid on demand;
  - Long-term loans: loans with an original maturity of more than one year or with no maturity specified.
- **Equity and investment fund shares/units**

The category “Equity and investment fund shares/units” consists of all transactions in shares and other assets, i.e. financial assets which represent property interests in corporations or quasi-corporations. These financial assets entitle their holders to a share in the profits of corporations or quasi-

corporations and to a share in their net assets upon liquidation. This category is divided into two subcategories:

- Equity: financial assets that materialise claims on the residual value of a corporation or quasi-corporation, after satisfying the claims of all its creditors;
- Investment Fund Shares/Units: securities related to stockholdings, which are listed on an exchange.

- **Insurance, pension and standardised guarantee schemes**

The category “Insurance, pension and standardised guarantee schemes” includes financial assets of insurance policy holders or beneficiaries and liabilities of insurers, pension funds, or issuers of standardised guarantees.

- **Financial derivatives and employee stock options**

The category “Financial derivatives and employee stock options” consists of financial assets associated with a financial asset, non-financial asset or index through which the specific financial risks can be traded independently on the financial markets. This category is divided into two subcategories:

- Financial Derivatives: financial instruments linked to a specific financial instrument, index or commodity through which specific financial risks can be traded independently of the financial markets;
- Employee Stock Options: financial assets in the form of agreements concluded on a given date, under which an employee may purchase a number of shares of the employer at a specified price or at a certain time or within a time period immediately following the date of vesting.

- **Other accounts receivable/payable**

The category “Other accounts receivable/payable” includes financial assets or liabilities created against a financial or non-financial transaction in cases where there is a timing difference between this transaction and the corresponding payment. This category is divided into:

- Trade credits and advances: financial claims arising from the direct extension of credit by suppliers of goods and services to their customers, and advances for work that is in progress or yet to be undertaken in the form of prepayment by customers for goods and services that have not yet been delivered;
- Other accounts receivable/payable, excluding trade credits and advances: financial assets or liabilities arising from timing differences between distributive transactions or financial

transactions on the secondary market and the corresponding payment.

### **Features of financial institutions**

At the aggregate level, sector “Financial corporations” includes the following subsectors:

- Central bank
  - Deposit-taking corporations except the central bank;
  - Money market funds;
  - Investment funds other than money market funds;
  - Other financial intermediaries except insurance corporations and pension funds;
  - Financial auxiliaries;
  - Captive financial institutions and lenders;
  - Insurance corporations;
  - Pension funds.
- ✓ **Subsector “Central bank”** includes the Bulgarian National Bank (BNB), whose main function is to maintain price stability by ensuring the stability of the national currency. The Bulgarian National Bank contributes to the establishment and functioning of efficient payment systems and supervises them. It holds the exclusive right to issue banknotes and coins in Bulgaria.
  - ✓ **Subsector “Deposit-taking corporations except the central bank”** includes all financial corporations and quasi-corporations which are principally engaged in financial intermediation and which receive deposits and/or close substitutes for deposits from institutional units and for its own account extend loans and/or invest in securities. This includes all commercial banks.
  - ✓ **Subsector “Money market funds”** consists of all financial corporations and quasi-corporations except BNB and commercial banks, principally engaged in financial intermediation.
  - ✓ **Subsector “Investment funds other than money market funds”** covers all collective investment schemes that are principally engaged in financial intermediation. The following financial intermediaries fall into this subsector: open and closed-end investment funds, real-estate investment funds, investment funds investing in other funds and hedge funds.
  - ✓ **Subsector “Other financial intermediaries except insurance corporations and pension funds”** includes financial intermediaries engaged mainly in long-term financing.
  - ✓ **Subsector “Financial auxiliaries”** covers all financial corporations and

quasi-corporations which are principally engaged in activities closely related to financial intermediation but which in themselves are not financial intermediaries.

- ✓ **Subsector “Captive financial institutions and lenders”** includes all financial corporations and quasi-corporations which are neither engaged in financial intermediation nor provide ancillary financial services, and the majority of whose assets or liabilities are not traded on the open market.
- ✓ **Subsector “Insurance corporations”** consists of all financial corporations and quasi-corporations that are principally engaged in financial intermediation as the consequence of the pooling of risks mainly in the form of direct insurance or reinsurance.
- ✓ **Subsector “Pension funds”** includes all financial corporations and quasi-corporations that are principally engaged in financial intermediation as the consequence of the pooling of social risks and needs of the persons insured (social security). Pension funds as social security schemes provide income upon retirement, and often make payments for death and disability.

#### **4. APPROACHES AND METHODS used in the valuation process**

The approaches and methods used for assessing financial institutions (corporations) and financial assets follow the general philosophy and general approaches and methods described in Part One of these BVS.

This section examines the specificity in the valuation of financial institutions (corporations) and financial assets.

##### **Approaches and methods applied in the valuation process**

The valuer should define and justify the approaches and methods applied in order to determine the market value of the subject asset. The selected approaches and methods of valuation should be consistent with the basis of value and with all general and special assumptions that the valuer has analysed beforehand and duly described.

##### Approaches:

1. Income Approach
2. Comparative approach

##### Methods:

- Market comparisons method
- Market multiples method
- Income capitalisations method
- Discounted cash flows method
- Net asset value method

#### **4.1. Income approach**

The income approach is a tool to determine the value of an asset by applying one or more methods whereby the value is determined by converting the expected revenues/profits.

The income approach involves estimation of cash flows. Each cash-flow projection is made after taking into account factors such as the nature of the cash flow; capital structure; efficiency of the asset; expected development prospects for the asset; circulation of the asset; liquidity of the asset; expected developments in the relevant industries and economic indicators; risk of investments in the asset. According to the nature of the asset, cash flow projections can rely on elements such as: net cash flow formed by operating profits; distribution of dividends; coupons; anticipated return and other sources of income and profit.

##### **Conversion of projected cash flows**

Projected cash flows are converted into value by using procedures that take into account the expected growth and timing of flows, the nature of the risk associated with their movement, using the theory of the time cost of money.

The conversion of projected cash flows into a present value requires the determination of a discount rate and/or a capitalisation rate. In estimating the appropriate rate, the valuer should consider factors such as the level of interest rates, expected rates of return, capital structure of the issuer, risk inherent in the anticipated cash flows, maturity date, expectations concerning inflation and other specific factors.

The methods based on discounted cash flows take into account the expected growth in forecasting the future income and profits. With the capitalisation methods, the expected growth is reflected in the capitalisation rate.

The capitalisation rate or discount rate applied must match the type of cash flows used, taking into account any specific risk factors. The choice of a specific type of cash flows and the application of an appropriate capitalisation rate or discount rate depends on the nature of the subject asset, and in particular:

- When assessing the value of a financial institution (corporation), the appropriate method is “weighted average cost of capital”;
- When assessing the value of financial assets, the appropriate method is “cost of equity”.

