Valuation Manual

Municipal Real Estate

Contents

Introduction

Status and purpose of Manual

This Manual is issued by The Saudi Authority for Accredited Valuers ("TAQEEM") for the Ministry of Municipalities. Rural Affairs Housing (the "Ministry") to support the consistent application of the valuation requirements in the Regulations for the Disposal of Municipal Real Estate issued 03\ 08\ 1441 H (the "Regulations") and the associated Executive Instructions (Bylaws) issued on 22\ 12\ 1441 H.

The Ministry's Valuation Policy dated [15 June 2023] (the "Policy") sets criteria for the required knowledge and expertise, investigations that should be undertaken, valuation bases which are applicable and the principal valuation approaches which are acceptable, all consistent with internationally recognised best practice. This Manual provides supplementary guidance on how the valuation ap-proaches described in the Policy can be applied to different types of property held by Municipalities.

The purpose of this Manual is to provide members of the Assessment Committee and Investment Committee of a Municipality with a better understanding of generally accepted valuation practice for different scenarios where the committee is required to determine an appropriate value. The Manual does this by providing information about recognised valuation methods with some simplified illustrations of how these may be applied to different property types. The following should be noted:

- The Manual is to assist the members of the Committees in their decision making, in understanding valuations provided by an accredited internal or external valuation expert or valuations prepared by or on behalf of counterparties. It does not examine valuation methods and techniques in the depth required, nor any of the other subjects required, for a recognised valuation qualification that would be sufficient for accreditation under the Accredited Valuers Law.
- The Manual explains the main valuation approaches and then discusses their application to the types of property typically held by Municipalities. It does not provide examples for every type of property in which a Municipality may have an interest as this would not be practical. However, in most cases where a property type is not specifically mentioned an example can be found with sufficient similar characteristics to indicate which is the most appropriate method to adopt for valuations required by the Regulations.
- It must be recognised that all real estate is unique, if only in terms of its location, and therefore different facts and circumstances from those provided in the illustrations may justify the application of a different method to that described.
- The Manual is a supplementary document to the Ministry's Valuation Policy. The Manual and the Policy complement each other, and they need to be read together to ensure maximum benefit to the end user.

A separate Manual, Leasing Sites for Telecommunication Towers and other Telecommunications Equipment, has been issued by TAQEEM for the Ministry. Reference should be made to this document for valuation guidance specific to telecoms sites.
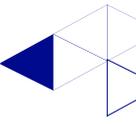
Definitions

Built Property: An interest in real estate of land that has been developed with buildings or other structures.

Discount Rate: A rate of return on capital used to convert future payments or receipts into present value. Also known as the yield of an investment.

Investment Property: Any type of property held by the owner to earn rental income, for capital appreciation or both.

IVS: The International Valuation Standards effective from January 2022.

NPV: Net Present Value – the current value of income received or expenditure incurred at a future date.

Property or properties: Interests in real estate, which may be of land alone or Built Property.

Regulations: Regulations for the Disposal of Municipal Real Estate issued 03\ 08\ 1441 H

Specialised Property: Built Property which is designed for one type of business operation and is not capable of use by other types of business without substantial alteration.

Years Purchase: The number of years it will take an annual income to add up to the capital value produced by an asset reflecting the time value of money.

Structure of Manual

The Policy requires valuations under the Regulations to be undertaken using applicable definitions, valuation approaches and methods in the IVS. The Policy provides the IVS definitions for the different bases of value which may be required by municipalities when valuing real estate. The Policy also describes the main valuation approaches identified in the IVS. This Manual examines these recog-nised valuation approaches and methods in greater detail and illustrates how they can be applied to estimate the value of different types of real estate.

Section 1 first examines the three main valuation approaches in the IVS and then common methods by which these are applied to real estate. It then explains how these methods are used to estimate the basis of Market Value, the measure required for disposals under the Regulations and its equivalent for leases, Market Rent.

Section 2 discusses which of the methods described in Section 1 that can be used for the valuation of land for development including the inputs required and the matters that need to be investigated or considered when using these methods to estimate value. Illustrative examples of how these methods may be applied are included in Appendix 1.

Section 3 discusses which of the methods described in Section 1 can be used for the valuation of various types of Built Property which are leased to the private sector. It indicates the most appropriate method or methods for valuing that property type, the inputs required and the key characteristics that influence value.

Section 4 considers matters that may need to be considered by the Assessment Committee when setting the rent for property leased to a public or private sector body for a use designated in the Reg-ulation and in accordance with Article 15 of the Regulations.

Appendix 1 contains examples to illustrate the application of the different methods that may be used for the valuation of bare land.

Appendix 2 contains examples to illustrate the application of the different methods that may be used for the valuation of Built Property.

Appendix 3 is a matrix that cross references the various methods discussed in this Manual to the property types to which they are usually applied.

Appendix 4 is a guide to the contents of a valuation report that is compliant with the IVS, with varia-tions to illustrate how the explanation of the valuation needs to vary depending on the method used.
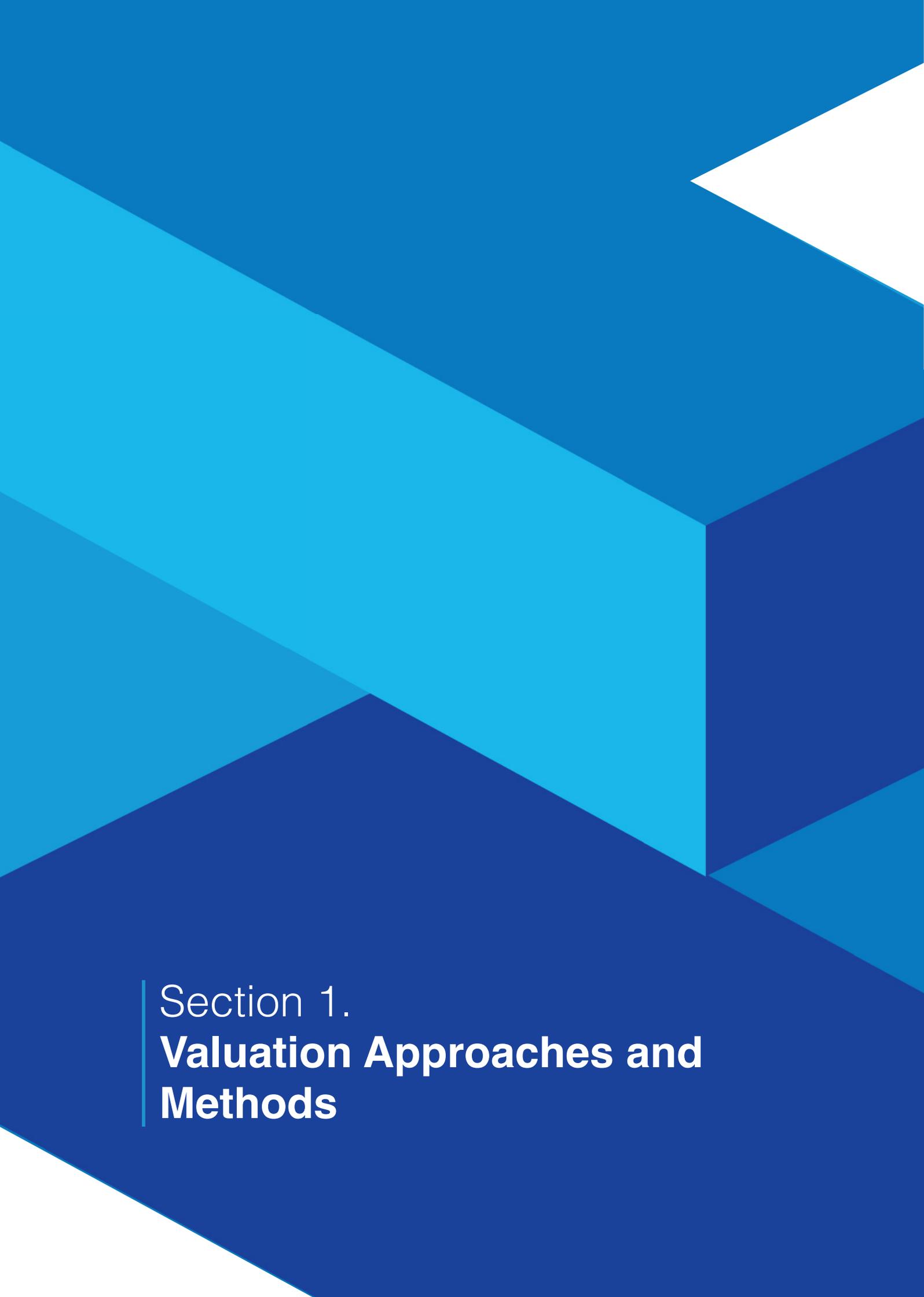
Section 1.
Valuation Approaches and Methods

1.1. Overview

The IVS define three main Valuation Approaches, the Market Approach, the Income Approach and the Cost Approach (see Policy Section 5).

Each of the Valuation Approaches in the IVS has different methods by which the fundamental principles of the approach can be applied, which vary between different asset classes. The goal in selecting the valuation approach(es) for an asset is to find the most appropriate method under the particular circumstances.

IVS 105 provides that the valuer may apply one or more of the valuation methods depending on:
- the purpose of the valuation;
- the appropriate basis(es) of value;
- the nature of the subject asset;
- the relative strengths and weaknesses of the possible approach(es) and methods;
- the customary approach used by local market participants; and
- the availability of reliable information (in the subject market) needed to apply the method(s).

This Section explains the fundamental principles of the three main approaches and the methods that will usually be applicable to apply those principles to different types of real estate.
Section 2 then examines the application of these methods to different property types.

1.2. Market Approach

The Market Approach is explained in Section 6.2 of the accompanying Valuation Policy document, together with an indication of the circumstances when it is usually the most appropriate approach to use. The most common application of this approach to real estate is by using the "Sales Comparison" method, which can be applied to both capital and rental valuations.

1.2.1. Sales Comparison Method
This method involves making comparisons between characteristics that have influenced the price or rent agreed for another property and how these compare to the same characteristics of the subject property. For example, analysis of other transactions might suggest that prices for otherwise identical properties in different locations differ by 10% or that larger sites have a rate per m² which is 15% lower than the rate per m² for smaller sites. Prices agreed in one year may average 5% more than those agreed in the next year. All differences between a transaction being used as evidence for the valuation of the subject site need to be considered both quantitively or qualitatively and the appropriate adjustments made.

Key steps in the Sales Comparison method are:
- Identify the units of comparison. For most real estate this will the value per m² but other units of comparison may be appropriate for certain property types.
- Identify relevant comparable transactions and analyse these to calculate the appropriate unit of comparison.
- Make a comparative analysis of similarities and differences between each of the comparable properties. This may involve a quantitative analysis but often a qualitative assessment can be made of the significant differences between the subject property and the comparable properties…Even if a quantitative analysis is used it is always important to subject this to qualitative review so that reasons for differences between each comparable property and the subject are properly understood.
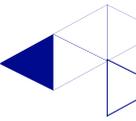
When making these adjustments care must be taken not to be too rigid or deterministic. This is particularly the case where the property being valued has multiple characteristics each of which would individually justify an increase or decrease in value when compared with another transaction. Although there may be evidence to support a 5% adjustment for one characteristic, a 15% adjustment for another, and a 10% adjustment for a third, it would be wrong to conclude that this meant an overall adjustment of 30% was appropriate. It is necessary to stand back from the mathematics and consider matters holistically and whether the resulting figure would actually represent what someone would pay in the market.

Another factor which could affect the price or rent agreed is whether the transaction was on the same terms as Market Value or Market Rent, i.e. agreed between two parties acting at "arms-length" with full knowledge of the property and without compulsion (See 5.2 and Appendix 2 of the Policy). If the transaction was agreed between parties that were connected or where the property had a special value or synergy to one particular purchaser, it may not be a reliable indicator of the Market Value or Market Rent. Besides knowing the size of the transacted property and price or rent agreed, most reliance can be put on the evidence of a transaction if the circumstances of the parties are also known.

The Sales Comparison method may be used to estimate the Market Value, a price for an exchange of an interest in property, or Market Rent, a regular payment for use of the property under a lease for a defined period. In most cases it is good practice to use only prices agreed in a sale (exchange) of a similar interest for determining Market Value and rents agreed for other leases to determine Market Rent. Although there is a connection between the rent and the price that could be obtained for a transfer of the lessor's interest, trying to use the evidence of prices to estimate rents or vice versa is inadvisable unless this can be corroborated with other evidence. The appropriate Years Purchase to convert a Market Rent to a Market Value is not straightforward to determine (see Section 2 – Income Approach) and introduces another variable into any analysis. However, the main reason why this should be avoided where direct evidence of Market Rents is available is that the market for leases is very different from the market for capital transfers of either ownership interests or long term lease interests.

When the Sales Comparison method is used to estimate Market Rent it is important to establish the basic lease terms that apply to any other rent that may be used as evidence. Differences in the length of the lease, the rent escalation provisions, and the rights and responsibilities of the parties all have an influence on the Market Rent.

1.3.   Income Approach

The basic premise of the Income Approach is to provide an indication of value by converting a series of expected future payments (or a "cash flow") to a single current value. In real estate valuation this approach is most often used for calculating the current capital value of the right of the owner to receive rents, either for the specific term of a lease contract or in perpetuity. However, cash flow analysis can also be used in certain situations to estimate Market Rent.

The net present value (NPV) of each future net receipt is calculated by applying a "Discount Rate" over the period until it is due to be received. To establish the current capital value of the recipient's interest, the individual NPVs for each future period are then added together. The Discount Rate represents the return that a market participant would expect on the initial capital sum invested. This will reflect the perceived level of risk to the future income stream. Risks can be external, for example the macro economic outlook, or the expected time cost of money (inflation or deflation). They can also be internal, for example the financial status of the party making payments or the risk of a change in future demand for that type of property.

The Income Approach is normally most appropriate where:
- the income-producing potential of the property is the most important characteristic that would be considered by market participants in setting its price, and
- information on the amount and timing of future income is available or can be reliably estimated.

Although the use of the Income Approach may still be appropriate in the following circumstances, it becomes more important to cross check the valuation by using the Market Approach:
- If the income-producing ability of the subject asset is not the only factor that would influence value from the perspective of a market participant, for example if there was potential for an alternative, more valuable use; and
- If there is significant uncertainty regarding the amount and timing of future income, for example where there is no established pattern of cash flows and only projected estimates can be made.

There are a number of methods of valuation commonly used to apply the principles of the Income Approach to real estate. The most common applications are to use either the "Income Capitalisation" or a "Discounted Cash Flow" method. However, these methods are mainly used to estimate capital value, i.e. Market Value rather than Market Rent. Since most disposals under the Regulations involve the granting of a lease contract these two methods are only briefly described in this Manual. Two methods under the Income approach that may be used to estimate the Market Rent or the Market Value are the "Profits method" and the "Residual method" and these are examined in more detail.

1.3.1. Income Capitalisation Method

This method applies a Years Purchase to a single period income for any given period up to perpetuity. The Years Purchase represents the number of years it would take for an investor to get back the capital invested at the target Discount Rate for the lifetime of the investment. This Discount Rate is sometimes called the "All Risks Yield" because all future risks to income or capital are consolidated into a single figure. For example, if the required rate of return was 6%, the Years Purchase would be 100/6 = 16.67. While this simple method provides a good indication of value where both the income and the risks are likely to remain consistent into the future, this will not always be the case. Where it is expected that the current income will change or that there will be a future event that materially alters risk, using a Discounted Cash Flow method provides a more reliable estimate of value.