## **Methods for applying the income approach**

### **4.1.1. Discounted cash flows method**

In applying this method, the valuer should make the general assumptions pertaining to it as described in the general part of these standards.

The choice of the most appropriate type of cash flow depends on the nature of the subject asset and the purpose of the valuation. In applying this method, two main cash flows are formed:

1. Projected cash flows for several consecutive periods. The end of the periods will not necessarily coincide with the end of the calendar year. The number of forecast periods depends on the specifics of the asset being valued. They are formed after a thorough analysis of the operation and forecasts on the development of asset, taking into account income, expenses and tax burdens.
2. Terminal value (value after a forecast period) is determined by capitalisation of financial results based on last year of the forecast period. The terminal value is determined for an infinite period of time, taking into account the following specific factors:
  - It is based on the financial result – income/profit for the last year of the forecast period;
  - The potential growth after the forecast period is determined, and this growth rate is taken into account in determining the capitalisation rate.

The forecast is based on:

- Assumptions about continuing operations.
- Analysis of risk factors: credit, liquidity, interest rate and equity risks;
- In-depth analysis of the operations and financial statements, this determining the main indicators of capital adequacy, investment and loan portfolio, manner of management of the interest margin, return, yield, profitability, liquidity, manner of management of the imbalance, securitisation, etc., which are characteristic of the activity of the financial institution/corporations.
- The valuer should draw on forecasts and assumptions provided or approved by the client;
- The valuer should consider obtaining information from other sources for the purpose of forecasting.

- The valuer should adjust the projected financial statements, excluding the impact of the following factors:
  - non-operating or redundant assets;
  - extraordinary revenues and expenses, beyond the ordinary operational activities of the entity;
  - depreciation allowances, if these are larger than those used in the relevant industry or do not correspond to those provided for in the Corporate Income Tax Act;
  - analysis of revenues and expenses that are excessive or unusual;
  - adjustment of cash flows after thorough analysis, where there is evidence of transactions and contractual relationships that are not concluded under arm's lengths conditions.
  - adjustment of cash flows that are not directly related to the principal line of business of the financial (credit) institution/corporation;
  - other adjustments intended to reflect factors that are not taken into account either in cash flow forecasts, nor in the formation of the discount rate;

After the analyses, adjustments and forecasts have been carried out, the value of the asset is derived by discounting either future net gains or net cash flows, with the discount rate being appropriate for the selected flow, and by adding the terminal value and the value of the non-operating assets and taking account the long-term liabilities.

The value of the entity is assessed by discounting either future net gains or net cash flows (with the discount rate being appropriate for the selected stream of benefits).

The *discount rate* is determined.

The discount rate is applied to the forecast cash flows, including the terminal value, if any.

The *terminal value* is determined.

The value of an enterprise/a business is normally assessed using cash flows, which do not include long-term debt, and a discount rate determined on the basis of weighted average cost of capital. Long-term debt and available non-operating assets (if any) are added after arriving at an indication of value via the discounted cash flow and discounted terminal value.

### **1.1.1. Income Capitalisation Method**



In applying this method, the valuer should make the general assumptions pertaining to it as described in the general part of these standards.

With the income capitalisation method, a representative amount of income is multiplied by the capitalisation rate in order to convert income into value.

The value of the subject asset is assessed by taking the following steps:

- Obtaining financial data on the subject asset, including financial institutions and/or financial instruments, for a representative period of time.
- Adjusting the financial data on the subject asset, including financial institutions and/or financial instruments, if necessary.
- If the stream of benefits to be capitalised is cash flow, make further adjustment of net profit to determine the gross or net cash flow.
- Determine the capitalisation rate.
- Determine the operational period, which will be capitalised.
- Determine the value of the asset by adjusting the net profit using the capitalisation rate;
- If adjustments to the financial position to reflect the impact of non-operating or redundant assets or shortage of assets have been made, an appropriate value of these assets should be determined at the valuation date and this value is then added/subtracted, and the capitalised cash flow is adjusted as follows: the assessed value is added to the value of non-operating assets; the assessed value is added to the value of redundant assets; the value of lack/shortage of assets is subtracted from the assessed value.

#### **4.2. Comparative approach**

The comparative approach is a way of determining the indicative value of an asset by comparing it to similar assets for which there is transaction prices evidence.

The asset used for comparison should be described by a sufficient volume of representative comparative data.

The factors to be considered in assessing whether appropriate benchmarks exist include:

- Sufficient analogy in terms of the qualitative and quantitative characteristics of the object of investment.
- Volume and verifiability of data known for the comparable object of investment.

- The circumstances in which the price for the comparable object of investment was achieved: an ordinary or a forced transaction.

#### **Way of comparison**

The comparison must be done in a way that is not misleading.

Such comparisons are normally carried out using ratios or multiples. The use of ratios must comply with all relevant factors, some of which are:

- Selection of underlying evidence for the ratio.
- Selection of underlying period of time and/or averaging method for the evidence.
- Method of calculating and comparing the evidence for the subject asset.
- Date of the price evidence used in the ratio.

In general, comparisons should be made using comparable definitions of the components included in the ratio or multiple.

In relevant cases the valuer may apply ratios based on components that are sufficiently representative of results clearly sustainable in the future.

#### **4.2.1. Market comparisons method**

The comparable assets must be selected among those belonging to and operating in the same industry and the same market as the subject asset, or in an industry and market that respond to the same economic variables. Factors that should be considered in assessing whether a reasonable basis for comparison exists include:

- Similarities between the subject asset and the comparable asset in terms of qualitative, quantitative and financial performance indicators.
- Possibility to verify the authenticity and reliability of data on the comparable assets used.
- Under what market conditions the price of the comparable asset was achieved.

#### **Application Algorithm:**

1. Research and analysis of financial data on each of the selected comparable assets over a representative period of time.
2. Based on the financial data, determining appropriate financial parameters of the subject asset, in order to create a basis of comparison with the comparable assets.
3. Selection of appropriate market multiples for the subject asset.
4. Estimation of the selected market multiples for each comparable asset.

5. When more than one market multiple exist, a weighting of the results obtained is undertaken to arrive at a single value. The selected market multiples for the comparable assets are used to adjust the selected parameters for the subject asset.
6. The subject asset's value is derived by adjusting the selected parameters.

#### **4.2.2. Net Asset Value Method**

The net asset value is a value resulting by recalculating the value of the assets of the financial institution that of its liabilities. The basic formula of the method is:

$$\text{Enterprise value} = \text{value of assets} - \text{value of liabilities}$$

The method is based on the assumption that a prudent buyer would not pay for the property offered more than it would cost for its reproduction to its current state. **In this case, the main requirement for the use of this method is the assumption that the institution will continue to operate in the same line of business.**

The valuation technique under this method is implemented by aligning all assets and liabilities with their reassessed values at the date of valuation, and the value arrived at constitutes the amount of the revalued assets minus the amount of the revalued liabilities.

The valuation technique using the net asset value method seeks to recalculate the balance, and the value of assets and liabilities is adjusted in accordance with their market value. The method is directed at indication of the value of the financial institution in a hypothetical sale of assets as such, instead of seeking their earning potential.

Based on the above, the value of the assets is assessed by taking the following key steps:

1. assess of each of the constituent assets that are part of the subject enterprise, using appropriate approaches and methods of valuation;
2. assess of each of the constituent liabilities that are part of the subject enterprise or asset, using appropriate approaches and methods of valuation;
3. add together the values of the constituent assets and liabilities in order to derive the value of the subject asset.

The values of assets, liabilities and equity in the adjusted balance are derived in accordance with Part Two: valuation standards for different types of assets.

## **Goodwill**

Goodwill is an intangible asset that impacts significantly the value of financial institutions/corporations derived by the net asset value method.

1. Goodwill is an intangible asset consisting in any future economic benefit which does not stem from a specific identifiable asset. The value of goodwill is measured as the residual amount remaining after deducting the values of all identifiable tangible, intangible and monetary assets, adjusted for actual or potential liabilities, from the value of the financial institution/corporation as determined by the net asset value method.
2. The value of goodwill is dependent on elements such as:
  - synergies specific to the relevant financial institution/corporation, arising from a business combination (e.g., product structure and product mix dynamics, reductions in operating costs, economies of scale)
  - opportunities to expand the business into new and different markets
  - the benefits of sustainable and flexible management of the portfolio of financial institutions/corporations.

Goodwill is any excess of the original cost of acquisition over the acquirer's share in the fair value of net assets acquired (identifiable assets less identifiable liabilities).

Negative goodwill is any excess of the acquirer's share in the fair value of net assets acquired (identifiable assets less identifiable liabilities) over the original cost of acquisition at the date of acquisition.

## **Section Seven: Specific and particular requirements for assessment of Other Assets, including works of art that are movable cultural property.**

The principles enshrined in Part One of BVS are also applied in the valuation of other assets, including works of art that are movable cultural property.

There are various assets that fall into the valuation competence for "Other assets, including works of art that are movable cultural property."

This section of BVS focuses specifically on works of art that are movable cultural property.

**1. SPECIAL LEGAL FRAMEWORK: laws, regulations and other acts related to the valuation of Other Assets, including works of art that are movable cultural property.**

**1.1.Special legal framework:** specific laws, regulations and other acts applicable under the existing legislation

- Copyright and Related Rights Act
- Cultural Heritage Act. The Cultural Heritage Act is in line with European regulations and abides by all international charters and documents for preservation of cultural heritage.
- Ordinance No. N-3 of 3.12.2009 on the procedures for conducting identification and keeping a register of movable cultural property.

**1.2. Conditions for the application of the special laws and regulations.**

- Under the legal framework referred to here above, the Ministry of Culture keeps a register of the movable cultural property which has acquired the status of national heritage. The register contains national heritage cultural property which is:
  1. state or municipal property;
  2. collection;
  3. owned by individuals or legal entities.
- Each cultural property that has been entered in the register receives a serial registration number. Within seven days of any change of ownership of the registered cultural property, its acquirer or the acquirer's authorized representative must notify the relevant authorities so that this circumstance can be entered in the register.
- The museums create and maintain records of movable cultural property identified by them.

**2. CONDITIONS AND ASSUMPTIONS in the valuation**

**2.1.Special assumptions**

Movable cultural properties are all tangible cultural assets, including those located under water, which are not permanently attached to the ground and whose significance does not change depending on their location.

The scientific, cultural and artistic value of movable cultural properties is not identical to their market value, but it affects the assessment of their market value.

## **2.2. The classification of movable cultural property is based on:**

- their belonging to a particular historical period: prehistoric, ancient, medieval, Renaissance, new and modern times;
- the research and cultural field to which they pertain:
  - 1.1. Archaeological: movable objects discovered in the ground, on its surface or underwater, testifying to epochs and civilisations studied by archaeology;
  - 1.2. Ethnographic: movable objects testifying to the lifestyle and work, traditions, customs, rituals, beliefs and craftsmanship, which enable the study of the ethnic characteristics and changes in the tangible and intangible culture;
  - 1.3. Historical: movable objects related to historic landmark events and personalities;
  - 1.4. Artistic: works of fine arts in all their techniques and varieties, including philatelic specimens;
  - 1.5. Natural: specimens of the flora, fauna, paleontological and mineral formations;
  - 1.6. Technical: products of technical culture;
  - 1.7. Archives: documents of cultural scientific importance, regardless of the time, location, medium and technique of their execution;
  - 1.8. Script: manuscript cultural values dating before the end of the 18th century, old printed rare and valuable editions of scientific, cultural, polygraphic or bibliographic importance;
  - 1.9. Literary: documentary and physical cultural values related to the overall history of literature.

## **2.3. Assumptions about socio-economic conditions**

- Movable cultural properties are carriers of historical memory and national identity, and have scientific and cultural value;
- Movable cultural properties are subject to statutory and other legal protection.

## **3. TYPES AND FEATURES of Other Assets, including works of art that are movable cultural property**

### **3.1. Types of Other Assets, including artwork**

The types of Other Assets, including works of art, include works of the fine and applied arts.

The types of visual arts are divided into two main groups.

- 1) The first major group includes fine arts, namely are paintings, graphics and sculpture.
- 2) The second major group is that of the decorative and applied arts, which include all types of design, jewellery and other works of the decorative and applied arts.

### **3.2. Characteristics of Other Assets, including artwork**

Such assets can be works of the fine or applied arts.

Fine arts include paintings, sculptures and graphics. The term “fine arts” is used arbitrarily to differentiate painting, sculpture and graphics from architecture and applied arts.

- *Painting* is a kind of visual art, consisting in the application of the colour dyes on paper, canvas, wood, wall, glass, silk and other substrates. In terms of its function and purpose, painting is divided into easel and monumental/decorative.
- *Sculpture* is generally two types, depending on the manner of spatial layout of the sculpture shapes and volumes: sculpture in the round and relief sculpture. Works of sculpture in the round are created in real space and are fully perceived from all angles in their three dimensions. Relief sculpture is of three types: high relief (high), bas-relief (low) and sunken (Egyptian) relief. Depending on their purpose, sculptural works are divided into fine art, monumental and decorative. Monumental sculpture includes mainly large works or ensembles which produce effect in conjunction with a certain space. The monumental sculpture can be figurative, decorative, art structures, naturalistic, static, kinetic, abstract, etc. Decorative sculpture is associated primarily with interior and exterior of buildings or other architectural structures. The most commonly used types of images are: floral elements, humans, animals, geometric or abstract shapes, etc.
- *Graphics (black and white drawing)* is based on drawing. Its main means of expression are the line and the mottle. It is based on the balance between black and white. It is possible that one or more additional colours are used, but the emphasis is not on colour, unlike in the case of painting. Graphics encompasses the genres portrait, landscape, still life, interiors. There is also the abstract graphics.