The simple calculation of the Years Purchase above assumes that the return on investment will continue indefinitely. Where a property asset has a limited life, for example because the interest being valued is a lease or it is a wasting asset such as a landfill site, the simple calculation of dividing 100 by the required return is inappropriate. Capital invested in property with an unlimited life is realisable at any time, subject to market fluctuations, the risk of which are reflected in the required rate of return. Where an investment is made in property with a limited life, the capital invested will diminish to zero at the end of that life. To calculate the Years Purchase required to provide the required return it is necessary to assume that the investor will set aside an amount each year to replace the initial capital at the end of the asset's life, otherwise known as a sinking fund. Because the required rate of return on the investment, the "remunerative rate", and the rate at which the sinking fund will accumulate, the "accumulative rate", will differ, what is known as a dual rate approach needs to be used.

The formula for calculating a dual rate capitalisation figure is complex but valuation tables and online calculators are available which provide the multiplier for a given number of years at different remunerative and accumulative rates. For example, the Years Purchase for an investment with a life of 10 years where a remunerative rate of 6% is required and the sinking fund grows at 3% is 6.79. This compares with the rate for an asset with an indefinite life yielding 6% of 16.67.

The Income Capitalisation method is normally applicable to Investment Property which produces a stable income for the foreseeable future.
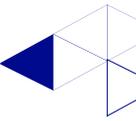
1.3.2. Discounted Cash Flow Method

This method, commonly abbreviated to DCF, allows for a more granular analysis than is possible with the Income Capitalisation method. It is applicable to Investment Property and is preferable to the Income Capitalisation method where changes in the future rental income are anticipated. It allows for these changes to be explicitly reflected and different risks applied to those incomes. For example, a lease may be granted with an initial rent free period followed by rent payments that escalate by a set amount at intervals throughout the lease. The DCF method also allows for different Discount Rates for each future period to be applied if the risk changes. For example, a lease expires in five years. The lessor may then have a period of no income until a new lease can be agreed, and the identity of the future tenant and the amount of rent they will pay will be unknown. DCF allows for the potential period with no income, together with the increased risk attached to the unknown future income and identity of the future lessee to be reflected in the current value.

There are two main types of DCF model. Growth implicit models project all expected future cash flows based on current values and the Discount Rate is used reflects the market's current perception of the risk of future inflation or deflation. Growth explicit models adjust future cash flows for expected inflation or deflation and the Discount Rate used does not include for the risk or opportunity caused by future changes in the value of money. It is important to understand which type of model is being used and that the cash flow projections and Discount Rates are consistent with this. Mixing a Growth explicit cash flow with a Growth implicit Discount Rate would cause a significant error in the NPV.

For most real estate valuation a growth implicit model is used. Expected future cashflows are used in the model, but not adjusted for inflation or deflation. The Discount Rate used is normally derived from analysis of transactions and therefore is based on the perception of market participants of the risk or opportunity arising from inflation or deflation.

There are many variations of the DCF method in use and different propriety software is available, although an Excel spreadsheet is sufficient for most applications.

The expected future cash flows for a property are either contractual, such as future rent obligations in a lease, or estimated, i.e. the rent the valuer believes could be reasonably expected for each future period. Allowance will also need to be made for any expected unrecoverable costs, i.e., future costs that will be incurred by the lessor which cannot be recovered from the lessee. Once future cashflows are forecast to be stable, i.e. no changes can be reasonably forecast from period to period, it is normal to enter a terminal value representing the capital value of the property on that date as the final cash flow to save calculating each period separately into perpetuity.

Once the net cash flow for each future period is determined, a Discount Rate then needs to be applied. The appropriate Discount Rate will be the rate of return that adequately compensates the investor for the risks taken. As risk rises, the required compensation for the level of risk should also rise by raising the Discount Rate.

In finance theory, the capital asset pricing model (CAPM) makes a distinction between market risk and specific risk. Market risk, also known as systemic risk, affects all assets and cannot be eliminated through diversification. Specific risk, however, is unique to each asset and is therefore uncorrelated with the market. This model rewards only market risk with increased Discount Rates because specific risk can be diversified away. However, analyses of Investment Property transactions often indicate variations in risk and reward in a way that CAPM would not predict. The main reason for this is the heterogeneity of real estate – no two properties are the same and each will have a unique risk profile Because of this Discount Rates in real estate valuations are normally derived from calculating the overall return, or "all-in" Discount Rate ,represented by the price paid as there is little reliable evidence of how specific types of risk are priced by the market..

Although an "all in" Discount Rate is the norm in real estate valuation it can also be important to understand the different types of risk it reflects. A significant change in any of these could indicate the need to adjust the all-in rate. Alternatively some types of risk are better reflected by adjusting the cash flow than trying to reflect in the Discount Rate. The main types of risk that are relevant to real estate are:

- The risk-free rate of investment
  The risk-free return is traditionally the gross redemption yield on a medium-dated government bond. However, over the last decade the return on government bonds has fallen to historically low levels and in some cases has been negative. While falling returns on government bonds has been associated with falling property Discount Rates or yields, and therefore rising prices in many markets, many argue that the concept of a risk free rate based on bonds is now flawed.
- Market risks
  - o Illiquidity upon sale (e.g. lot size, transaction times, availability of finance).
  - o Failure to meet market rental expectations (forecast rental growth).
  - o Failure to meet market yield expectations (forecast yield shift).
  - o Risk of locational, economic, physical and functional depreciation through structural change.
  - o Risks associated with legislative change (for example changes in fiscal policy).
- Property Specific risks
  - o Lessee defaulting on rental payment.
  - o Risk of failure to renew or agree new lease.
  - o Costs of ownership and management.
  - o Differing lease structures (e.g. rent review structure, lease breaks).

There is a degree of overlap between risk factors and therefore care must be taken to avoid double counting of risk. It is common practice to incorporate property-specific risks into the cash flow, for example reflecting the risk of future periods with no income while a new tenant is found by a period of nil income. Therefore, while market risks are customarily reflected in the Discount Rate, non-market property risks are, where possible, built into the cash flow.

Discount Rates may be used in different ways in a DCF model for real estate. These include:

- A single Discount Rate for each class of property – either by use (offices, shops, etc.), by subtype (unit shops, shopping centres, etc.) and/or by location.
- A Discount Rate reflecting the risks of a specific property or cash flow.
- Different Discount Rates applied to different components of the cash flow according to their risk – for example the passing contractual rent until lease expiry (risk dependent on financial strength of lessee), the rent at future rent reviews (risk dependent on lessee and market rental changes) and rental income beyond expiry of lease contract (risk dependent on unknown lessee, changes in market conditions and prospect of period with no income).

Note that investors' perception of risks and the appropriate adjustments to be made is not stable over time. For example, the increasing role of international investors across property markets places emphasis on a wider range of factors than has been the case in the past. Most important amongst these are market transparency and governance, political and currency risk.

1.3.3. Profits Method
The Profits Test is only a reliable valuation method for Specialised Property, for example a hotel, theatre, hospital, care home, fuel station or certain types of leisure property where the design of the building means it is only suitable for use by one specific type of business. The value of such Specialised Property is directly related to the income that could be generated by the type of business for which it is designed. The Profits method is not an appropriate method for property which is capable of use by a range of different types of business all of which have different earning potential, for example vacant land, standard retail, office or industrial units.
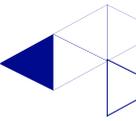
The principle of the Profits method is to estimate the typical income and expenditure that would be incurred in operating the business, excluding rent. The difference between the two provides the amount which is available to pay rent and provide a return to the business owner.

Having established the only type of business that could use the property, an estimate of the trading figures that could be achieved by a reasonably efficient operator must be estimated. This does require detailed knowledge of the business sector involved and the analysis of sufficient businesses to understand typical income and expenditure levels. Care must be taken to exclude outliers. For example, any business which is outperforming its peers because of factors that are exclusive to that operator or one which is being poorly run should be excluded from the analysis. If it is trading, the performance of the business in the property being valued is obviously a key indicator of the trading potential unless it is obviously more or less efficient than the average in the sector, but care has to be taken to adjust the actual figure for any extraordinary items.

Often performance benchmarks can be used for analysis and comparison, for example a typical revenue per room for a certain class of hotel or typical staff and catering costs in a hospital or care home. However, these should not ignore any specific features of the property in question that could cause the revenue or expenditure to differ from the norm.

Another factor that is especially relevant for new buildings or projects is to understand the time that would typically be required for the operator to build up the business. Few new enterprises reach full potential or capacity immediately upon opening, so some adjustment may be required to the early stage financial projections to reflect this. Where the income or expenditure is expected to change in the first few years, or where the asset has a limited life, these are best reflected by using a DCF model, see 1.3.2 above, which allows the NPV of a series of variable figures to be calculated for each item of income or expenditure.

The need for good knowledge of revenue and expenditure for the business sector in question is paramount so that any trading figures provided by the actual operator can be critically considered against other operators in the sector.

Under the Regulations the most frequent task is to estimate the amount which a typical operator could afford to pay in rent. To do this the earnings before tax, depreciation and amortization, is calculated by deducting all other expenditure incurred in operating the business from the total revenues. This is sometimes known as the "Divisible Balance".

The Divisible Balance provides the amount which is available to pay rent to the Municipality (the lessor) and a return to the operator (the lessee) for its investment in the building and business. The lessor's share of the Divisible Balance represents the Market Rent. The apportionment between the lessor and the lessee will vary depending on their respective risk and reward, for example if the lessee has invested significantly in equipping the building for its business its share of the Divisible Balance would be higher than if the lessor had provided a fully equipped building. Market practice should dictate the most appropriate apportionment in each case.

1.3.4. Residual Method

The Residual method is a form of the Income Approach that is normally used to calculate the capital value of property which is designated for development or redevelopment. In many cases such property, especially bare land, can be more reliably valued using the Market Approach. However, the Residual method is useful where the proposed development is unusual or cannot be easily compared with other property in the locality. It is often useful in city centres, where the value of the site is more dependent on the detail of the development that is permitted than on the site area. An example would be where permission may be granted for a very tall building on one site to create a "landmark building" but on other sites in the locality the height is limited.

Although the Residual method produces a capital value for the property in question , this may be a useful indicator of the Market Rent if the Market Approach can be used to determine an appropriate Capitalisation Rate to establish the ratio between the Market Value and the Market Rent. However, as explained later in the Manual, caution is needed when doing this.

The Residual method involves estimating the value of the completed development and then deducting from this the total costs of the development, including the profit that would be required by the developer in return for the risk of undertaking the development. In theory the amount remaining represents what a market participant could afford to pay for the site, the "residual value". The inputs required for this method are:

- **The Market Value of the completed development:** This will be the current Market Value on the special assumption that the development had already been completed. This is sometimes referred to as the Gross Development Value (GDV). Since this term is used in TAQEEM's standards and training material this Manual uses the term. The GDV can be estimated using the Sales Comparison method, the Income Capitalisation method, a Discounted Cash Flow method or, for specialised property only, the Profits method.

- **Construction costs:** Where no work has yet started this will include any preparatory work required prior to the main building contract, such as the costs of obtaining statutory permissions, demolition or off-site enabling work.

- **Consultants' fees:** These will include legal and professional costs that would be reasonably incurred by a market participant at various stages through to completion of the project

- **Marketing Costs:** If there is no identified buyer or lessee for the completed project it will normally be appropriate to allow for the costs associated with marketing, including any consultants' fees incurred.

- **Timetable:** The duration of the project from the valuation date to the expected date of physical completion of the project, together with the phasing of all cash flows, eg for construction costs, consultants' fees and for the receipt of income following completion.

- **Finance costs:** These represent the cost of finance for the project from the valuation date through to the completion of the project, including any period required after physical completion to either sell the interest or achieve stabilised occupancy.

- **Development Profit:** Allowance should be made for development profit, i.e. the return that would be required by a buyer of the development property in the marketplace for taking on the risks associated with completion of the project on the valuation date. This will include the risks involved in achieving the anticipated income or capital value following physical completion of the project.

- **Discount Rate:** In order to arrive at an indication of the value of the development property on the valuation date the residual method requires the application of a Discount Rate to all future cash flows in order arrive at a net present value, i.e. the present value of all anticipated cash inflows less the present value of all anticipated cash outflows.

This simple premise has many detailed variations in practice. Proprietary software is often used to calculate the residual value of a proposed development or one under construction based on the valuer's inputs for the value of the finished project, the building costs, construction consultants' fees, finance costs, required profit and how all these are phased over time. These are now the usual way in which the viability of any large project is determined.
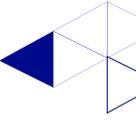
A fundamental problem of the Residual method is that because the residual land value is usually a small proportion of the total value of the project and the costs involved in its completion, it is highly sensitive to relatively small changes in the completed value and the costs. For example, a 10% increase in the cost of a project could result in a 50% reduction in the residual value. It therefore follows that the more certain the costs, the more reliable the valuation of the land will be, so it is better used when detailed plans and building costs have been determined for the proposed development or re-development. When using the Residual method it is also recommended that a sensitivity analysis is undertaken to illustrate the impact on the residual value of any changes in either the completed value of the project or the costs involved.

Although it is indicated above that the Residual method may be useful to determine the Market Rent of a development site, this involves adding another variable into the overall calculation which can adversely affect its reliability. Wherever possible the method should be cross checked with an estimate produced using the Market Approach.

1.4.   Cost Approach

The Cost Approach is only applicable to estimate the capital value of real estate where the buildings or other structures are highly specialised and do not produce an income that is directly attributable to that asset. The cost approach is therefore typically used when the market or income approaches cannot be applied. Examples of the types of building or structure to which it can be applied include buildings suitable only for a single industrial process, specialised buildings for providing public services that do not generate income or structures for the delivery of a public utility, for example water treatment. Its use for valuations required under the Regulations will therefore be rare.

It is also important to note that the fact that a property asset can be regarded as specialised does not automatically mean that the Cost Approach should be adopted. To the extent it is possible to apply the Income or Market Approaches it is appropriate to consider these for either the primary approach or as a cross check on the Cost Approach.

1.4.1. Depreciated Replacement Cost

Depreciated Replacement Cost is the method that is normally used to apply the Cost Approach to real estate. The fundamental premise of the Cost Approach is that a buyer would pay no more for the subject asset than the cost of buying or creating an asset that would provide the same functionality. It follows that the cost of creating a new asset will usually have to be reduced to reflect factors such as the age, efficiency or functionality of the subject asset. These reductions are known as "depreciation". If the depreciation of the subject asset is such that a buyer would not recreate it because it is effectively obsolete, the value may be limited to the scrap or salvage value of the installed plant or structures plus any residual value in the land for an alternative use after deducting the costs of clearance and any remediation required.

The first step is to estimate the replacement cost which is based on the cost to construct a new, modern equivalent asset. The concept of a modern equivalent asset means that it would be the type and specification of building or structure that a buyer in the market would choose if constructing a new building for the same purpose. This may be smaller, more energy efficient, cheaper to maintain or more efficiently laid out than the subject so the replacement cost is not simply the cost of replacing the existing.

The replacement cost is then depreciated to reflect the fact that the subject property is not the building or structure which a buyer would choose to replace it with.

Depreciation adjustments are normally considered for the following types of obsolescence:
- physical obsolescence;
- functional obsolescence; and
- economic obsolescence.

Physical obsolescence is any loss of utility due to the physical deterioration of the asset or its components resulting from its age and normal usage that results in a loss of value. The depreciation adjustment is usually the proportion of the expected total life consumed, measured by considering the asset's age and expected remaining life. It is usually appropriate to use an asset's effective age rather than its actual age. Effective age reflects the asset's condition and utility. For example, if an asset is poorly maintained, its effective age may be greater than its actual age on the valuation date or if it has been renovated, its effective age may be lower than its actual age.

Functional obsolescence is any inefficiency in the subject asset compared to the theoretical replacement that results in a loss of value. It can arise due to either:
- the design or specification of the asset no longer being the most appropriate for delivery of the service for which it was originally intended as it may be inadequate or over-engineered compared with a new replacement;
- the technology used in the asset having been superseded; or
- a combination of both of the above factors.