### **3.3. Other types**

According to their belonging to a particular historical period, movable cultural properties are divided into prehistoric, ancient, medieval, Renaissance, belonging to new and modern times.

#### **4. APPROACHES AND METHODS applied in the valuation process**

##### **4.1. Income Approach**

The income approach has limited application in the valuation of movable cultural property; it is normally confined to the valuation of assets that can generate income without change of ownership. The valuer should reflect the various costs for maintenance, conservation and restoration that are specific to the subject asset. The method applicable under the income approach as described in Part One of BVS can be used where appropriate.

##### **4.2. Cost Approach**

In assessing movable cultural properties that are specific in nature and individual characteristics as well as in their artistic and historical value, the reproduction value method is applied where appropriate market comparables cannot be found. In determining the reproduction cost of the asset it is necessary to consider the type and technique of workmanship and the conservation and restoration works that have been or need to be carried out. The modern equivalent should reflect the cost of reproduction with the original materials and techniques or, if this is impossible that, the reproductions of replicas copy is with modern materials and techniques, but with the same features and characteristics of the object.

##### **4.3. Comparative approach**

The value of movable cultural property is determined by objective criteria based on stylistic and artistic analysis of quality, authenticity, period of creation, its place in the author's works and the author's contribution to art. The value depends also on the particular state of the art market, i.e. the interest of buyers towards specific works. The application of the method is based on existing information on market supply and its transformation into normally expected and reasonably feasible realisation of bidding prices at auctions and sales of such products.

The comparative approach involves comparing the movable cultural property to similar works realised on the market. The criteria are artistic and aesthetic. They depend on the artistic quality of the work itself and its condition, subject and technique of performance, the skills of the artist, the creative period during which the artist created the work and their contribution



of the artistic life in Bulgaria and abroad. The methods under the comparative approach described in Part One of BVS find application where possible.

When applying the methods, the valuer must have reliable information about the similar and/or identical movable cultural properties, so as to be able to adjust for any differences between the subject asset and selected comparables.

The criteria for selection of comparable assets include:

- Specificity of the artistic and historical value;
- Belonging to the respective era and style;
- Permissible use;
- Specific methods of restoration and conservation.

The comparable values obtained are subject to various types of adjustments, taking account of the criteria listed above.

**4.4. Valuation of Other Assets, including works of art, for financial reporting and accounting purposes** may be performed in accordance with the existing legislation.

**5. Assessing the liquidation value of Other Assets, including works of art, where applicable**

- The liquidation value of movable cultural properties is assessed in cases where the subject assets constitute part of the property of legal entities, including state and municipal bodies, or of individuals.
- Upon realisation of assets in a *forced sale* the valuer must take into account all the usual selling costs, the costs of conservation and restoration activities prescribed by the competent municipal and other public bodies, under the current legislation.
- Upon realisation of assets in a voluntary sale the liquidation value is determined under the conditions of an arm's length transaction, taking into account all costs relating to: the normal period of marketing and special assumptions concerning movable cultural properties as enshrined in the laws on their protection.

***Section Eight: Specific and particular requirements for valuation of agricultural land and permanent crops (ALPC)***

**1. SPECIAL LEGAL FRAMEWORK: laws, regulations and other acts related to the valuation of agricultural land and permanent crops.**

**1.1. Special legal framework**

- Ownership and Use of Agricultural Lands Act;
- Protection of Agricultural Lands Act;
- Protection of Agricultural Property Act;
- Water Act;
- Agricultural Land Lease Act;

#### 1.1.1. Regulations:

- Rules on the implementation of laws;
- Ordinance on the method of pricing of agricultural lands;
- Ordinance No. 19/2012 on construction on agricultural lands without changing their intended use;
- Ordinance on the categorisation of agricultural lands after changing their intended use;
- Ordinance on the basic prices of permanent crops;
- Ordinance No. 15 of 23.07.2001 on the structure and content of the identifier of real properties in the cadastre;
- Ordinance No. 3 of 28.04.2005 on the content, creation and maintenance of cadastral map and cadastral registers;
- Tariff of fees payable upon change of intended use of agricultural land.

#### **1.2. Conditions for the application of the special legislation.**

- Exercise of ownership rights on agricultural land and permanent crops upon: sale, exchange, transfer, partition and other disposal transactions;
- Granting the temporary use of agricultural land and permanent crops under lease;
- Expropriation of real properties and establishing limited real rights and easements;
- In connection with the application of Ownership and Use of Agricultural Lands Act;
- In determining the value of the in-kind contributions within the meaning of the Commerce Act;

- For the needs of financial institutions: mortgaging, leasing, insurance, etc.;
- For accounting and tax purposes;
- For the needs of the judiciary;
- Other cases provided for in the laws and regulations.

## **2. CONDITIONS AND ASSUMPTIONS in the valuation of ALPC.**

### **2.1. Special assumptions**

Special assumptions are needed in order to clarify the actual condition of agricultural land and permanent crops, which upon any change would have a significant impact on the value. The special assumptions regarding the efficiency of land use should result from analysis of facts or studies available at the valuation date. Such special assumptions include, without limitation:

- That the land is cultivated and will continue to be cultivated in the coming years;
- That the necessary agritechnical activities and harvesting of the land are carried out in a timely manner, in order to preserve the quality of land and permanent crops;
- That the subject land plots having common boundaries could be sold as a single (consolidated) plot with a larger area;
- The impact of the infrastructural elements on the value of agricultural land.

### **2.2. Assumptions about socio-economic and political conditions at the time of the valuation, regarding:**

- Maintaining or changing the national and EU agricultural policy for application or cancellation of schemes and measures to support farmers and provide national payments, measures for the implementation of agroecology, organic farming, etc.
- Maintaining or changing the municipal spatial development plans, including plans for development of the agricultural sector;
- Maintaining or changing the credit policy;
- Factors affecting the realisation of agricultural production.

## **3. Types and characteristics of agricultural land and permanent crops**

### **3.1. Types of agricultural land and permanent crops**

#### **3.1.1. Types of agricultural land:**

- by category – classifiable, based on average yield class score (from first to tenth category), and unclassifiable;
- by manner of permanent use;
- arable or uncultivated;
- irrigated or non-irrigated.

#### 3.1.2. Types of permanent crops:

- orchards
- vineyards, berries
- some technical and essential oil crops
- other perennial trees and shrubs attached to the ground for more than a year.

### 3.2. Characteristics of agricultural land and permanent crops:

#### 3.2.1. Characteristics of agricultural land:

- Agricultural land is a durable irreproducible natural resource that is not reproduced and is used for farming and other agricultural activities;
- Quality of agricultural land: fertility and suitability for growing agricultural crops. Agricultural lands have different agroecological characteristics in terms of soil types, climate, topography, fertility, etc.
- Agricultural land is a tangible fixed asset not subject to depreciation;
- Permanent location of the agricultural lands, with fixed area and a particular intended use;
- Agro-technical activities and other external impacts on agricultural land may change their qualitative characteristics.

#### 3.2.2. Characteristics of the permanent crops:

- Permanent crops are perennial plants;
- They are biological assets with a specific life cycle: period of creation (period with no crops), period of fruit-bearing (exploitation), and death. Depending on the type of perennials, the periods of productivity are of different duration;
- Perennials have specific characteristics based on their requirements to soils, climate, water availability, topography and other factors of the environment;
- Perennials are tangible fixed assets subject to depreciation;

- Agro-technical activities and other external impacts on agricultural land may change their qualitative characteristics.

### 3.2.3. Other types of agricultural lands:

Agricultural lands subject to restrictions on their use as well as communication, climatic, hydrological, sanitary, landscaping and environmental restrictions, archaeological sites, etc., governed by regimes established in special laws and regulations and map materials.

## 4. APPROACHES AND METHODS used in the valuation process

### 4.1. Regulatory approach. It is applied in:

- Pricing of agricultural lands under the Ordinance on pricing of agricultural lands;
- In tax assessments of agricultural land, under the Local Taxes and Fees Act;
- Determination of basic prices of permanent crops, under the Ordinance on basic prices of permanent crops.

The prices of agricultural lands determined under the Ordinance on pricing of agricultural lands are indicated in BGN per decare.

The prices of permanent crops determined under the Ordinance on basic prices of permanent crops are indicated per one tree (shrub, plant) or one decare of crops.

**4.2. Comparative approach:** based on market information containing data on actual sales or offers for sale of properties with characteristics similar to the subject property. The analysed transactions or offers must have taken place in the vicinity of the subject property and must have been executed at a time close to the valuation date.

#### 4.2.1. Market comparisons method (comparables)

The method is applicable where market evidence is available, to which the valuer will refer in the valuation report. In valuations of the properties using the market comparisons method, the value is derived by comparing the subject property with similar properties located in a region with similar prices, which properties have been offered, leased or sold at a time close to the valuation date.

The characteristics of the market comparables must match to the fullest extent those of the subject property, with all similarities and differences taken into account.

For the purposes of valuation by the market comparisons method, the valuer should:

- Examine the characteristics of the subject property in terms of type, features and location of the subject agricultural land or permanent crops;
- Research market information and analyse the factors forming the market prices of sales, rentals, land lease payments and offers of similar/comparable assets;
- After comparison and analysis of the characteristics of the subject property and the comparable properties, make adjustments according to the identified differences, which may include, without limitation: manner of permanent use, category, size, location, restrictions on land use, etc.
- In applying the method for valuation of permanent crops, the relevant factors are species, age, formations and planting scheme of perennial plants. The application of this method is limited due to the specificity and the biological nature of perennial plants;
- The amount of the adjustments determines by how much the market value of the comparable needs to be increased or decreased, in order to arrive at an indication of the market value of the subject property.

#### 4.2.2. Market Multiples Method

This method is applicable where market evidence on sales, market prices and income/profit, land lease payments, etc. is available. The valuation of agricultural land and permanent crops by the market multiples method involves creating ratios between the price of the land and the earnings it generates; between the price of the land and the land lease payments, and other ratios of appropriate indicators for which there is sufficient and reliable evidence. The method is applicable where information exists on the amount of earnings, land lease payments etc. generated by the subject property.

Market multiples can be calculated as the arithmetic mean or weighted average.

A widely used ratio which is appropriate for valuation of agricultural land and permanent crops is the arithmetic mean market multiple, which constitutes the ratio between the price of the land and the land lease income (rents) it generates.

When the weighted average market multiple is applied, the ratios are weighted by the areas of the properties and are calculated using the factor thus identified.

4.2.3. Availability Method: similar to the Market Multiples Method, but with more limited application under the comparative approach.

“Availability” means the ability of a specific agricultural property to perform a certain function at a certain time or during a certain period.

The valuer may compare: wages in the agriculture sector with the market price of the land; proceeds from one decare of major crop with the land price and other relevant parameters.

#### **4.3. Income approach**

The income approach is based on the present value of all future rights to income arising from ownership. The value of the land constitutes the present value of the anticipated future income it would generate.

The two most widely used methods under the income approach are:

- Direct capitalisation of income;
- Discounted cash flows.

##### 4.3.1. Direct income capitalisation.

##### Application Algorithm:

- Determine the net income from rent/land lease depending on how the land is used and the type of crop rotation;
- Determine the rate of return;
- Derive the capitalised value of the agricultural land as the ratio between the net income from the land and the rate of return.

##### Application:

a) It is used for valuation of agricultural land generating income/land rent “in perpetuity”, which is capitalised, more commonly known as the formula of “eternal rent”.

b) It is used for valuation of agricultural land generating steadily increasing income. The rate of increase should be lower than the rate of return or the difference between the rate of return and the rate of increase should be greater than 1%.

c) Method of the gross rent multiple: suitable for valuation of agricultural land, where the gross to net rental income ratio is approximately one.

The value of agricultural land is assessed depending on the future benefits for the owner, measured by the gross rental income that can be obtained from the subject property.

##### Application Algorithm:

- Determine the gross rent obtainable from the subject property;
- Determine the rent multiple using comparable properties;

- Determine the value of the land as the product of the gross rent and the rent multiple.

#### 4.3.2. Discounted cash flows method

This method is applicable to the valuation of permanent crops and also finds limited application in the valuation of e.g. agricultural land subject to development, where it is not possible or not appropriate to determine a representative amount of annual income; agricultural land encumbered by limited real rights, etc.

#### Application Algorithm:

- Forecast the cash flows of income from permanent crops or agricultural land over a certain period and determine the present value;
- Determine the terminal value depending on the applicable technique for assessing the present value of income.
- The sum of the discounted income from a forecast period and after that forecast period gives the value of permanent crops or agricultural land.

### **4.4. Cost approach**

The cost approach is applicable to the valuation of permanent crops. The approach enables the determination of the value of permanent crops, taking into account the cost of creation and cultivation of permanent crops and the physical, functional and economic obsolescence.

#### 4.4.1. Depreciated reproduction cost method

The reproduction cost is the cost of reproduction of the relevant type of permanent crops at the valuation date, including the cost of technological upgrade.