Economic obsolescence is where factors external to the subject asset result in a loss in value. Examples include adverse changes to demand for the products or services produced by the asset or the loss or raw material required for the process. These factors may be specific to a particular location or may be more generally experienced in the wider economy.

When using the depreciated replacement cost method care needs be taken in reflecting the value attributable to the land element. The depreciated replacement cost method requires all interdependent assets, which may include land, buildings or other improvements and plant, to be valued using consistent assumptions, whether this be for the existing or an alternative use.
The value of the whole is normally based on the value of the land which would be required for the new, modern equivalent asset. That might be in the same location as the subject, but if the use of the subject is no longer suitable to that location it would be where the modern equivalent would most likely be situated.

Where is it anticipated that the value of the land for an alternative use may be significantly higher than that required for a modern equivalent, a two-stage process is required:
- First, the value of the whole is estimated using the value of the land required for a modern equivalent asset and appropriate deductions for depreciation of the buildings and improvements.
- Second, the land is valued for the alternative use using whatever method is appropriate, usually sales comparison, see 1.2.1. The buildings and other improvements are then valued at nil unless some would have value for the identified alternative use. A deduction then needs to be made to reflect the cost of any demolition and site remediation that would be required before the alternative use could be implemented.

If the first value exceeds the second value this represents the Market Value. If the second exceeds the first, this is the Market Value.

1.5. Application to different bases of value

The differences between Market Rent and Market Value are explained in the Policy (Section 4.3 and Appendix 2). In summary, Market Rent is the estimated value of a periodic payment for the use of
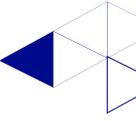
the property for a defined period, with the ownership interest remaining unchanged. Market Value is the estimated capital amount that would be paid for a permanent transfer of the ownership interest The capital value of a Municipality's interest is only required under the Regulations where an exchange of land is made, or if surplus land as defined in Article 3 is disposed of. Further, the value of exchanged land has to be assessed in accordance with the Law of Eminent Domain as provided in Article 6. Most of the valuations required under the Regulations are therefore of Market Rent.

For each property type in this Section of the Manual the characteristics which affect value are discussed and are applicable to estimating both Market Rent and Market Value. However, there are additional considerations that apply when estimating either Market Rent or Market Value which are discussed below.

1.6. Market Rent

Market Rent is defined in the IVS as:
"Market Rent is the estimated amount for which an interest in real property should be leased on the valuation date between a willing lessor and a willing lessee on appropriate lease terms in an arm's length transaction, after proper marketing and where the parties had each acted knowledgeably, prudently and without compulsion."

The following points should be noted in relation to this definition:
- Market Rent is an estimate of the best rent reasonably obtainable by a lessor and the most advantageous rent reasonably obtainable by lessee for the use of a property for a defined period. This rent excludes a rent inflated or deflated by special considerations or concessions granted by either party to the other, or any additional rent which a specific lessee would be prepared to pay because occupation of the property provides a unique benefit to them, in other words one which would not be available to any other prospective lessee in the market.
- "… on the valuation date" means that the estimated Market Rent is effective on a specific date. Because markets and market conditions may change, the estimated rent may be incorrect or inappropriate at another time.
- "…between a willing lessor and willing lessee" means that both parties are motivated to agree a lease of the property for the best rent obtainable in the market from their perspective, whatever that rent may be. Neither is prepared to hold out for a rent that is unreasonable in the market on the valuation date. The factual circumstances of the actual parties are not considered because the rent is one that would be agreed between any active lessor or lessee in the market.
- "… on appropriate terms." means terms that are typical for that type of property in the relevant market. The terms of a lease, for example its duration, frequency of rent payment, the respective responsibilities of the lessor and lessee or the frequency and method of rent escalation all will have an impact on the Market Rent. The IVS provide that an estimate of Market Rent can only be provided with a summary of the lease terms that have been assumed when making the estimate.
- The expression "at arm's length" means that the parties are deemed to be unconnected and each seeking the most advantageous price from their perspective.
- "… after proper marketing" means it is assumed that prior to the rent being agreed the opportunity to lease the property has been exposed to the market in the most appropriate manner to attract potential lessees. The length of this exposure is not a fixed period but will vary according to the type of property and market conditions.
- "… where the parties had each acted knowledgeably (and) prudently" presumes that both the lessor and lessee are informed about the nature and characteristics of the property to be leased, its actual and potential uses, the terms of the lease and the state of the market as of the valuation date.
- "… and without compulsion." establishes that while each party is motivated to undertake the transaction, neither is forced or unduly coerced to complete it.

Importance of lease terms

The Market Rent will vary depending on the terms of the lease contract for each property. The International Valuation Standards require any estimate of the Market Rent to be accompanied by an indication of the lease terms which have been assumed. These will normally be terms that are typically offered in the market for that type of property but still need to be stated to avoid the Market Rent being misinterpreted.

The following lease terms can all affect the Market Rent:

- The frequency and timing of rent payments. Whether rents are paid monthly, quarterly or annually will depend on market practice for that property type. Any departure from the usual payment intervals could affect the Market Rent if it gives an advantage to either the lessor or lessee.
- The length of the lease. For some property types a short lease will be preferred by lessees because it gives flexibility and is not a long term commitment. However, where a lessee is required to make substantial investment, for example in constructing a new building, lessees will prefer a much longer lease to allow them to receive a return on their investment.
- The frequency and method of any rent escalations. Lessee's will generally prefer rents to be fixed for as long as possible, so longer intervals between escalations often can increase the initial Market Rent. If the amount of any future escalation is capped at a figure below the market's expectations of future growth it will tend to increase the initial Market Rent or have the opposite effect if it is perceived by lessees as exposing them to paying a higher figure than the Market Rent in the future.
- The party responsible for repairs and maintenance. While in leases granted by a Municipality the lessee will normally be responsible for all repairs and maintenance, this is not always the case, especially for shorter leases of property with older buildings. If the lessor takes responsibility for some repairs this can increase the Market Rent.
- Responsibility for other outgoings, for example tax and insurance. While generally the responsibility of the lessee, this is not always the case, so it needs to be stated in each case.
- Any special obligations, for example, to construct a specified building by a specified date. This is will be the norm when leases are granted of bare land for development. The length of time allowed for construction before any penalty applies or if the rent payments are reduced or deferred during this period will all have an effect on Market Rent.

1.7.   Market Value

Estimating Market Value involves one major additional consideration from an estimate of Market Rent. This is the actual or implied Years Purchase as explained in 1.3.1. of this Manual. Even if the Sales Comparison method is used and there is transaction evidence from transfers of other similar property allowing a price per m² to be determined, the price paid in any capital transaction will reflect the return expected by market participants.

If there is an identifiable income that the owner will receive, this return is explicit and the Discount Rate or Years Purchase can be calculated. Even in cases where there is no identifiable income, the benefits of ownership for a defined period of time, for example, annually, can still be measured in financial terms, for example in the rent saved by ownership. However, just as important are the views of market participants on the future of the property. If market participants consider that the annual benefits of ownership are likely to increase in the future the price they will pay will be higher than if they consider that the benefits will diminish in real terms, for example because demand will fall or because buildings become obsolete or more expensive to maintain. While the anticipation of future benefits may not always be explicitly stated in financial terms, they are still implicit in the Market Value.
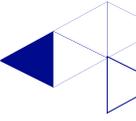
This anticipation of future returns and benefits is therefore inherent in the price paid for any transfer of ownership and will vary from property to property. Any comparison made between prices agreed in actual transactions and the subject property needs to take into account factors that could have influenced the price paid that would not be part of an estimate of Market Value.

- If a property has a rental income or is vacant but intended to be leased to produce an income, the security of the income over time will be an important factor. If the income is secure because the lease contract is for a long period and with a financially sound lessee the price paid will be higher than for a similar property which is leased for only a short period or if there is a risk that the lessee might be unable to maintain rent payments.
- The long term prospects for the property, for example if the nature of the surrounding area is likely to change, how quickly will the buildings become obsolete or whether the building can be adapted for other uses.

Section 2.
Valuations of Land

2.1. Methods Applicable

Land for any commercial or industrial use can be valued using two of the main recognised approaches explained in the Policy. These are the Market Approach and the Income Approach. The specific methods are the Sales Comparison method and the Residual method as explained in Sections 1.2.1 and 1.3.4. The use of both methods may be appropriate in some cases, for example the value indicated by the use of the Residual method may be cross checked against the value per m² of other sites which are not strictly comparable to see whether it falls within a range which is reasonable when the differences between the sites are taken into account.

Sales Comparison Method

Where the intended use and form of development on the land is similar to that for other land for which there is transaction evidence, the Sales Comparison method is normally the most reliable. However, where the form of development is unique to that site, the income that can be generated from that development becomes a better guide to the land value. In these circumstances using the Residual method provides a better indication of value.

Applying the Sales Comparison method involves making comparisons between the subject land and similar land that has been sold or leased recently. To start the comparison, the size of the land that was subject to the transaction must be known as well as the price or rent. This enables a price per m² to be established.

Having established the price per m² for each of the transacted sites, a process of comparison needs to be undertaken, where differences in the characteristics of each transacted site and the subject land are identified. Characteristics which can influence the value of an area of land include:

- **The location:** land close to transport links such as major roads or in a city centre will be more valuable than land in a more remote location. For uses such as retail or offices other location factors influencing value can be the proximity to complementary or even competing businesses. For industrial land the proximity of resources or supplies or availability of suitably skilled labour can also affect value.
- **The legally permitted use or uses:** Some uses will attract a higher value than others. If there are significant restrictions on the use of the land this will depress the value.
- **The type of development permitted:** The form of building and density of development permitted will affect the land value. A site that has a higher permitted floor area to land area ratio will be more valuable than one with a lower ratio, for example a site on which a tall tower can be built will usually be worth more than one of the same size where the maximum allowed height is only a few floors.
- **Physical characteristics:** The size and shape of land will affect value. For example, an irregular shaped plot may be difficult to use efficiently compared with a rectangular plot. A small plot may have a higher price per m² than a much larger one. Also factors such as whether the land is sloping or flat will affect value.
- **Ground conditions:** If land has poor load bearing capacity or has been contaminated by a previous use, this will have a negative effect on value.

All of these are matters that need to be considered as any of them could have influenced the price or rent paid in another transaction or have an effect on the value of the subject land.

Examples of how the Sales Comparison method may be applied to land are included in Appendix 1.
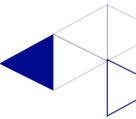
Residual Method

The Residual method is explained in 1.3.4. In summary it is a method of valuing land with potential for development by deducting all the costs involved in creating that development from the completed value of the development.

The Residual method can be complex, especially if it is being used to estimate the Market Rent of the land. It requires many inputs to calculate and the result can be very sensitive to small changes in some of those inputs. Wherever evidence can be found of rents paid for land which can be used for a similar development it is preferable to use the Sales Comparison method. However, where the land is to be used to for the development of a specialised building or one that is not typical of other developments in the neighbourhood, it is sometimes the only method which can be used. Its use is more common in city centre locations where there can be considerable differences between the type of development permitted, or possible, on different sites within close proximity, for example in terms of the permitted height or density of new buildings.

To use the Residual method to estimate the Market Rent of land for development the following is needed.

- The Gross Development Value – this is the Market Value of the municipality's interest assuming the proposed project had been completed. This can be done using the Sales Comparison method, the Income Capitalisation method or the DCF method, depending on the types of property that is planned.
- The actual or estimated costs of the project including construction, fees, finance and an allowance for the profit or return on those costs which would be expected by a developer in the market.
- The gross land value will be the GDV less the costs, and from this the Market Value of the land can be calculated. A further valuation exercise is then required to estimate the Market Rent, which can be done by applying a "reverse" Income Capitalisation or DCF method.

A further consideration is the estimated time scale of the project. For a large-scale project the time taken to complete will be significant and in these cases allowance with need to be made in the calculation for the expected timing of all cash outflows and inflows by applying a DCF method to not just the calculation of the GDV but to the whole project.

- All the variables caused by these complexities are the reason why the Residual method should only be applied to calculate the Market Rent of land when there is no relevant evidence that can be used to apply the Sales Comparison method. An illustration of the application of the Residual method is in Appendix 2.
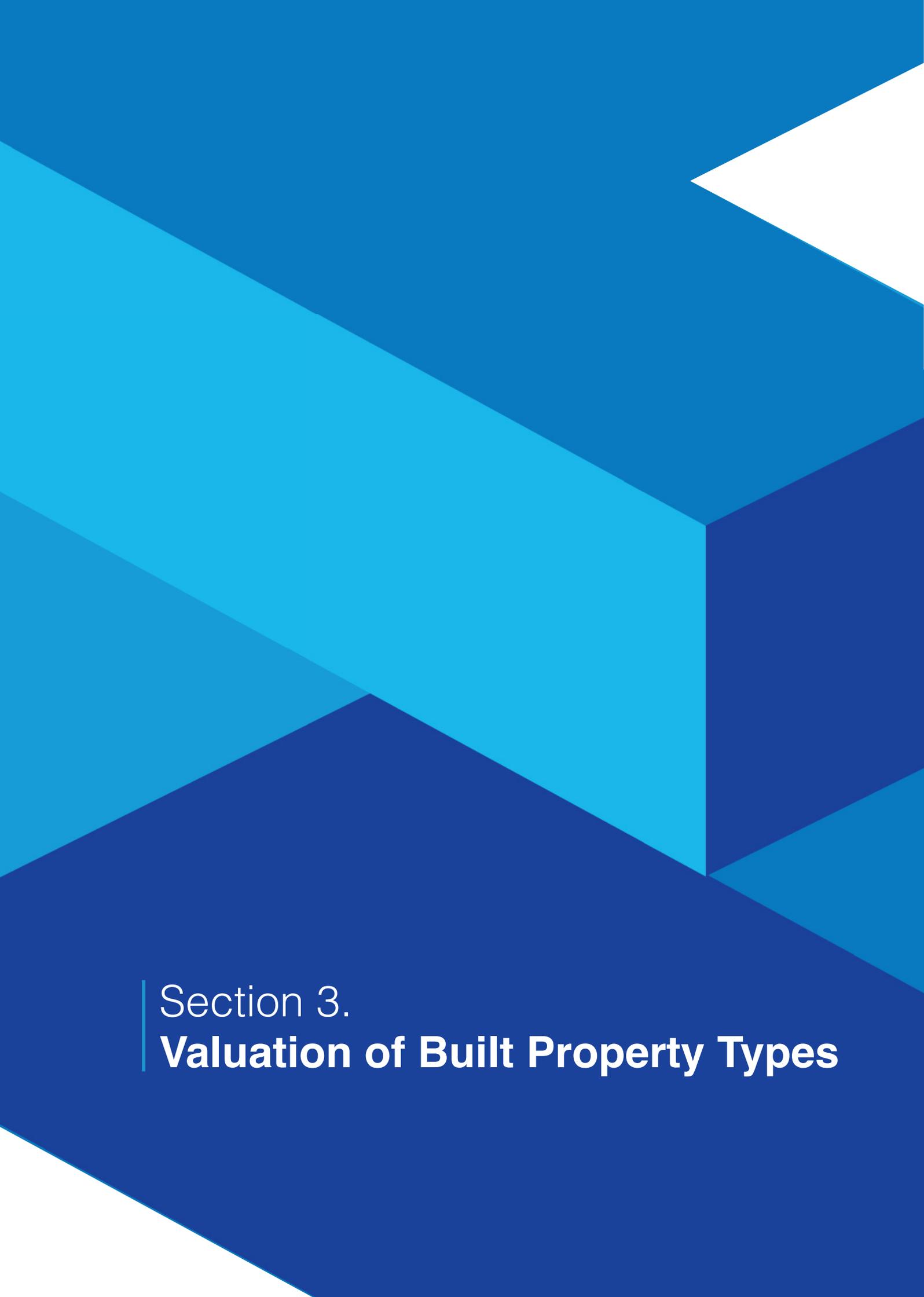
Section 3.
Valuation of Built Property Types

This Section examines the appropriate methods for valuing the different types of Built Property typically owned by Municipalities. The valuation of Built Property is required under the Regulations when it is necessary to include the value of buildings in a lease contract renewal or extension.