For the purposes of valuation of permanent crops under the depreciated reproduction cost method, the valuer should determine:

- Depreciation period (period of effective use): the period of fruit-bearing of the relevant type of permanent crop.
- Obsolescence:
  - Physical: due to biological aging, wear and tear, disease, inadequate agrotechnical measures, etc.;
  - Functional: availability of new technologies and features of new species and varieties, which significantly outperform the subject of the valuation;
  - Economic: changes in demand, resources, workforce, etc.
- Depreciation rate: ratio, percentage of annual discounts from the period of fruit-bearing, which is set at 100%.



- Annual depreciation: defined as a product of the new reproduction cost and the depreciation rate. The annual depreciation can be also determined on the basis of the production potential and the yields curve of the relevant crop.

The new reproduction cost of permanent crops comprises all the costs of creation and cultivation of the crops per current prices at the time of valuation.

#### 4.4.2. Depreciated replacement value method

Depreciated replacement cost is the value of existing and used permanent crops, determined on the basis of the new reproduction cost per current prices at the time of creation of the subject permanent crops and the estimated degree of obsolescence at the valuation date.

The valuation of the permanent crops must be adjusted for, without limitation: age, health and physiological status of the crops, productive potential, method of management and implementation of agrotechnical measures; yield realised over a selected period of three consecutive years.

#### **4.5. Method for assessing the investment value.**

Valuation of permanent crops under this method is performed using the following algorithm:

##### Application algorithm:

- Determine the investment costs of the project for creating and cultivating permanent crops. Identify the operating costs for cultivating crops per year during the period of creation and the fruit-bearing period;
- Determine the cash flows from expected net proceeds from the sale of produce depending on the type of permanent crops, the curve of productivity over the useful life of the relevant species and the selling prices of produce; operating costs, depreciation and liquidation value;
- Determine the risk, including all kinds of risks that accompany the development of the project, and determine the discount rate at which the estimated cash flows are discounted at the valuation date;
- Determine the present value of expected net cash flows, deduct the present value of the investment costs at the valuation date and the value arrived at in this manner constitutes the investment value.

#### **5. Assessing the liquidation value of agricultural land and permanent crops, where applicable**

- Liquidation value is assessed in cases where the subject assets constitute part of the property of legal entities, including state and municipal bodies, or of individuals.
- Upon realisation of assets, including on a piecemeal basis, in a forced sale, the valuer must take into account all the usual selling costs, including the specific costs related to agricultural land and permanent crops, under the current legislation.
- Upon realisation of assets, including on a piecemeal basis, in a voluntary sale, the liquidation value is determined under the conditions of an arm's length transaction, taking into account all costs relating to: the normal period of marketing and special assumptions concerning agricultural land and permanent crops.
- Liquidation value of permanent crops may be determined in cases of expired useful life of the respective crops, in compliance with current laws and regulations.

### ***Section Nine: Specific and particular requirements for valuation of land in forest areas (LFA)***

#### **1. SPECIAL LEGAL FRAMEWORK: laws, regulations and other acts related to valuation of land in forest areas**

Bulgarian forests perform multiple economic, environmental and social functions essential to sustainable development. They are a key factor in the formation and maintenance of the living environment. Forests provide and maintain the quality and quantity of the water flow in the country or safe drinking water. The forests are home to over 80% of the protected plant species in Bulgaria, over 60% of endangered animal species, eight of the twelve landscape complexes, as defined in the National Strategy for Biodiversity Conservation.

**Land in forest area** is a real property indicated on the cadastral map or the map of restituted property as forest land within the meaning of the Forestry Act (FA).

##### **1.1. Special legal framework**

- Forestry Act, prom. SG No. 19 of 08.03.2011, effective from 09.04.2011
- Restitution of Ownership of Forests and Forest Lands Act
- Protected Areas Act, prom. SG No. 133 of 11.11.1998

- Registration and Control of Agricultural and Forestry Equipment Act, prom. SG No. 79 of 10.07.1998
- Plant Protection Act
- Water Act
- National Strategy for Regional Development in the Republic of Bulgaria for the period 2012 - 2022
- National Strategy for Development of the Forestry Sector in the Republic of Bulgaria for the period 2013-2020
- Convention on Biological Diversity, ratified by a law passed by the 37th National Assembly on 29.02.1996, prom. SG No. 22 of 15.03.1996
- Strategic Plan for Biodiversity 2011 - 2020.
- National Strategy for Biodiversity Conservation
- National Spatial Development Concept 2013 - 2025, adopted by Record No. 47.61 of the Council of Ministers on 19.12.2012

#### 1.1.1. Regulations:

- Regulations to implement laws;
- Ordinance on valuation of land in forest areas, prom. SG No. 63 of 2011
- Ordinance on determining the amount of compensation for damage to forests and forest lands, prom. SG No. 39 of 2004
- Ordinance on determining basic prices, prices for excluded areas and on establishing the right of use and easements on forests and forest lands, adopted by Council of Ministers Decree No. 252 of 06.11.2003, prom. SG No. 101 of 18 November 2003
- Ordinance No. 20 / 18.11.2016 on the contents, terms and conditions for the establishment and maintenance of forest maps;
- Ordinance No. 2 of 7 February 2013 on the terms and procedures for afforestation of forest areas and agricultural land used to create special protection and economic forests and forests in protected areas, inventory of the created crops, their reporting and registration
- Ordinance on the terms and procedures for assigning the implementation of activities in forest areas that are state and municipal property, and on the use of timber and non-timber forest products;
- Ordinance No. 8 of 11.05.2012 on the terms and procedure for protection of forest areas from fires, prom. 05.06.2012;
- Ordinance No. 1 of 30 January 2012 on the control and protection of forest areas;

- Ordinance No. 5 of 31 July 2014 on construction in forest areas without changing their intended use;
- Ordinance No. 39 of 10 April 2006 on construction in forests and forest lands, prom. SG 38 of 9 May 2006;
- Ordinance No. 4 of 19.02.2013 on the protection of forest areas against erosion and floods and the construction of fortifications;
- Ordinance No. 8 of 05.08.2011 on felling in forests, prom. SG No. 64 of 19.08.2011;
- Ordinance No. 18 of 07.10.2015 on the inventory and planning in forest areas issued by the Minister of Agriculture and Food, prom. SG No. 82 of 23.10.2015;
- Ordinance No. 5 of 31 July 2014 on construction in forest areas without changing their intended use;
- Ordinance No. 4 of 19.02.2013 on the protection of forest areas against erosion and floods and the construction of fortifications;
- Ordinance No. 30 of 31.07.2003 on the terms and procedure for taking fire protection measures in forests and protection of forests against fires;
- Ordinance No. 30 of 2.12.1998 on the use of timber from forests;
- Ordinance No. 6 of 5.02.2004 on the spatial planning of forests and forest lands and hunting areas in Bulgaria, effective from 1.04.2004;
- Ordinance No. 16 of 9 June 2004 on the easements for energy facilities, prom. SG No. 88 of 8.10.2004,
- Ordinance No. 14 from 1987 on resorts resources, resort areas and resorts, prom. SG No. 79 of 1987;
- Ordinance on basic prices of permanent crops, prom. SG No. 65 of 1991;
- Ordinance No. 3 of 28.04.2005 on the content, creation and maintenance of cadastral map and cadastral registers;

## **1.2. Conditions for the implementation of special laws and regulations.**

- Exercise of ownership rights over land in forest areas which is state or municipal property: sale, exchange, transfer, expropriation, partition and other disposal transactions;
- Expropriations and establishing limited real rights and easements on land in forest areas;
- Formation of values of separately standing trees in forest areas and outside them;
- Prices for change of manner of use of land in forest areas;

- Value of land in forest areas for which the legislation or a government authority requires valuation;
- Insurance and mortgage value of land in forest areas.
- Values for consolidation of land in forest areas.
- In connection with the application of the Forestry Act;
- In determining the value of the contribution in kind within the meaning of the Commerce Act;
- For the needs of financial institutions: mortgage, insurance, etc.;
- For accounting and tax purposes;
- Other cases provided for in the legislation.

## **2. CONDITIONS AND ASSUMPTIONS in the valuation**

### **2.1. Special assumptions**

Special assumptions are needed in order to clarify the actual condition of land in forest areas, which upon any change would have a significant impact on the value. The special assumptions regarding the efficiency of land use should result from analysis of facts or studies available at the valuation date. Such special assumptions include, without limitation:

- that the forests and forest areas will continue to be used as such in the coming years;
- that the necessary measures are taken in time in order to preserve the quality of forests, land and permanent crops;
- that the adjacent forest plots being valued could be sold as a single consolidated plot with a larger area;
- the impact of the infrastructural elements of the value of forest land.

### **2.2. Assumptions about socio-economic and political conditions at the time of the valuation:**

- Maintaining or changing the national and EU agricultural policy for application or cancellation of schemes and measures to increase the economic value of forests and provide national payments, measures adding value to agricultural and forestry products, etc.
- Maintaining or changing the municipal spatial development plans, including plans for development of the forestry sector;
- Maintaining or changing the credit policy;
- Factors affecting the realisation of forestry products and the various tree species.

### **2.3. General circumstances relating to valuation of land in forest areas, including stands**

The price of land in a forest area is its monetary value at a specific date, which depends on:

1. market conjuncture;
2. the value of the land and plantation;
3. special useful features of the forest;
4. location of the property.

**The value of land in a forest area** constitutes the monetary expression of the average price of land plots in forest areas realised in various kinds of disposal transactions concluded within 24 months prior to the assignment of the valuation and registered with the registry office at the location of the property.

Executive Forest Agency (EFA) creates a database of information on the disposal transactions against consideration with land plots in forest areas within a single administrative region.

EFA issues annually and publishes on its website a bulletin on market prices of land in forest areas, which is an integral part of its information system.

The cost of the plantation is the sum of the values of the forest elements that make up the stand. A forest element is a part of the stand that is to the highest extent homogenous in its mensuration parameters. For the purposes of the valuation, the differently aged stands are divided into three forest elements: 1st, 2nd and 3rd class of thickness. The average age of forest elements of the 1st class of thickness is 40 years, the average age of the 2nd class is 80, and that of the 3rd class – 120 years. The value of the forest element is equal to the value of a simple stand with the same parameters and an area equal to the partial area of the forest element.

### **3. Approaches and methods used in the valuation process**

#### **Applicable approaches:**

- Regulatory approach;
- Comparative approach
- Income approach
- Cost approach

#### **Applicable methods:**

- Comparable sales;
- Market multiples;
- Direct capitalisation of income;
- Discounted cash flows;

- Depreciated reproduction cost;
- Determination of investment value

### **3.1. Regulatory approach.**

*The regulatory approach for valuation of land in forest areas* is applied in:

- Pricing in transactions with land plots in forest areas, which are state or municipal property, according to the Ordinance on valuation of land in forest areas. The price of land in forest areas is determined by the average value of the land by types of habitats;
- Pricing of separately standing trees in forest areas and outside them, according to the Ordinance on valuation of land in forest areas.
- Determination of compensations in connection with the restitution of forests and forest lands;
- Exchange and establishment of limited real rights, etc.

The price of unafforested portions of land in forest areas, for which the type of habitat cannot be identified, is assessed as price of areas unfit for forests.

The price of built-up land in the property is determined according to the type of habitat specified in the existing forestry plan or program for the relevant subdivision where it is located. Where the habitat is not identified, the habitat is assumed to be the same as that of the subdivision nearest to the built-up land for which a forestry plan or program has defined habitat.

The price of land in forest areas is adjusted for location and category according to the town or village within whose administrative boundaries the property is located.

Prices of land in forest areas assessed under the Ordinance on valuation of land in forest areas are indicated in BGN per decare.

Prices of separately standing trees in forest areas and outside forest areas are indicated per one tree or per one decare of stand.

#### **3.1.1. Valuation of stands**

The valuation of stands may be performed by direct calculation or in a simplified manner through calculation tables, which apply where the area of the property is more than 50 ha, as well as in:

1. valuation for mortgage and insurance purposes;
2. issuing acts of state property;
3. partition;
4. consolidation of properties.

The value of the stand is the sum of the values of the forest elements that make up the stand.

The value of timber per root in the present age is the value of the stand at valuation date, calculated on the basis of the income that can be generated if the timber from the stand is obtained at average yield costs and sold at the average market price.

Estimated value of the stand is its value at the valuation date, calculated on the basis of future income from this stand at rotation age.

The value of dominant and separately standing forest trees is determined through prices by timber categories or using calculation tables for individual trees.

The value of the stand in areas unfitted for forest, and that of stands and plantations is equal to the value of timber per root in the present age, pursuant to the Forestry Act.

The value of timber per root in the present age is determined as by deducting the cost of felling, primary processing and transportation from the revenue from sales.

Revenues from sales of timber are assessed by grading the timber stocks and multiplying the volumes by timber category by their respective prices.

The methods used for measuring in cubic meters and grading must be indicated in the valuation report.

The value of the stand in rotation age is assessed similarly to the value of timber per root in the present age based on forecast mensuration parameters calculated in rotation age.

The age factor is determined by tree species, the grade and the age factor as a percentage.

The value of the decorative forest tree vegetation that cannot be derived under these Standards is assessed in accordance with the Ordinance on basic prices of permanent crops.

#### ***3.1.2. Basic price of land in forest areas***

The basic price of land in forest area is the sum of the basic price of land and the price of the stand.

Certain regions of Bulgaria have areas zones for special protection from urbanisation, where the basic price is adjusted by the relevant coefficient.

### **3.2. Comparative approach**

*The comparative approach* is based on market evidence for actual sales or offers for sale of land in forest areas with characteristics similar to the subject property. The transactions or offers analysed must be for properties in the



vicinity of the subject property and must have been concluded/made at a time close to the valuation date.