For each type of Built Property in this Section, the most appropriate method, or methods, to be used are discussed together with advice on how these can be applied to the property type in question. A list of the main factors that will influence the Market Rent for each type of property is also provided. The valuation considerations and methods identified for different property types may be relevant to estimating the GDV of a proposed new project if the Residual method is being used to estimate the value of bare land, see Section 2.

3.1.   Retail Property

For retail uses the Sales Comparison method will usually be the most appropriate method to estimate the Market Rent, although for certain types of specialised retail property which are suitable for only one type of business, the Profits' Test" described in 1.3. may be used. In some retail centres which are managed by a single owner, "turnover rents" are becoming more common. Lessees are required to disclose the turnover generated each year and a percentage of this is paid, in addition to a base rent.

Applying the Sales Comparison method to retail property requires knowledge of the floor areas for different parts of the subject property and any property used for comparison. These different parts would typically be:
- the area usable for sales; if the sales area is more than one level the floor areas need to be recorded separately for each level.
- Staff facilities and any back office areas.

The reason why a breakdown of each floor area within a retail building is important is because most retailers will normally place a higher value on sales space on the ground floor but regard any basement or upper floor areas as less desirable. A building with 1,000m² of sales space all at ground floor level will normally be more desirable to a retailer than a building with 1,000m² of sales space split over multiple floors.

A regular and well-proportioned layout that provides a retailer maximum flexibility as to how they layout displays and encourage movement around the sales area, increases value. In city centre locations having a prominent frontage to the places where there is high 'foot traffic' from potential customers is important. For this reason, a property with a good "frontage to depth ratio" will be more valuable than one of the same area which is narrow and deep. Corner units with two frontages can also be more valuable. Ancillary accommodation such as storage space, staff accommodation and offices will normally be valued at a lower rate than the sales area.

Information is therefore needed about the layout and type of accommodation within a retail building, either to properly analyse the evidence of other transactions or to apply the appropriate rate per m² to the subject property.

The value of a retail building can also vary significantly for the reasons listed below:
- **Location:** In the retail market there can be significant differences in value between properties that are within a short distance of each other, so analysis of the micro location is important. The optimal location will depend on the type of or retail use. A retail unit will have the highest value if it is in the catchment areas with the greatest number of potential customers for that business. This will be influenced by the number of other shops in the area and the proximity of retailers who attract large numbers of shoppers. The socio-economic profile of the area will also affect rents. Low margin discount shops typically found in areas with a low average household income will pay lower rents than a high margin luxury goods retailer in an area with a high average household income.
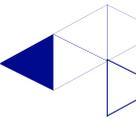
- **Accessibility:** city centres will normally have good accessibility for public and private transport, but the proximity of transport hubs and parking can also influence the flow of potential shoppers. For large format out of town retailing the availability of sufficient parking and proximity to major roads becomes a more important influence on value.
- **Construction:** a structure that allows for internal changes and replacement of shop fronts without major alterations will be preferred by most occupiers and therefore be more valuable.
- **Age:** a modern building that is easy to maintain and energy efficient will be more valuable than an older building.

It is therefore important to record information on all these variable factors when assessing the rent for a retail property or recording transaction data that can be used as evidence. This ensures that like is compared with like, and for appropriate adjustments to be made to the rate per m² applied to different parts of a retail building.

An example of the application of the Sales Comparison method to a retail property is provided in Appendix 1.

3.2. Office Property

This section deals only with the value of purpose-built office buildings. Offices that are ancillary to other uses, for example on the upper floors of a retail property or an administration block in a factory will be valued as part of the predominant use.

The Sales Comparison method is most appropriate for estimating the Market Rent of offices. The following factors all affect value and must be considered when making comparisons between the rents paid for other office buildings or accommodation and the subject property:
- **Location:** while less sensitive to the precise position than retail property because office occupiers do not need to attract potential customers into their building, location is still an important factor. In city centres it is not uncommon for the highest values to be found in recognised clusters of similar or complementary types of business, for example the financial centres in parts of large cities such as New York, London and Hong Kong. Historically this is because such clusters or hubs facilitate face to face dealing, and also attract a pool of suitably specialised workers. While technology may be reducing the benefit of having workers specialising in the sector being close together because much office work can often be done efficiently from any location, there is still a preference from many office occupiers to have a physical presence in areas traditionally associated with their business sector. The value of offices being in a recognised "hub" is less important for offices in edge of town or out of town locations, although accessibility to good road links and other public transport is still an important consideration.
- **Accessibility:** in city centres a property's proximity to key transport terminals, to allow ease of access for workers, will be a significant consideration. In edge of city or out of city locations, the proximity to transport links will also be important but with a greater emphasis on roads and highways, and to local centres of population and complimentary facilities.
- **Design:** in prime city centre locations some occupiers are prepared to pay additional rent for an exceptional or unusual design of office building if it enhances the prestige of their business, but in other situations functionality and efficiency are more highly valued by the majority of occupiers.
- **Construction:** most modern office buildings will have a similar basic construction and provide mainly open plan office areas that can be partitioned to suit different occupier's requirements. They will also be equipped with raised access floors for communication cables and have integrated air conditioning. Older buildings that do not provide some of these facilities will be less valuable.

- **Age / Environmental Impact:** a modern building that is easy to maintain and energy efficient will be more valuable than an older building. Many large office occupiers are now committed to Environmental, Social and Governance (ESG) policies which include ensuring the buildings they occupy are as efficient and environmentally friendly as possible, which is focusing demand on the newest buildings. Because of this technical and functional obsolescence has been significant in offices over the past thirty years, with many 1980s office buildings that may be physically in good condition being demolished or converted to other uses such as residential.

An illustration of how the Sales Comparison method can be applied to an office building is included in Appendix 2

3.3.   Industrial and Logistics Buildings

Many conventional industrial and logistics buildings built within the last forty years are of similar basic construction with portal frames to support the roof which provide clear working or storage areas. Subject to local planning regulations many are also interchangeable between industrial and logistics uses. Because there is a higher degree of similarity than for some other property types the most suitable method of valuation is Sales Comparison.

The few exceptions are where the buildings are highly specialised and will only be suitable for one type of industrial process. Other methods may be appropriate for these, such as the Depreciated Replacement Cost method or Profits method. However, even if a specialised factory is constructed on a Municipality's land, the lessee would normally have been granted a long lease in order to amortise the initial investment. Since specialised manufacturing processes usually have a high degree of technical and economic obsolescence it is very unlikely that such facilities will have a significant value on lease renewal or extension. For some factories, e.g. those in the pharmaceutical or chemicals industries, it can then be difficult to determine what is a building and what is plant or equipment – for example, the specialised interstitial spaces and building equipment required for pharmaceutical clean rooms. Because the occasions where a valuation of a specialised property will be rare, and when they arise it will require specialised input, these are not examined in this Manual.

Factors that need to be considered when comparing properties using the Sales Comparison method include:
- **Location:** The most important considerations for an occupier of industrial or logistics property will be the proximity of good transport links, a local population with the required skills and where neighbouring uses are unlikely to restrict or limit their operations, for example by forbidding night-time operations. Another factor which can be important for certain occupiers is the proximity of suppliers or customers, or to resources required for their process. For some types of industrial process, the availability of a substantial electricity supply or other services is essential.
- **Accessibility:** As with other types of business use, access to local and national road networks is an important consideration for occupiers. This is especially the case with logistics operators where being only a few kilometres from a location which is optimal for receiving goods from suppliers and distributing them to customers can add significantly to their operating costs, making the property less valuable.
- **Site Density:** An important consideration, especially for logistics operators is the amount of open space around the building to allow for parking of trucks and other vehicles and to allow for an efficient flow of traffic and goods around the site. Some manufacturing operations also need open storage. A building area to site area ratio of more than 40% is normally considered undesirable, although some logistics operators prefer this to be as low as 20%.
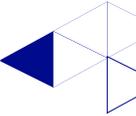
- **Design:** Few industrial or logistics occupiers will need, or be prepared to pay for, anything other than a functional and flexible design. The main variables are the effective height to eaves and the width of the bays. However, once a clear internal height of about 6m is reached, together with a proportionate span for each bay, additional height and bay width does not always increase value. While some logistics operators will require tall buildings to allow them to stack goods higher, unless an industrial operator has a process or product that needs additional height the additional volume is an expense rather than a benefit.
- **Construction:** most modern industrial and logistics buildings will have a similar portal fame construction with external cladding. In older buildings the insulation on the walls and roof will normally be less efficient, and asbestos containing materials were commonly used for cladding. Modern cladding systems are more efficient and easier to maintain and therefore more valuable. A major factor that influences the value of buildings is the floor loading capacity, usually measured in Kilonewtons (KN) per m². For logistics buildings with an internal height of 10m, a typical minimum required floor loading capacity is 50KN m². Logistics operators usually wish to install racking systems to use the height of the building, so the evenness of the floor is as much a factor influencing value as the loading capacity.
- **Age:** Because most industrial or logistics buildings constructed in the last forty years have a design which can accommodate a wide range of different types of operation, they do not suffer the same degree of functional obsolescence as some other types of building. However, older buildings may be in locations which are no longer favoured by current occupiers, and almost certainly will be more expensive to maintain and operate which will adversely affect their value.

3.4.   Hotels and Hospitality

If buildings are designed for and only suitable for a specific type of business, such as a hotel, or restaurants in unusual buildings, the Profits method approach described at 1.3.3 may give a more reliable indication of value. While there may be sales of other similar properties that might suggest the Sales Comparison method could be used, due to the specialised nature of the buildings it would be unusual for there to be many with sufficiently similar characteristics to make the use of this method reliable. However, whenever the Profits method is used it is good practice to undertake a cross check to compare with any available metrics obtained from transactions of other properties in the sector.

Like other types of commercial property, the characteristics that will influence value will be location, accessibility, design, construction and age. However, when applying the Profits method it is the effect that these characteristics will have on the estimated income and expenditure of a typical business in occupation that needs to be considered. Clearly the location and accessibility will influence income as the better these are the greater the potential number of customers. The design may be one that enhances income if it makes the property stand out from potential competitors, but different designs may have very different operating costs. Differences in design will also be reflected in maintenance and operating expenditure, as will the buildings age.

If there is a business in occupation the starting point for the Profits method is to examine the actual trading accounts. These must be critically considered and not simply accepted as being representative of the figures which any averagely competent operator would achieve. The income and expenditure of an individual operator can also vary from year to year if there are abnormal events. For example, a local short-term event may have boosted income above the norm, or much more may have been spent on repairs and maintenance than usual. It is therefore important that the valuer seeks to obtain accounts from the occupier which span a number of years and also has knowledge of typical income and expenditure for the sector.

For hotels a widely used performance metric recognised internationally is Revenue per Available Room (RevPAR) which is calculated by multiplying a hotel's average daily room rate by its occupancy rate. It provides a useful cross check to see if a hotel's actual or estimated revenue is compatible to other hotels in the sector. There are various sources of RevPAR data in the KSA for most major branded hotel chains, including the Tourism Information and Research Centre and other commercially available subscription services.

A simple example of the Profits method applied to a hotel is provided in Appendix 2.

3.5.   Hospitals and clinics

This Manual provides guidance on the valuation of private sector hospitals, clinics and medical laboratories developed on municipality owned land, which are subject to the Regulations. Public, government hospitals and clinics, including the land on which they are built are owned by the Ministry of Health, and therefore outside the scope of the Regulations and this Manual.

Except for certain types of clinics where consulting rooms can be accommodated in office style buildings, most Built Property in this sector will be highly specialised and may also be on sites designated for the purpose. The Profits method as described in 1.1.3 of this Manual is therefore normally the most appropriate valuation method.

Although the inputs required to estimate the Market Rent of a hospital will differ in detail from those of the hotel in the example of the Profits method in Appendix 2, the principle that estimated expenditure is deducted from estimated income to find the amount available to rent or purchase the property is exactly the same.

Points that need to be given special consideration when valuing a hospital or specialised clinic include:
- The demand for the particular type of medical facilities in the area having regard to other public or private sector facilities. A particular hospital may specialise in treatments that are not offered by others within easy reach and this is a factor that will influence demand.
- Medical and healthcare operations are subject to a higher degree of regulation than most other types of business. The ability of a hospital or clinic building to allow compliance with relevant regulations is therefore a more significant influence on value than for buildings that can accommodate a wider range of uses.
- The income will have two main elements; the care of inpatients and income from the treatments they receive. In many cases income from the care of inpatients is analogous to that of a hotel, albeit one with more specialist staff. Income from medical services, which may be provided to inpatients or outpatients, will vary significantly on each hospital's specialisation and whether the service is provided by medical staff employed by the operator or by independent consultants.
- Staffing cost can vary significantly depending on the type of procedure undertaken at each hospital or clinic.

All these factors need to be investigated and understood in order to estimate the trading performance and to make realistic income and expenditure projections, from which an estimate of Market Rent or Market Value can be made.

3.6.   Leisure and Sport Facilities

A very wide range of buildings and structures provide leisure and sports facilities. Some, such as an indoor gym, may be in a building similar to a standard warehouse or office. Others require more specialised structures such as cinemas and theatres, stadiums or swimming pools.
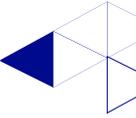
For non-specialised buildings which may be potentially used for other purposes the Sales Comparison method is the most appropriate and can usually be applied with little difficulty. An exception may be where the building has had specialist adaptations within the basic shell, for example the construction of courts for racquet sports or shower and changing rooms within a building which otherwise could be used as a warehouse. Such alterations would be regarded as an impediment to other potential occupiers for the basic building shell. In such cases a comparison would need to be made between:

- the value for alternative uses using the Sales Comparison method, after allowing for the cost of any reinstatement work for the removal of the specialised adaptations
- the value of the facilities as they are to a an averagely competent operator of that types of business using the Profits method.

For more specialised buildings or structures which are not easily adapted to an alternative use, such as theatres, swimming pools, and sports stadia, the Profits method is the only relevant method. If the activity for which they were designed was not viable, they would be economically obsolete, and the only value would be in the land for an alternative use less the cost of demolition and clearance.

An illustration of the Profits method is provided for Hospitality Accommodation at 3.6 above. Equivalent inputs will be available for most sports and leisure facilities. Factors that may require consideration when applying the Profits method to leisure property include:

Income:
- The average number of customers or visitors, which will vary depending on location and the type of leisure activity.
- The quality of the facility offered compared with alternatives.
- The average fee per visitor for using the facility.
- The average spends per visitor on additional services, for example refreshments.
- The effect of season passes, group bookings and promotions on income.

Expenditure:
- Staff costs.
- Maintenance of property
- Maintenance or replacement of equipment.

As in the case of other applications of the Profits method, the valuer needs sufficient knowledge of the leisure sector in question to be able to judge whether the income and costs for each heading in an actual occupier's accounts is typical of those that would be experienced by a reasonably efficient operator, see 1.3.3.

3.7.   Gas stations

Gas stations are specialised in that they are only suitable for one main purpose, refuelling vehicles. However, since they are in roadside locations the highest and best use, see Policy 3.2, may be for re-development. It should be noted that the costs of decommissioning will be high relative to other uses because of the need to deal safely with the removal of storage tanks and any contamination.

The Profits method as explained in 1.3.3 and illustrated in Appendix 2 can be applied to the fuel sales; the higher the number litres sold, the higher the value. The key inputs to this calculation are:
- The gross income from fuel sales.
- The cost of sales, i.e. the cost to the operator of the fuel, regular maintenance of the pumps, forecourt and any structures, wages, taxes and other outgoings.

As with all applications of the Profits method, the actual trading figures for each station or operator need to be compared with those typical in the sector and any abnormal over or underperformance should be ignored. From this calculation the amount available for rent and the operator's return can be calculated. Where there are sufficient data from many other gas station transactions, benchmarks based on the volume or throughput, such as the average rent per 10,000 litres can be developed as a unit of comparison, although as with any such benchmark, caution is required to ensure that any atypical characteristics of a property are reflected by appropriate adjustments.

One issue in KSA that does not arise in other markets is that retail prices are set by Aramco. Because of this the margin allowed on the price charged to the operator is often small This means that the sale of fuel is often just one of the services offered at a roadside property, with the fuel sales used to attract customers to other parts of the business. Examples include coffee shops, restaurants, car washes and motor maintenance services. While the Profits method can be applied to these elements of the site, it is often more reliable to use the Sales Comparison method to compare with the value of other such facilities in the area.

3.8. Banks and Automated Teller Machine (ATM) premises

Bank premises may be situated in retail areas where they will be competing with other retail users. Banks may also be found within office complexes in a property that would otherwise be used as offices if the bank vacated. In either case the appropriate valuation approach will be to use the Sales Comparison method to compare the property with others in the market in which their property would compete if vacant, based on the criteria set out in 2.4 and 2.5 above.

ATMs may be situated within a bank or other retail or office premises, in which case the space they occupy will be valued as part of the whole property. However, the majority of ATM locations owned by municipalities are in standalone "drive through" facilities which are not part of a larger retail or office property. These sites will be competing with other roadside uses which will vary by location. The ATM itself will be classed as plant or equipment owned by the lessee and will not form part of the real estate, so a municipality's interest is in the land and any permanent building erected to house the ATM.

The most appropriate method of valuation will be Sales Comparison with other roadside uses in the locality. The Sales Comparison Method is explained in 1.2.1 and illustrated with examples in Appendix 1 for land and Appendix 2 for Built Property.

3.9. Kiosks

If a kiosk is a permanent structure, it will be valued in the same way as a small retail unit, see 3.1 above. If it is a non-permanent structure which can be easily moved without significant dismantling, it will not form part of the real estate and therefore only the land will fall to be valued. Land should be valued using the Sales Comparison method, as described in in 1.2.1 above with regard to the location criteria for retail property as described in 3.1 and illustrated in Appendix 2.

3.10. Waste landfills

Municipalities are responsible for ensuring adequate waste management provision in their area. This may be on sites owned by a municipality with a contract with a waste management company for the management and disposal of waste. The Regulations, and this Guidance Manual only applies where a waste management or disposal site is leased to an operator.
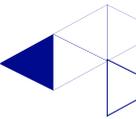
Waste disposal and landfill sites can vary significantly and are heavily regulated to minimise causing pollution or other environmental damage to the surrounding area. The cost of work needed to ensure a site complies with these regulations will also vary significantly. Also, waste disposal sites have a limited life based on the volume of waste each can hold and the rate at which this is used up. This means that comparing the rents for different bare sites is not possible without making a full analysis of the development and operating costs of each one.

For this reason, the most appropriate valuation method is to use a Discounted Cash Flow as explained, see 1.3.2 and the illustration in Appendix 2. The key inputs required to construct a suitable DCF model are:

- **Estimated Life:**
    - o The total volume of waste that can be disposed of on a site needs to be established. This total may be set by regulation or be limited by physical factors, such as the volume of the site. This volume may need to be calculated following a geotechnical survey of the site.
    - o The average volume of waste disposed of in each year needs to be determined. Since an operator will charge those who wish to dispose of waste by the tonne, most properly managed sites will have a weighbridge. Information is then required on the average volume of each tonne, which will vary depending on the type, or types, of waste permitted.
    - o The total volume available is then divided by the average volume of waste expected to provide the estimated life of the facility.
    - o It would be unusual for a site to only accept one type of waste. The site may be required to have separate areas, or cells, for the disposal of special waste such as tyres, carcasses of dead animals, asbestos containing material, etc. These will need to be engineered to prevent cross contamination between the different types of waste as well as protecting land outside the site. This means that the estimated life for each type of waste will probably differ. In constructing the DCF model the type of waste with the longest expected life should determine the period for which explicit cash flow forecasts are made.

- **Income:**
    - o The cash inflows for each period will need to be calculated based on the expected revenues. In cases where different types of waste are disposed of this will need to be calculated separately if the price charged for each type differs. Disposal of inert waste, such as construction waste is likely to be charged at a much lower rate than potentially harmful material such as asbestos. The available capacity for different types of waste may also differ which will mean that the period over which income may be received for different categories will also differ.

- **Expenditure:**
    - o The costs will include all operating expenses. Unlike income these costs are likely to apply to the whole site. Separating out the costs related to a specific type of waste may be possible but in most cases many of these costs will be spread across the operations for the whole site.
    - o For a new, or proposed, site the capital expenditure incurred in creating a site compliant with all the appropriate engineering works required by regulations to protect the environment or for the effective operation of the site will need to be included. For existing sites there will often be further capital expenditure required during its life, for example in creating and lining new cells, updating or creating new effluent treatment facilities or replacing any fixed equipment.
    - o Allowance for all anticipated operating and capital expenditure should be included for the appropriate period in the cash flow.

- **Restoration Costs:**
  - o At the end of the life of the landfill the operator will normally be required to remove all buildings or equipment and restore the site to a specified standard, for example covering with a certain depth of soil and undertaking landscaping and planting. An estimated allowance for these costs need to be included in the cash flow at the end of the estimated life.

- **Residual Value:**
  - o Although under the current regulations new landfill sites must be far from land planned for residential, commercial, agricultural, and industrial development, there may be occasions when a restored site has value for an alternative use.
  - o Technology now exists for the recovery of methane gas from closed landfill sites and using this as an energy source, which may also create a residual value.
  - o Where such opportunities do not exist, the residual value will be nil or a nominal figure.
  - o Any material Residual Value needs to be included as a Terminal Value in the DCF model, and included in the NPV calculation.

- **Operator's Profit:**
  - o An allowance needs to be made in the DCF model for the operator's profit. This is usually done by subtracting a percentage of the annual income from the gross profit for that year

For each year the total of the expenditure items is deducted from the total income to arrive at the gross profit for that year. The net profit is then calculated by deducting the operator's profit. The net profit for each year is discounted, see 1.1.3, to provide the NPV. The NPVs for each year and the NPV of any residual value are then added together, and the resulting figure represents the current Market Value.

The Market Value can be used to calculate a Market Rent by applying an appropriate Discount Rate, see 1.3.2.

3.11. Marinas and Boat moorings

Some Municipalities lease waterfront land and the rights to the adjoining water for the development of leisure marinas.

The facilities on land can include changing and washing facilities for marina users, hardstanding for boats when they are out of the water and parking facilities. Larger marinas may have additional facilities, such as retail space for the sale of marine spares and accessories, workshops, fuelling facilities, cafes and restaurants. These are often leased to third party service providers.

The marina will also require infrastructure on or under the water. This will require concrete slipways for launching and recovering smaller boats and a dock with cranage for larger vessels. There will be pontoons to create and provide pedestrian access to the berths for individual boats. These will require anchoring to the seabed, either by posts driven into the ground or by cables. Each berth will need access to electricity and water.

A marina requires specialised structures and therefore the Built Property is only suitable for this use. Additionally, the physical characteristics, will vary significantly between different marinas, both in terms
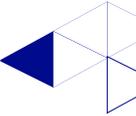
of the required infrastructure and matters beyond the marina, such as the depth of water available on the approach. This means that the Profits method is the most reliable valuation method. Where a marina is still to be developed or is still building up berth occupancy in its early years, combining Profits method with a DCF model as described in 1.3.3 and in Appendix 2, Illustration 3 will provide the most reliable estimate of the current value.

The key inputs required to construct a suitable Profits method model are:

- **Income:**
  - o Fees from annual berth holders.
  - o Fees from visiting boats.
  - o Income from subleases or other agreements with service providers.
  - o Income from additional services (fuel, water, electricity).

- **Expenditure:**
  - o Staff.
  - o Maintenance of "on-water" and "off-water" infrastructure.
  - o Costs of providing services.

As with all applications of the Profits method, the income and expenditure used should be typical of the market, i.e. that would be experienced by an averagely competent operator. Although the starting point will be the trading accounts of the actual operator, these must be adjusted for any extraordinary items of income or expenditure which would not be incurred by another operator of the site.

3.12. Off Street Parking

Parking regulations are being introduced in many urban areas and building permissions require off street parking to be provided in new developments. Some municipalities are using Build, Operate Transfer (BOT) agreements with the private sector to provide off street parking, normally in multi-storey car parks.

- **Parking in new developments:**
  The parking provision in a new development project will be reflected in the income and cost projections used in the Residual Method, see 1.3.4 and the Land Example 3 in Appendix 1. The cost of providing the required parking will be included in the overall construction costs. If the parking will be charged separately from the buildings it serves, a separate projection can be made of parking income. However, in many cases the parking will not be charged separately and the benefit it provides will be reflected in the rents for the buildings. For example, an office building that includes the right to use allocated parking spaces in the rent for each office area will achieve a higher rent per m² than otherwise similar offices with no parking facilities.
  By including these costs and benefits when applying the Residual Method, the effect of the parking provision is reflected in the resulting valuation estimate.
- **New Standalone Parking:**
  If a municipality identifies the need for off street parking and wishes to appoint a private sector investor to construct and manage the parking, under a BOT or similar agreement, it will need to identify the Market Rent for the land. If there are other sites within the area which have recently been leased for the construction of a car park, in theory the Sales Comparison Method could be used. However, the reality is that it would be unusual for there to be an active market for car park sites. The Residual Method is therefore the most reliable.

- o **GDV Calculation:** Since a multi-storey car park is unsuitable for any other type of use the most reliable method for calculating the GDV is to use the Profits method, see 1.3.3 and Appendix 2 Example 3. This will calculate the net profit that can be obtained from the operation of the parking and use this to estimate the amount that a reasonably efficient parking operator could afford to pay as rent for the completed facility.
- o **Costs:** The total costs of constructing the new car park are then calculated as per Land Example 3 in Appendix 1.
- o **Residual Value:** This is estimated by deducting the costs from the GDV and a further deduction for the developer's initial profit. As illustrated in the above example this can be used to estimate the Market Rent for the land.

3.13. Land for Advertising Signs

This Manual is only concerned with the disposal of real estate on which an investor or other third party will construct a sign or other structure for the display of advertisements. It does not apply to permissions or agreements between a municipality and an advertiser to display an advertisement on a municipality's property.

Although the advertising sign will produce an income from advertisers, in practice it is difficult to apply the Income Approach to calculate the rent for the site for such signs, because information on the income received from any particular site is rarely available. In practice an outdoor advertising provider will enter into an agreement to display an advertiser's advert for a certain number of weeks or months on multiple sites. It is rare for a specific site to be offered separately unless it is in an exceptionally high-profile location which gives it a unique appeal to advertisers.

There is an active market for sites between advertising companies who construct and maintain the billboards or other display structures and then rent space to advertisers and therefore the Sales Comparison can normally be applied without difficulty. The criteria that affect the value of each site are:

- • Either a large footfall in a pedestrian area or a high volume of passing traffic for a roadside site will increase value.
- • Some sites, in particular sites alongside major roads, will attract high values if they can be illuminated. The availability of an electricity supply will also have a positive effect on value.
- • The type of sign permitted on the site. A site for a light box or Liquid Crystal Display (LCD) will be significantly more valuable than one which can only have a traditional billboard or hoarding.
- • The micro location has a significant effect on value, for example two sites for advertising hoardings may be within a few metres of each other but if one is more prominent and is visible by more people at any given time it will be significantly more valuable than the other.

It is important to understand all the factors that could influence the value of any site for an advertising sign and only compare like with like when applying the Sales Comparison method.

3.14. Telecoms Sites

Municipalities and their advisors are referred to the Guidance Manual "Leasing sites for Telecommunication Towers and other Telecommunications Equipment" issued by TAQEEM on Rajjab 1442H. This provides general guidance on the valuation of real estate leased to telecoms operators which is applicable to both the public and private sector.
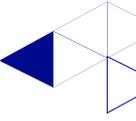
The Regulations impose some additional requirements that are relevant for the disposal of telecoms sites by a municipality:

- Article 10 of the Regulations provides that investment contracts with government agencies or companies with a public franchise, for the provision of any basic services and utilities, including telephone, are exempt from the requirement for public bidding but must be disposed of or leased at a market value.
- Under Article 21 of the Regulations the maximum lease that a municipality can grant for land that does not include the construction of fixed buildings by the investor is ten years.
- Article 57 of the Bylaws indicates that in leases granted by municipalities the maximum increase in a five-year period shall not exceed 10%.

Section 4.
**Public Parks, Public Benefit
and Service Properties**

4.1.   Introduction

Investment may be sought in Public Parks under the Regulations.
The Regulations define Public Benefit Properties as:

"Lands or buildings allocated for the sale of livestock, meat, vegetables, fruits, firewood, coal, and the like."

Article 10 of the Regulations provides that such properties are exempt from the requirement for competitive bidding. Under Article 15 the rental value of real estate units designated for public benefit and utility is initially set by the Assessment Committee.

The Regulations define Service Properties as:

"Lands or buildings allocated for workshops (industrial, craft, and professional), gas distribution centres, car showrooms, and the dismantling of damaged cars (scrap / junk yards) and the like."

In this context, Service Properties are subject to a restriction that they may only be occupied by a business owned by Saudi nationals.

When a lease of a Public Benefit or Service Property is renewed, Article 26 provides that the revised rent is set by the Investment Committee.

4.2.   Public Parks

Where land owned by a private sector entity is designated in a Master Plan for a Public Park the landowner has the right to establish and invest in the park without public competition. However, if the work is not commenced within two years the municipality may take over the land and seek investment in the park by public competition using one of the three methods in Article 12 of the Regulations.

This investment can include the construction of permanent facilities for visitors to the park, such as toilets or restaurants, attractions for which visitors pay an entrance fee or general activities.

The Market Rent for such sites within a park may be determined using a Sales Comparison method. However, evidence of rents agreed for similar developments in other parks in the same area is likely to be scarce. Rents agreed for property outside the park are unlikely to be relevant. An estimate of Market Rent may be made by applying a simple Profits method or by simply basing the rent for the site on a percentage of the turnover generated.

4.3.   Public Benefit Properties

As defined in the Regulations, Public Benefit Properties are types of retail or industrial property. The valuation methods used will be similar to those described in Sections 2 and 3 of this Manual, i.e. Sales Comparison or, in the case of a very specialised building, the Profits method.

The designation of certain retail activities as Public Benefit property is because access to essentials such as food and fuel is deemed to be of benefit to the whole population. Although in many locations the private sector will compete to provide such facilities, there will be more remote areas where there would be limited or no interest from investors. In such areas there are unlikely to be relevant comparable transactions of similar land or Built Property to enable the Sales Comparison method to be used.
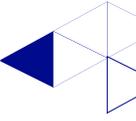
The Policy indicates that in these circumstances the value of the property for any other purpose which would be physically possible, legally permissible and financially feasible should be considered alongside the financial benefits that the proposed development will bring to the area. The value for an alternative use will set the maximum value for the public benefit property, but if the benefits of the designated public benefit are greater than those for the most likely alternative use of the property, the municipality may reduce the rent below that of an alternative to ensure that the project remains viable. For a project for which no direct or indirect financial value can be identified but which a municipality considers will still be of benefit to its area, it may charge a nominal rent.