In determining the value of land in forest areas the valuer should indicate separately the value of the stand and the value of the land, as well as the total value of the property.

### **3.2.1. Market comparisons method**

This method is applicable where market evidence is available, to which the valuer will refer in the valuation report. In valuations using the market comparisons method, the value is derived by comparing the subject property with similar properties located in the vicinity or in a region with similar prices, which properties have been offered, leased or sold at a time close to the valuation date.

The characteristics of the market comparables must match to the fullest extent those of the subject property, with all similarities and differences taken into account.

For the purposes of valuation by the market comparisons method, the valuer should:

- Examine the characteristics of the subject property in terms of type, specifics and location of the subject land in forest areas and the tree species;
- Research market information and analyse the factors forming the market prices of sales and offers of similar/comparable assets;

After comparison and analysis of the characteristics of the subject land in forest areas and the comparable properties, make adjustments according to the differences identified, which may include, without limitation: location, infrastructure, type and main characteristics of the property, tree species, construction type (if such), functionality, restrictions on land use of forest areas, etc. The application of this method is limited due to the specificity and the biological nature of stands;

- The amount of the adjustments determines by how much the market value of the comparable needs to be increased or decreased, in order to arrive at an indication of the market value of the subject property.

### **3.2.2. Market multiples method**

This method is applicable where market evidence on sales, market prices, income/profit, etc. is available. The valuation of land in forest areas by the market multiples method involves creating ratios between the price of the land and the earnings it generates; between the price of the land and other

ratios of appropriate indicators for which there is sufficient and reliable evidence. The method is applicable where information exists on the amount of earnings etc. generated by the subject property.

A widely used market multiple which is appropriate for valuation of land in forest areas is the ratio between the price of the subject land in a forest area and the income/profit from timber.

### **3.3. Income approach**

The income approach is based on the present value of all rights to future income arising from ownership. The value of the subject land in a forest area constitutes the present value of the anticipated future income it would generate, depending on the type of timber.

The two most widely used methods under the income approach are:

- Direct capitalisation of income;
- Discounted cash flows.

#### **3.3.1. Direct capitalisation of income**

##### Application Algorithm:

- Determine the forest rent of the economic class of the subject land in a forest area and the wood capital;
- Determine the rate of return based on the forest interest rate;
- Derive the capitalised value of land and stands as the ratio between the forest rent for the relevant economic class and the rate of return.

##### Application:

- It is used for valuation of land in forest areas generating income/rent “in perpetuity”, which is capitalised, more commonly known as the formula of “eternal rent”.
- It is used for valuation of land in forest areas generating steadily increasing income. The rate of increase should be lower than the rate of return or the difference between the rate of return and the rate of increase should be greater than 1%.

#### **3.3.2. Discounted cash flows**

This method provides an indication of the value of land and stands in forest areas. The method is applicable to the valuation of land in forest areas and types of stands within a forestry enterprise, i.e. large forests that are “normalised”. It is applicable to forests with estimated life of at least 50-60 years who are properly managed.

Forest rent is a measure of profitability of the biological production in the forestry enterprise. **If under certain conditions the forest rent is a positive**

**value, the enterprise operating under these conditions will be able to cover its costs.**

Application Algorithm:

- Forecast the cash flows of income from land and stands in forest areas over a certain period and determine the present value;
- Determine the terminal value depending on the applicable technique for assessing the present value of income.
- The sum of the discounted income from a forecast period and after that forecast period gives the value of land in forest areas.

**3.4. Cost approach.**

The cost approach is applicable to the valuation of land and stands in forest areas. The approach enables the determination of the value of forests, taking into account the cost of creation, including costs of planting or re-planting, costs made until the stand is stable: preparing the clearing and the soil, supply of seedlings, planting, fertilising, filling, growing of tree species, etc., followed by consideration of their biological aging.

**3.4.1. Depreciated reproduction cost**

The reproduction cost is the cost of reproduction of the relevant type of forest at the valuation date, including the acquisition cost of land to be used for growing stands of different tree species or a combination thereof and the cost of cultivation and/or reproduction the types of forest stands.

For the purposes of valuation of forest stands under the depreciated reproduction cost method, the valuer should determine:

- Rotation age (depreciation period or period of effective use): the period for growing and harvesting timber with certain qualities.
- Obsolescence:
  - Physical: due to biological aging, disease, inadequate forestry measures, etc.;
  - Economic: availability of new technologies and features of new forest species, which significantly outperform the subject of the valuation; changes in demand, resources, workforce, etc.
- Depreciation rate: ratio, percentage of annual discounts according to the rotation age.
- Annual depreciation: defined as a product of the new reproduction cost and the depreciation rate. The annual depreciation can be also determined on the basis of the rotation age and the yields curve of the relevant stand.

The new reproduction cost of land and stands in forest areas comprises all the costs of land acquisition and creation and cultivation of forest species per current prices at the time of valuation.

Depreciated replacement cost is the value of existing and used perennials, determined on the basis of the new reproduction cost per current prices at the time of creation of the subject perennials and the estimated degree of obsolescence at the valuation date.

The valuation of the stands must be adjusted for, without limitation: rotation age, health and physiological status of the stands, productive potential, method of management and implementation of forestry measures; timber yield realised over a selected period of three consecutive years.

### **3.5. Method for determining the investment value.**

#### **Application Algorithm:**

- Determine the investment costs of the project for creating and cultivating the stands. Identify the operating costs per year during the period of creation, perpetuity and indestructibility;
- Determine the cash flows from expected net proceeds from the sale of timber (yield) depending on the type of stands, target diameters, selling prices of timber, operating costs, depreciation and liquidation value;
- Determine the risk, including all kinds of risks that accompany the development of the project, and determine the discount rate at which the estimated cash flows are discounted at the valuation date;
- Determine the present value of expected net cash flows, deduct the present value of the investment costs at the valuation date and the value arrived at in this manner constitutes the investment value.

#### **4. Assessing the liquidation value of land in forest areas, including stands**

- Liquidation value is assessed in cases where the purpose of the valuation provides for it, and is applied in cases of forced or voluntary sale where the subject asset constitutes part of the property of legal entities, including state and municipal bodies, or of individuals.
- Upon realisation of assets, including on a piecemeal basis, in a forced sale, the valuer must take into account all the usual selling

costs, including the specific costs related to land in forest areas and stands, under the current legislation.

- Upon realisation of assets, including on a piecemeal basis, in a voluntary sale, the liquidation value is determined under the conditions of an arm's length transaction, taking into account all costs relating to the normal period of marketing and special assumptions concerning lands in forest areas and stands.
- Liquidation value of stands may be determined in cases of expired rotation period, biological aging/disease or physical destruction of the relevant stands, in compliance with current laws and regulations.