The appropriate reduction may be capable of benchmarking against the rents applied for other Public Benefit Property, but the extent of the reduction for any particular type of property is a political decision and not one to which any valuation method can be applied.

4.4. Service Properties

Land, or buildings designated as workshops (Industrial or craftsmanship), gas distribution centers, car showrooms, and car redundancy or scrap workshops and similar yards. and therefore the most appropriate valuation method will be Sales Comparison as described in Sections 2 and 3 and in the examples in the Appendices.

An additional consideration when estimating the Market Rent of a Service Property is the effect of the restriction on the type of business which may occupy it. Any restriction on use or the types of occupier reduces the potential market and therefore will often have a negative effect on value.

It is therefore important to ensure that like is being compared with like, i.e. that the Market Rent of a Service Property is estimated using transactions of other Service Property, not those with unrestricted occupation. If there are no other Service Properties in the area, an alternative is to analyse the differ-ence between rents obtained for unrestricted industrial workshops and those for Service Property in another area and use that to estimate the appropriate discount.
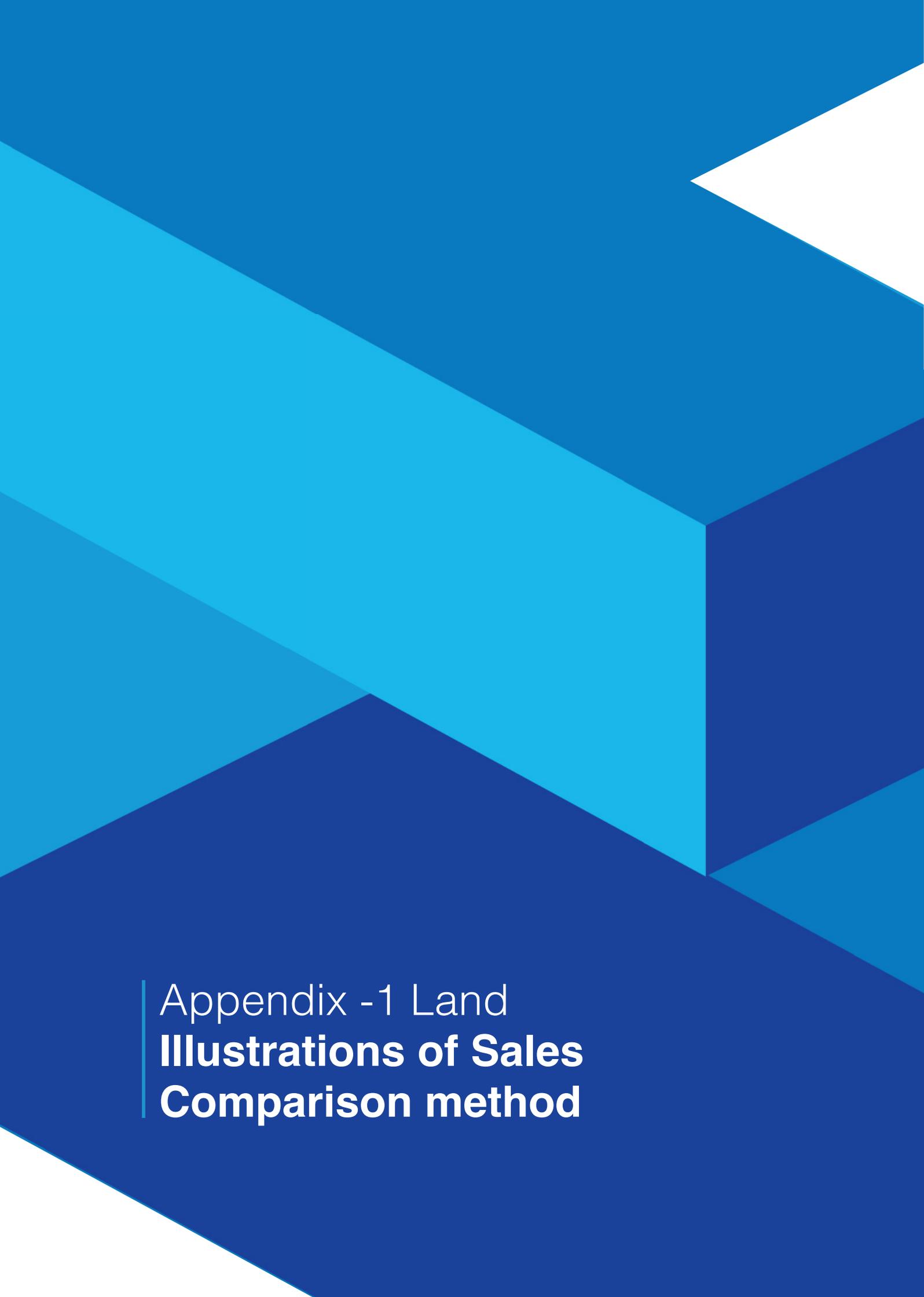
Appendix -1 Land
Illustrations of Sales Comparison method

The Sales Comparison method is normally the most reliable method for estimation the Market Value or the Market Rent for land. The detailed application of the method can vary depending on the number and nature of the comparable transactions, and whether a quantitative analysis is possible as well as qualitative comparison.

Land Example 1

This example is for estimating the Market Rent of a site where there have been other recent transactions in the area and where the only difference is the size and location.

Scenario: You are estimating the Market Rent per annum of a bare site of 2,500 m^2 in an area designated for industrial use on the outskirts of a city. An investment contract for a term of 25 years is being offered. Three other sites in the area have been recently leased for industrial buildings on similar terms for SAR 20m^2 per annum, but these are all between 10,000 and 12,500 m^2.

Valuation: There is good evidence from the locality that other sites in this area for industrial use have rents agreed at SAR 20 per m^2 but this is for sites that are 4 to 5 times the size. Evidence from other parts of the region indicates that smaller industrial sites generally attract a higher rate per m^2 of up to 20%.

Looking at the spread of rates for different site sizes you judge that the appropriate adjustment in this case is to increase the rate per m^2 by 10% to SAR 22 per m^2.

Land Example 2

This example involves a more complicated scenario where there are more differences between the subject property and the comparables, which include the possibility of the subject site being contaminated due its previous use.

Scenario: You are estimating the Market Rent of 20,000 m^2 of land for a new housing project. It currently has a few old industrial buildings which have to be demolished as part of the project undertaken by the potential lessee.   A lease term of 40 years is being offered to make the project viable.

There are three other recent transactions for new housing development in the region. The first comparable is in a smaller town about 25km away, where a clear site of a similar size was leased more than a year ago for SAR 30m^2 for a 25-year term, but the permitted housing density was lower. The second and third comparables are two sites of about 5,000 m^2 which were leased for 25 years within the last six months in the same town as the subject at SAR 45m^2. Both were on sites that had previously been developed but the old buildings had been cleared.

Valuation: The following differences need to be considered.
First comparable (Site A):
- It is a similar size but some distance away in a town with a different character. It is a less valuable location for housing.
- It is a clean site which did not require the investor to demolish old buildings.
- The permitted density is lower than for the subject site. While this would reduce construction costs it may also mean that the units are larger and more valuable. An analysis needs to be carried out to see if this is likely to impact on the relative values of the two sites.
- The lease terms were agreed over a year ago. If the market has altered over this period, some adjustment may be necessary.
- The lease was for 25 years but the lease of the subject is 40 years to make the project feasible given the higher costs associated with site preparation and a higher density.

- The sites are much closer geographically than the first comparable. However, these two sites are less desirable locations for housing than the subject.
- The price per m² of these sites is 50% higher than the first comparable. This may be due to the difference in size, the difference in location, the different dates or different densities of permitted development. It could be some or all of these factors, so analysis of other market data is required to determine how much each of these factors is likely to influence the respective values of the comparables and the subject. It is also possible the site preparation costs for the new development were lower for these sites

Having identified all the factors that could have negatively or positively influenced the price per m² agreed for these three sites an assessment needs to be made of the impact each will have had. The interaction between these factors can be complex so attempting to make a purely quantitative analysis based on fixed percentage adjustments is unlikely to result in a valid estimate of the Market Rent. For example, although analysis might suggest that sites of 1,000m² have a price per m² which is about 15% higher than sites of 10,000 m², it would be wrong to apply this adjustment without considering all the other factors which could influence price.

Sites B and C are in the same town and two similar recent transactions would normally carry more weight than an older transaction further away. However, they are much smaller than the subject and in an inferior neighbourhood. Site A illustrates that a larger site normally has a lower rate per m² although it is 25km away from the subject. Although the subject site will have a longer lease than all the others, which would increase its value to a lessee, this is offset by the cost of demolition which the comparables do not require.

After qualitative consideration of the different factors the conclusion is reached that the appropriate Market Rent for the subject site is SAR 37.50 per m².

Illustration of Residual method

There will be cases where the Sales Comparison method cannot be reliably applied to value land because the site and/or the proposed development are significantly different from that for other sites in the area. It is frequently used in city centres where differences in the permitted use, density or height can vary significantly between neighbouring sites with the result that there are no transactions which can be validly compared to the subject.

The example below illustrates how the method may be applied to value a site for office development. However, it can be applied to sites for virtually any purpose, the only difference being in the way in which the GDV is estimated. Depending on the type of property being developed the GDV can be estimated using the Sales Comparison, Discounted Cash Flow or Profits methods. Illustrations of the application of these methods to Built Property are in Appendix 2

Land Example 3
Scenario: A site of 10,000m² in a city centre has permission for the development of a 30-storey office building. The total lettable area of the building on completion will be 35,000m². There have been no recent transactions for sites where consent has been granted for a similar building in this part of the city for at least 5 years.

Because of the lack of comparable transactions the Residual method is the most appropriate way of valuing the land. In this example the Income Capitalisation method is used to estimate the value of the completed building because the purpose of the example is to provide a simple illustration of the use of the Residual method to estimate land value. In practice, for a large scale development such as this, a DCF method would normally be used to calculate the GDV of the future building and the different

timing of each item of expenditure incurred during the project, with the present value of all income and expenditure used as the input into the Residual Calculation shown below.

- **The GDV of the proposed building** – assuming completion and stable occupancy: 1
  - o Total projected rental income: 1,500 per m²
  - o Lettable Area: 35,000m²
  - o Total potential net rent income: 52,500,000   2
  - o Years Purchase: 14.29   3

  GDV: **750, 000,000**

- **Costs:**
  - o Construction Cost:
    - • Gross area of building: 48,000
    - • Cost per m²   7,000
  - o **Net Construction Cost**   **336,000,000**
  - o Fees: 12% of Construction Cost   40,320,000   4
  - o Marketing and letting costs: 7,900,000   5
  - o Gross Construction Cost   **384,220,000**
  - o Finance Cost 4% over 3yrs on ½ cost: 23,100,000   6
  - o **Total Development Cost**   **407,220,000**
  - o Developer's Profit at 20%   81,464,000
  - o **Total Development Cost + Profit**   **488,784,000**

- **Market Value of site:**
  - GDV   750,000,000
  - Total Development Costs + Profit   (488,784,000)
  - Amount available for purchase of land   261,216,000
  - Less costs of Land Purchase: 3%   (7,836,000)   7
  -      253,379,520
  - **Market Value (say)**   **253,000,000**

This illustration is significantly simplified in order to demonstrate the principles of the Residual method. It should be noted that all figures are for illustrative purposes only. Those used in an actual valuation must reflect those in the relevant market. The following numbered notes provide additional information:

1. The Market Value assumes "stabilised occupancy". Any large new building intended for multiple occupiers will take time to fill. However, throughout its life it will be rarely 100% full as different occupiers move in and out. Most valuations of such multi-occupied buildings will assume that at any one time the building will probably have about 10% of the building available and therefore the "stabilised occupancy" is about 90%.

2. The potential net rent income is the predicted income based on the stabilised occupancy rate less any expenses that the lessor cannot recover from the lessee.

3. The Years Purchase of 14.29 reflects an overall return of 7%. This is a "blended rate" which covers all risks and the assumption that the stabilised occupancy will be about 90% of the total area.

4. Professional fees are the fees payable to the architects, engineers and other professionals engaged in the project.

5. The Marketing Costs will be costs incurred in attracting and agreeing leases with new occupiers. It will need to cover marketing materials, agents and lawyers' fees.

6. Finance costs will be incurred in funding construction and other costs until the new development is income producing. Not all costs will be incurred at the start of the project and therefore the finance calculations need to reflect how these will be phased. Where the amount and timing of finance drawdown is known a DCF calculation can be used to calculate the net present cost of financing the scheme. In the absence of this information a common rule of thumb is to apply the appropriate interest rate over the whole development period but to only 50% of the costs. This is the approach used here. Even if the buy
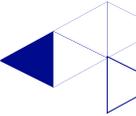
er is self-funding the development, the costs that a typical buyer would incur in financing the development should be reflected in order to estimate Market Value. This model uses simple interest to calculate the finance cost to reflect Shariah practice.

7. The GDV less the costs of development provides the estimated amount that a buyer would have available for site purchase. However, this amount would also have to cover the costs of purchase, such as lawyers' fees. The costs that would be incurred by a typical buyer should therefore be deducted to arrive at the Market Value of the site as existing. In this example a figure of 3% is used but the actual cost will vary.

As indicated in 1.3.4, a major drawback of the Residual method is the sensitivity of the residual value to changes in the value of the completed project or in the building costs. This is illustrated by the following sensitivity analysis:

	GDV >	-10%	-5%	0	5%	10%
Gross Costs		675,000,000	712,500,000	750,000,000	787,500,000	825,000,000
-10%	439,905,600	204,300,000	264,400,000	300,800,000	337,200,000	373,500,000
-5%	464,344,800	204,300,000	240,700,000	277,100,000	313,500,000	349,800,000
0	488,784,000	180,600,000	217,000,000	**253,000,000**	289,800,000	326,100,000
5%	513,223,200	156,900,000	193,300,000	229,700,000	266,000,000	302,400,000
10%	537,662,400	133,200,000	169,600,000	206,000,000	242,300,000	278,700,000

If the Gross Development Value was 10% lower and the cost increased by 10%, the Market Value of the land would be about 53% lower. Conversely, if the Market Value was 10% higher and the costs 10% lower the value of the land would increase by about 47%. This example is extreme because the land is only a small element of the value of the whole project and therefore sensitive to changes in the costs and final value, but it illustrates the need for all the inputs to be as certain and accurate as possible before the land value can be reliably determined.

The Residual method initially calculates the Market Value of the land. The return which an investor would expect can be used to estimate the Market Rent, although as pointed out earlier, this is not a reliable method and should be regarded as the method of last resort. It should be cross checked with evidence of actual land rents available in the subject market area. In this case a return of 7% has been assumed for the completed project. Because the land will not suffer from the same obsolescence as the building, it is usual for the return on land alone to be lower. Additionally, because it is a relatively small percentage of the total value, the income will be more secure than the income from the completed tower.

If a return of 5% was used in this case the Market Rent would be:
Market Value: 253,000,000
              x 5%
Market Rent: 12,650,000 per annum.

An alternative that is frequently used by the owner of a freehold site granting a lease for development is to set the site rent at a percentage of the rental value of the completed project. By way of illustration 12,650,000 per annum is just over 24% of the estimated Market Rent of the completed project.   However, bearing in mind the sensitivity of the site valuation using the residual method this percentage can vary significantly between projects. This approach has advantages for both parties because there will normally be more evidence of the Market Rent for offices than there will be for land to build a tower of a similar size and specification, thus making it easier to establish the appropriate Market Rent.

Appendix -2 Built Property

Introduction

Under the Regulations, most municipalities may lease land to an investor for an agreed project to be developed. Under Article 21 of the Regulations that lease may be for up to 25 years for lands or buildings, that include the construction or addition of fixed buildings or restoration work by the investor. For large projects which contribute to supporting the development of cities and for which a 25-year term is insufficient to allow for a viable return for the lessee, leases up to 50 years may be granted if approved by the Minister.

At the end of an initial development lease, the benefit of fixed buildings falls to the municipality. Under Article 26 leases may be extended or renewed for a period of up to 10 years and the Investment Committee must determine the Market Rent of the Built Property at every extension.

The Assessment Committee also has to estimate the value of Built Property which may be exchanged under Article 6, or the rent of Built Property designated for public benefit or utilities under Article 10. This Appendix provides examples of valuation methods that can be applied to some of the types of Built Property described in Section 3. The methods illustrated may also be used to estimate the GDV where the Residual method described in Section 2 is being used to estimate the value of land.

1.   Illustrations of Sales Comparison Method

The Sales Comparison method can be applied using a mixture of quantitative and qualitative techniques or using only a qualitative comparison. There follow examples of how the method can be applied to retail and warehouse property. It can be applied to any property for which there is an active market, see Section 3 of this Manual.

Retail Property

Scenario: A 50 m² retail unit is located at an intersection of two commercial roads. It is of traditional construction and built a year ago. The immediate locality is predominantly residential, with a mix of retail along the main street frontages.

Transactional evidence shows that retail units on the same road as the property range between SAR 1,300 per m² per annum to SAR 1,700 per m² per annum.

Comparable 1 is a 52.5 m² retail unit located circa 800m to the west of the subject property and leased for SAR 1,700 per m² per annum for a term of two years with four month's rent free. It is situated at the junction of two major roads benefiting from high visibility and accessibility.

Comparable 2 measures 51 m² and is located next door to the property but is five years older. This comparable transacted for SAR 1,400 per m² per annum for a term of four years with no options to break.

Comparable 3 is an 80 m² retail unit located on the same street as the property some 200 metres to the east. This lease transacted for SAR 1,250 per m² for a term of 3 years. This comparable is 15 years old and is in need of renovation.

Valuation:

The factors that influence the value of retail property are discussed in 3.1. Comparable 2 is the most relevant to the subject property because it shares most of the same characteristics. Comparable 1 is similar size but is further away and situated in a better retail location. Comparable 3 is closer to the subject than Comparable 1 but is significantly larger and the building needs renovation, which is reflected in the lower rent per m². Comparable 2 is five years older than the subject, and is not in such a good condition. The design of the subject property allows for larger displays and better visibility. To reflect these advantages, an increase in the rent agreed for Comparable 2 is justified but this increase is limited by the rent for Comparable 1 which is in a better location.

After consideration of the different factors the conclusion is reached that the appropriate Market Rent for the subject property is **SAR 1,500** per m².
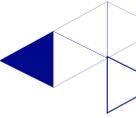
Logistics Warehouse

Scenario: : The subject property is a 15-year old logistics warehouse of 10,000m² on the outskirts of a large city with good access to a major national highway under 1km from the property. It has an internal height to eaves of about 8m and has four bays each 20m wide, separated by steel frames at 10m intervals. The building is clad with coated steel profile sheeting with internal insulation. There is a separate office building with staff facilities at one end. The building is on a site of 40,000m², which is mostly paved with concrete and has loading docks for ten vehicles and parking space for up to thirty articulated trucks.

There have been transactions on three other warehouses within a radius of 10km within the last years. The following information has been obtained.
- Building A was constructed one year ago 500m from the subject. It is of similar design but is 15,000m² on a site of 35,000m², so the site density is significantly higher. It was let for ten years at a rent of SAR 200 m² per annum, with an escalation of 5% in the fifth year, with the lessee responsible for all outgoings.
- Building B is twenty years old with floor area of 5,000m² on a site of 15,000m² located next to the same highway but about 10km away. It is of similar basic construction but the internal height to eaves is 5m and the distance between supporting pillars is smaller. It was let for a term of five years at a rent of SAR 100m² per annum.
- Building C is a new warehouse of 5000m² on a site of 15,000m². It has a similar design to the subject but has the most modern cladding systems and environmentally friendly services. However, it is situated 5km further away from the main highway and the local access is often congested. A lease just been agreed at SAR 250m² per annum for a 15-year lease with the lessee responsible for all outgoings.
- Building D is seven years old. It is situated 2km from the same highway but is 5km further away from the city. Its floor area is 8,000m² on a site of 18,000m², which is a higher building density than the subject. It has an eaves height of 7.5m with a clear span in each bay of 20m. It has recently been leased for a term of ten years at a rent of SAR 180 per m².

Valuation: These four transactions, the "comparables", all have different characteristics which need to be compared with those for the subject and appropriate adjustments made. There is no one way of doing this but the process should be applied consistently and recorded in the valuer's file. The characteristics which have most impact on the value of a logistics warehouse are discussed in 3.1. A qualitative comparison can be made by an experienced valuer considering the advantages and disadvantages of each comparable in relation to the subject, such as described in the earlier retail example. A quantitative process for comparing the comparables with the subject property can also be useful. An example is illustrated below:

The first step is to allocate a score between 1-5 for each of the characteristics most likely to influence the value of a logistics warehouse, where 1 is the worst and 5 is the best. These scores are based on a comparison of the properties being analysed, not on the wider market, so while the worst located property in this analysis is scored 2, if it were being compared to another group of properties it might be the best located and justify a score of 5. This is shown below:

	Subject	Building A	Building B	Building C	Building D
Location / Accessibility	5	5	3	2	3
Site Density	5	3	4	4	3
Building specification	3	5	2	5	3
Age	3	5	2	5	4
Total	16	18	11	16	13

Next, the evidence provided by the comparables has to be weighed to establish its relevance to the subject site. It can be seen from the above that the subject and Building C have the same total score and therefore may appear likely to be the most similar in value. However, further consideration needs to be given to the relevant importance of each characteristic. This is done by "weighting" the above scores. This process is illustrated in the matrix on the next page.

The first step is to consider how important each of the characteristics is to the overall value. Since this is a logistics warehouse, location, specifically access to major highways, is the most important. Site density (i.e. the amount of outside space for parking and manoeuvring trucks) and the building specification (eaves height, bay width, efficiency) are roughly of equal importance, but age is not as important. To reflect this the percentage the valuer considers each characteristic contributes to the overall value is allocated in the "Weighting of Characteristic" column. In this case Location is weighted at 30%. Site Density and Specification each at 25% and age at 20%. However, this can change between different types of property.

Notes	Adjustment	Weighting of Characteristic	Subject Property	Building A	Building B	Building C	Building D
1	**Location**	30%	5	5	3	2	3
2				0.0%	12.0%	18.0%	12.0%
	Site Density	25%	5	3	4	4	3
2				10.0%	5.0%	5.0%	10.0%
	Building specification	25%	3	5	2	5	3
2				-16.7%	8.3%	-16.7%	0.0%
	Age	20%	3	5	2	5	4
2				-13.3%	6.7%	-13.3%	-6.7%
3	**Total Adjustments**			-20.0%	32.0%	-7.0%	15.3%
4	**Passing Rent per m2**			200	100	250	180
5	**Adjusted Rent**			**160**	**132**	**233**	**208**
6	Percentage Weighting	100%		25%	0%	45%	30%
7	Weighted Rent m²		206.91	40.00	-	104.63	62.28
	Total Area/Sqm		10,000				
8			2,069,050				
	Market Rent, say		**2,070,000**				

Notes on calculation matrix:

1. The figure in the third column, "Weighting of Characteristic", is the percentage that the valuer considers each characteristic contributes to the overall value. The percentages allocated must add up to 100.

2. The percentage shown for each comparable is the percentage by which the score for that comparable differs from the subject multiplied by the percentage weighting in the third column. (((subject score – comparable score) ÷ subject score) x percentage weighting). For Building A, the Building Specification percentage is (((3-5) ÷ 3) x 25% = - 16.7%: in other words, the specification of the subject is 16.7% worse than Building A.

3. This is the total of the percentage adjustments for each of the four characteristics.

4. This is the rent per m² for Buildings A -D.

5. The Adjusted Rent per m² is the actual rent plus or minus the total percentage adjustment (see note 3.)
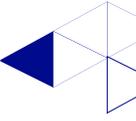
6. The Percentage Weighting is determined by the valuer to reflect how relevant the valuer considers each comparable transaction to be to the subject property. It is important that the percentages allocated to each site add up to 100. In this example Building B, which has a total percentage adjustment of 32%, is considered the least reliable comparable and allocated 0%. Building C with a total adjustment of -7% is the most relevant and given a 45% weighting, Building D with a 15.3% adjustment given 30% and Building A with a -20% total adjustment given 25%.

7. The Adjusted Rent per m^2 for each comparable is multiplied by the Percentage Weighting and the sum of the resulting figures provides an estimate of the Market Rent per m^2 for the subject.

8. This figure is multiplied by the area of the subject site to arrive at the total estimated Market Rent.

The larger the Total Adjustment (whether positive or negative) from the subject, the less relevant is that site as evidence of the value of the subject. When deciding on the appropriate percentage weighting to apply (see Note 6) caution must be used in attaching any weight to a comparable where the Total Adjustment exceeds 25%. In this example the Total Adjustment for Building B was 32% so this was allocated 0% weighting.

While the initial comparison of the scores for each property suggested that Building C, which had a rent of SAR 250 per m^{2}was the most similar, after weighting the various characteristics it illustrates that the value of the subject is probably significantly less and closer to the rents for Buildings A and D.

This is a simplified model and further adjustments could be made for differences in the lease terms and the size of the buildings, since smaller buildings tend to attract a higher rent per m^2 than larger buildings of the same specification.

In this example the different ratios between the building and site area are reflected in the rate per m^2 for the building. An alternative is to include only the average amount of outside space found in the relevant market in the value of the building and then add for the extra yard space at a value based on rents for outside storage with no buildings.

2.   Illustration of Discounted Cash Flow method

The DCF method is described in 1.3.2 of this Manual. In summary it is used to calculate the present value of any asset that will produce receipts or incur expenditure at predictable intervals in the future. It is especially useful where the future income is expected to vary. For Built Property this is normally the expected rent income after the deduction of expenses, but the same principle can be used for any asset or project which produces variable but predictable future cash flows. Examples include:
- A new building designed for multiple occupation which may take time to reach full occupation.
- The current rental income is expected to change. For example, there may be a void period at the end of an existing lease before a new tenant is found or there may be agreed escalations in the rent.

DCF principles can also be used within other methods. These include:
- To calculate the present value of future changes in income or expenditure as the inputs into the Profits method.
- To calculate the present value of expenditure and income that will be incurred at different times during a development project in order to provide the inputs into the Residual Method, see example in Appendix 1.

The following example is a growth implicit[1] DCF model for an office building, but it can be adapted for valuing any type of Built Property that has predictable future cash flows.

> **Scenario:** A nine-story office building is centrally located in a city fronting a busy highway. It has a gross leasable area of 12,781 m². Access to the property is directly from the main road and there are two basement levels for parking. The property is currently vacant and was previously occupied by a single tenant. In the current market demand is strongest for smaller areas so the building is likely to be let to multiple occupiers. The proposed lease terms offered will include for the rent to be increased by 2% per annum, which is in line with the norm in the current market.
>
> It is rare for a large multi occupied building to be 100% full. Different tenants have leases ending on different dates and there will be a regular turnover of tenants. Evidence from other large multi occupied office buildings in the city indicate that the average maximum occupancy rate, or "stabilised occupancy", is about 85%. Evidence from the market indicates that it could take up to four years to achieve stabilised occupancy.
>
> **Valuation:** The first task is to estimate the current Market Rent. This requires the use of the Sales Comparison method. From other lease transactions in the city centre and consideration of the differences of position, specification, age and size between them and the subject property a current Market Rent of about SAR 1,000 per annum is indicated. However, a further adjustment is necessary.

The Market Rents of the comparables that are in multiple occupation are all subject to an additional service charge of equivalent to an average of about 15% of the rent. This service charge is to cover the costs to the owner of providing maintenance, cleaning, security, insurance, etc to the common parts of the building. Although the subject property will be offered for leasing on similar terms, until stabilised occupancy is achieved the owner will not be receiving service charge contributions from the vacant parts and therefore the service charge receipts will not cover the lessor's costs. This is reflected in the model by increasing the estimated Market Rent by the service charge and the estimated costs of providing the required services to the building is deducted from this to provide a more accurate estimate of the net income that will be received in each period by the lessor. The indicated Market Rent is therefore increased by 15% to SAR 1,150 per m² to reflect the total income the lessor will receive from the leased areas from which the cost of providing the services will be deducted.

In addition to the deduction of the operating cost of providing the regular services, the costs deducted include allowance for a "sinking fund", i.e. an annual amount set aside to cover periodic major replacements or renewals of parts of the building, for example replacing the elevators, or redecoration of the common areas. Finally an allowance is made for the cost of managing the building which covers the cost of collecting rents, supervising suppliers and ensuring that necessary work is carried out. This is normally undertaken by a professional firm, so the model allows for a management fee.

Since reliable income and expenditure forecasts cannot be made long into the future, standard practice is to limit the period during which expected variations in the cash flow are made and a single sum is included representing the anticipated capital value expected at that date, also known as the Terminal Value.

In this example the cash flows for the first ten years are calculated year by year and then a Discount Rate of 9% is applied.

Because the cash flows assumed in the Terminal Value are less certain, i.e. more risky than those in the near future, a higher Discount Rate of 11% is used by multiplying the eleventh years estimated net income by a Years Purchase of 9.09.

See 1.3.2
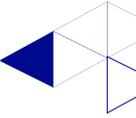
Example of Discounted Cash Flow Model

Inputs:

Office Leasable Area	12,781
Current Market Rent per m²	1,150
Market Rent pa	**14,698,150**

Annual Rent Increase	2.00%
Term Discount Rate	9%
Terminal Discount Rate	11%
Terminal Years Purchase	9.09

Notes		Year 1	Year 2	Year 3	Year 4	Year 5	Year 6	Year 7	Year 8	Year 9	Year 10	Terminal Value
1	Gross Market Rent	14,698,150	14,992,113	15,291,955	15,597,794	15,909,750	16,227,945	16,552,504	16,883,554	17,221,225	17,565,650	17,916,963
2	Occu-pancy	40%	55%	70%	85%	85%	85%	85%	85%	85%	85%	85%
	Rent Received	5,879,260	8,245,662	10,704,369	13,258,125	13,523,288	13,793,753	14,069,629	14,351,021	14,638,042	14,930,802	15,229,418
3	Operat-ing Cost	1,150,290	1,173,296	1,196,762	1,220,697	1,245,111	1,270,013	1,295,413	1,321,322	1,347,748	1,374,703	1,402,197
4	Sinking Fund	117,585	164,913	214,087	265,163	270,466	275,875	281,393	287,020	292,761	298,616	304,588
5	Fees	117,585	164,913	214,087	265,163	270,466	275,875	281,393	287,020	292,761	298,616	304,588
6	**Terminal Value**											120,164,042
7	**Net Income**	4,493,800	6,742,540	9,079,432	11,507,103	11,737,245	11,971,990	12,211,430	12,455,659	12,704,772	133,122,909	
8	NPV	114,740,964										
	Market Value	**SAR 114,700,000**										
	Capital Value per sq m	6,994										

Notes:

1. Market Rent is inclusive of service charge and is increased by growth rate of 2% per annum. | 2. Occupancy increasing over first 4 years to reach stabilised occupancy of 85%. | 3. Operating Costs include all lessor's expenditure for maintaining building, cleaning common parts, security etc. | 4. The sinking fund is an annual allowance made by lessor for periodic major expenditure such as replacing elevators or renewing roof. | 5. This is the fee incurred by lessor for property management. | 6. Terminal Value is the net rent expected at the end of the tenth year multiplied by 9.09 Years Purchase. | 7. The net income for year ten includes the Terminal Value. | 8. Is the Net Present Value of the net income for each period calculated using the Discount Rate of 9%.

3. Illustration of Profits Method

The Profits method is explained at 1.3.3 of this Manual. In summary it can be applied to certain types of specialised Built Property where the design of the building means its use is limited to one particular type of business. An analysis is then made of the earnings that could be made by a typical reasonably efficient operator from the property in order to estimate the amount that would be available to pay as rent or to repay a loan to purchase the property.

The Profits method can be used to estimate the Market Rent for the Built Property and that can be used to estimate the Market Value. This figure can be then used as the GDV when using the Residual Method to estimate the value of the land, see example in Appendix 1.

A simple illustration of how the Profits method can be applied to a hotel is provided on the next page. Although the income and expenditure descriptions will alter for other types of specialised property, for example, leisure properties or hospitals, the process is identical.

A more sophisticated application of the Profits method is to combine it with a DCF. This is particularly suitable for any new business which would take time to build up to its target income or to any situation where the income can either be expected to vary significantly in future years or is for a limited period only. The income and expenditure items in columns 2 and 3 of the model are calculated as the NPV of the anticipated future cash inflows and outflows for each item, see 1.3.2 and the model on the previous page.

All figures in the model are illustrative. Those used in an actual valuation must reflect those that are typical for a reasonably efficient operator of this type of hotel. The following notes relate to the numbers in column 4:

Note			
	Key Information		
	Number of Rooms	100	
	Standard Rate per Room per night	600	
1	Average Rate per Room per night	500	
	Average Occupancy Rate	80%	
2	RevPAR	400	
	Annual Revenue		
3	Room Income per annum	14,600,000	
4	Bar and restaurant income	3,400,000	
4	Extras	500,000	
	Gross Annual Revenue		**18,500,000**
5	**Annual Expenditure**		
	Wages	3,600,000	
	Food and Drink	1,700,000	
	Agency staff	500,000	
	Laundry and Cleaning materials	100,000	
	Repairs and Maintenance	2,500,000	
	Miscellaneous	1,000,000	
	Gross Annual Expenditure		**9,400,000**
6	**EBITDA**		**9,100,000**
7	less depreciation / amortisation	2,000,000	
	net profit		**7,100,000**
8	less tax	20%	1,420,000
9	**Divisible Balance (DB)**		**5,680,000**
	Available for rent (Market Rent)	50% of DB	**2,840,000**
10	**Capital Value:**		
	All Risks Discount Rate	9%	
	Years Purchase	11.1	
	Market Value		31,524,000
		Say	**31,500,000**
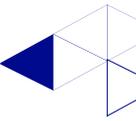
Notes:

1. The average rate per room will generally be below the standard advertised rate because of discounts given for group bookings or to attract guests during quiet periods. For a new hotel or one which is not currently trading the rate will need to be estimated based on hotels of a similar standard.

2. The RevPAR is a standard industry metric which is useful for comparing with other hotels, see 3.4.

3. The estimated annual room income is the number of rooms multiplied by the RevPAR and 365 (the number of days in a standard Gregorian year).

4. Additional income from sales of food and drink or any other sales of services to guests or non-guests can be based on actual revenues if the current business is established. If the information is not available or if there is no recent trading history, it will need to be estimated based on other hotels of a similar standard.

5. The starting point for estimating each category of expenditure is the amount paid by the current operator. However, this must be tested to see if it is typical for the sector, and therefore representative of what any operator of this hotel would experience. That requires specialised knowledge of the sector.

6. EBITDA (earnings before interest, tax, depreciation and amortisation) is the Gross Revenue less the Gross Expenditure. Tax liabilities, finance costs and depreciation policies vary between different operators, so EBITDA is a more constant figure for comparison between different properties in the sector. A simplification which is often made to the Profits method is to estimate the rent as a percentage of the EBITDA, based on analysis of the market.

7. Depreciation appearing in the accounts of the operator will vary depending on the accounting policies adopted, so may need to be treated with caution. It should be a figure that is realistic to spread capital expenditure incurred, e.g. the cost of the building, any improvements, furnishings and equipment over its expected economic life. It provides a more realistic assessment of the annual profit than including all such expenditure as an expense in the period when it is incurred.

8. EBITDA is a before tax figure. An amount that would represent the typical tax that would be applied to gross profit therefore needs to be deducted. This will be the tax that a typical operator would pay, not the figure paid in any given period by the actual operator, which may be influenced by its own circumstances.

9. This model assumes that the surplus after deducting tax from the net profit, the "divisible balance" will be the amount available for both the rent for the property and the operator's profit. Since the building owner will not earn rent unless the business is viable, including a profit for the operator, and the operator cannot earn a profit without the building, the usual practice is to divide this balance equally. However, if this would result in either a profit or a rent in excess of market norms, a different apportionment may be appropriate.

10. If a capital value (Market Value) is required, the Market Rent is multiplied by a suitable Years Purchase.

If this is a new hotel with no trading history, reliance will have to be based on sector averages for income and expenditure. This will increase the uncertainty of the estimated income and expenditure which may need to be reflected by a reduction in the initial Market Rent or an increase in rate of return if Market Value is required. Alternatively, a DCF model may be used.

Appendix 3 – Summary of Methods
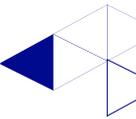
The table below sets out the methods discussed or illustrated in this Manual alongside the types of property they can be applied to. For some types of property more than one method may be appropriate. If there is sufficient data to undertake two methods, it is good practice to use both and use one as a cross check on the other before deciding which gives the most reliable valuation.

Method	Applicable To	References in Manual
Sales Comparison	Land Retail Offices Logistics and Industrial Banks and ATMs Kiosks Land for Advertising Signs Public Benefit Property Service Property Some Property in Public Parks	1.2.1 Appendix 1: Land Example 1 Appendix 1: Land Example 2 Appendix 2: Retail Property Appendix 2: Logistics Warehouse
Income Capitalisation	Investment Property	1.3.1
Discounted Cash Flow	Investment Property Waste Landfills Specialised Property (combined with Profits Method)	1.3.2 Appendix 2: Illustration 2
Profits	Specialised Property, e.g. Hotels, Hospitality and entertainment venues Hospitals and specialised clinics Certain leisure and sports facilities Gas Stations (excluding non-fuel operations) Private Schools Marinas Some Property in Public Parks	1.3.3 Appendix 2: Illustration 3
Residual	Land for development	1.3.4 Appendix 1: Land Example 3
Depreciated Replacement Cost	Specialist Property which does not generate income exclusively attributable to that property. (not applicable for most property that will be disposed of by Municipalities)	1.4.1

Appendix 4 – Report Contents

This Appendix provides a guide to matters that should be included in a valuation report using any of the methods that are identified in this Manual as applicable to municipality owned property. The appropriate detail will vary depending on the complexity of the property, the purpose of the valuation and the intended recipient, but the purpose of the templates is to provide a check list of matters that need to be investigated and reported. It includes all the matters required for a report to comply with International Valuation Standards and the Saudi Real Estate Valuation Manual issued by TAQEEM.

The report requirements are divided into four main groups:

Group 1. Identifying what is to be valued, by who, for whom, why and when.

Group 2. What was investigated, what are the relevant facts found and what assumptions have been made where full investigation was either not possible or was limited in scope by agreement with the client.

Group 3. What is the required basis of value, the method(s) that have been used, what are the key inputs relied on, how these have been used, the conclusion reached on the evidence available and the valuation, including any special assumptions made.

Group 4. Any general limitations, caveats and confirmation of the standards that have been followed.

The items in Groups 1, 2 and 4 will differ in detail between different property types but the subjects that need to be included will remain consistent. Some of the subjects in Group 3 will change depending on the methods used and the types of input required. The first example below is for valuations using the Sales Comparison method, which should be the method most commonly applicable for valuing a municipality's interest in property under the Regulations. Alternatives for Group 3, for when different methods are used, are then provided.

Report where Sales Comparison method used, see 1.2.1 and illustrations in Appendix 1 and Appendix 2:

Group 1.

- Identify the property to be valued. (IVS 103 30.1 (a))
- Confirm name and qualifications of valuer(s). External valuers should also confirm that they have no involvement with any other parties with an interest in the property in a way which could conflict with their duty to provide an independent valuation. (IVS 103 30.1 (a) and TAQEEM CEPC 11.A (2) and Articles 1 and 2)
- Confirm for whom the valuation is prepared and any other intended users who may rely on it. (IVS 103 30.1 (a) and (b))
- Indicate purpose of valuation, its intended use and the valuation date. (IVS 103 10.2 and IVS 103 30.1 (a) and (b))

Group 2.

- Describe the property and its location, and the site or building area in m^2
- Indicate any information that it has been agreed the valuer can rely on without further investigation, for example legal permissions, details of a proposed new building. etc. (IVS 30.1 103 (a))
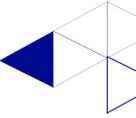
- Confirm extent of investigations the valuer has undertaken about matters that could impact on value, any limits that apply and assumptions made as a result of those limits. Examples include, but are not limited to, ground conditions, building condition, legal title, lease details, statutory licences and consents. (IVS 103 10, IVS 103 30.1 (a) and IVS 103 30.1 (f))
- Include a comment on the market for the property on the valuation date and the demand in the locality for that type of property. Identify any potential alternative properties that are available and which could compete with the subject for a buyer. (IVS 103 10.1)
- Identify any other properties that have been subject to recent transactions and that have provided source of data in this valuation. (details and analysis to be provided in Group 3)

Group 3.

- State the basis of value used and its definition. This will normally be Market Rent but may be Market Value if the capital value of the Municipality's interest is required. A brief description of the lease terms that have been assumed when estimating the Market Rent should be provided, e.g. duration, escalation provisions, payment intervals, etc. (IVS 103 30.1 (a))
- Indicate that the Sales Comparison method has been used (IVS 103 30.1 (c) and (d))
- Provide detail and analysis of any comparable transactions that have significantly influenced the opinion of value. For a property that is leased this will include an outline of the main lease terms as well as the rent per m^2. Care must be taken not to disclose any confidential information. (IVS 103 30.1 (e))
- Explain how transaction evidence obtained has been used by the valuer, e.g. what, if any, adjustments have been made and why in estimating the value of the subject.
- State amount of valuation or valuations and the currency used. If a valuation provided is subject to a special assumption[2] , set out that special assumption in full. (IVS 103 10.2 and IVS 103 30.1 (a) and (g))
- State date on which the valuation applies, this may be earlier than the report date. (IVS 103 30.1 (a))

Group 4.

- In exceptional circumstances, for example if there has been a recent market shock and all the available comparable evidence is from before the event which caused it, it may be appropriate to make a statement that the valuation is subject to material uncertainty.[3]   (IVS 103 10.2)
- State any restrictions on the use of the valuation, to whom it may be shown and limits on reproducing or publication of the valuation. (IVS 103 30.1 (a))

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2 A special assumption is one where the valuation is based on facts that differ from those actually existing on the valuation date. Examples would be that a proposed building had been completed, or that a clearly contaminated site had been remediated. (IVS4 200)

3 For guidance when it is appropriate to add a warning that the valuation is subject to material uncertainty, see the IVS paper "Dealing with valuation uncertainty at times of market unrest" issued in March 2020.

https://www.ivsc.org/files/file/view/id/1719

- Confirmation that the valuation has been undertaken in accordance with the IVS (IVS 103 30.1 (a)) and the Saudi real estate valuation manual and this guidance issued by TAQEEM.
- State the date of the report. (IVS 103 30.1 (h))

Alternative Group 3 when Income Capitalisation or DCF methods used, see 1.3.2 and illustration in Appendix 2, Example 2:

Group 3.

- State the basis of value used and its definition. This will normally be Market Rent but may be Market Value if the capital value of the Municipality's interest is required. A brief description of the lease terms that have been assumed when estimating the Market Rent should be provided, e.g. duration, escalation provisions, payment intervals, etc. (IVS 103 30.1 (a))
- Indicate that the Income Capitalisation or DCF method has been used. (IVS 103 30.1 (c) and (d))
- Provide details of the key inputs such as income, any expenses, Discount Rates or Years Purchase used. This should include explanation of where the data has come from and how these have been analysed. Care must be taken not to disclose any confidential information. (IVS 103 30.1 (e))
- Explain how data obtained has been used by the valuer, e.g. what, if any, adjustments have been made and why in estimating the value of the subject. If a DCF method has been used it would normally be appropriate to append a spreadsheet showing the calculation to the report.
- State amount of valuation or valuations and the currency used. If a valuation provided is subject to a special assumption, set out that special assumption in full. (IVS 103 10.2 and IVS 103 30.1 (a) and (g))
- State date on which the valuation applies, this may be earlier than the report date. (IVS 103 30.1 (a))

Alternative Group 3 when Profits method used, see 1.3.3 and illustration in Appendix 2, Example 3:[4]

Group 3.

- State the basis of value used and its definition. This will normally be Market Rent but may be Market Value if the capital value of the Municipality's interest is required. A brief description of the lease terms that have been assumed when estimating the Market Rent should be provided, e.g. duration, escalation provisions, payment intervals, etc. (IVS 103 30.1 (a))
- Indicate that the Profits method has been used. (IVS 30.1 103 (c) and (d))

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4 In more complex cases where it is expected that there will be significant changes in the level of trade, e.g. in a new property which will take time to establish the business, it may be appropriate to use a DCF method to establish the NPV for of the estimated EBITDA for each period until a level of trade that is maintainable in the long term is reached.
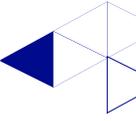
- Provide an analysis of the income and expenditure of the business in occupation, and how these have been used to calculate the EBITDA for that business. Comment on whether this represents a level of trade that could be maintained by a reasonably efficient operator in the sector. If there is no business in occupation or there is no trading record, provide an indication of how income and expenditure figures have been estimated. (IVS 103 30.1 (e))
- Explain conclusions from the analysis of the actual or estimated level of trade and what, if any, adjustments have been made, and why, in estimating the EBITDA for the subject. Explain how Market Rent has been calculated
- State amount of valuation or valuations and the currency used. If a valuation provided is subject to a special assumption, set out that special assumption in full. (IVS 103 10.2 and IVS 103 30.1 (a) and (g))
- State date on which the valuation applies, this may be earlier than the report date. (IVS 103 30.1 (a))

Alternative Group 3 when Residual method used, see 1.3.4 and illustration in Appendix 1, Example 3:[5]

Group 3.

- State the basis of value used and its definition. This will normally be Market Rent but may be Market Value if the capital value of the Municipality's interest is required. A brief description of the lease terms that have been assumed when estimating the Market Rent should be provided, e.g. duration, escalation provisions, payment intervals, etc. (IVS 103 30.1 (a))
- Indicate that the Residual method has been used. (IVS 103 30.1 (c) and (d))
- Provide details of the key inputs used to estimate the GDV of the proposed project.
- (IVS 103 30.1 (e))
- Indicate source of estimated build cost and all other expected cost, e.g. professional fees, marketing costs, finance costs.
- Explain how allowance for developer's profit has been made
- Explain any other adjustment made to arrive at the estimated Market Value
- State amount of valuation or valuations and the currency used. (IVS 103 10.2 and IVS 103 30.1 (a) and (g))
- State date on which the valuation applies, this may be earlier than the report date. (IVS 103 30.1 (a))
- Indicate that the method used means that the valuation can be abnormally sensitive to changes in the GDV or costs of the project. It is good practice to include a sensitivity analysis as illustrated in Appendix 1 Example 3

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5 In more complex cases where it is expected that there will be significant changes in the level of trade, e.g. in a new property which will take time to establish the business, it may be appropriate to use a DCF method to establish the NPV of the estimated EBITDA for each period until a level of trade that is maintainable in the long term is reached.

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