

Glossary of Terms & Definitions

European AVM Alliance

Independent - Transparent - Unbiased



Term	Definition	Remarks
(AVM) Accuracy	Collective term referring to the ability of a valuation solution (typically an AVM) to produce results close to the respective Benchmark Values.	<p>Accuracy incorporates the following broadly separate dimensions:</p> <ul style="list-style-type: none">- Bias (typically quantified by the Average Error or preferably by the Median Error)- Dispersion (typically quantified by the Standard Deviation, or the Average Absolute Error, or the percentages of results within 5%, 10% etc of the Benchmark Value). <p>Please note that some widely used Accuracy measures may capture elements of both dimensions, e.g. the percentages of results less than 10%, 15%, 20% etc above the Benchmark Value.</p> <p>Please also note that, as it postulates the existence of a Benchmark Value, the assessment of AVM Accuracy can only be performed in circumstances where this is or becomes available, e.g. in the context of Back-Testing or Forward-Testing respectively.</p>
Address-Matching Rate	The ratio of cases whose address can be matched to a Unique Property Identifier divided by the total number of cases.	
Advanced Statistical Model	A Statistical Valuation Model fulfilling the criteria laid out in the "Guidelines on loan origination and monitoring" by the European Banking Authority (EBA).	<p>The criteria posed by the EBA for Advanced Statistical Models relate, among other things, to uncertainty, Granularity, Accuracy, validity, Property-Specific Characteristics, representativeness, data quality and regular quality assurance.</p> <p>Following from the above, only Comparables Based AVMs can be regarded as Advanced Statistical Models.</p>
Analyst Assisted AVM (AAVM)	A Semi-Automated Valuation that relies on the experience and judgement of a professional, but not necessarily a qualified surveyor, to validate and supplement the output of an AVM.	<p>Please note that the modifications or manipulations introduced by the analyst onto the AVM output and/or the Comparable Evidence removes the objectivity and integrity of the fully automated process and it may compromise its unbiased nature.</p>
Appraisal	See Surveyor Valuation (preferred terminology).	<p>Appraisal is the term used in American English, whereas Surveyor Valuation is the one used in British English, hence typically across Europe. They are entirely equivalent.</p>
Arm's Length Transaction	A property sale transaction where the buyer and seller act completely independently of one another and the Sale Price is unaffected by any undue stimulus (e.g. a family relationship, Right-To-Buy discount etc).	
Asking Price	The price advertised by a seller when putting a property on the market to be sold.	<p>It may or may not be met by the Sale Price, the latter typically being lower, sometimes significantly so.</p>

Assumptions	A set of suppositions that underly and apply to a Valuation, which are taken to be true.	There are certain Assumptions -about facts and conditions underlying the subject of or approach to a Valuation- that do not need to be individually verified and which the Valuer is not required to prove to be true. This applies to all Valuers, no matter if they are a surveyor or a provider of a Statistical Valuation Method.
Automated Valuation Model (AVM)	A system that provides an estimate of value (a Valuation) of a specified property at a specified date, using mathematical modelling techniques in an automated manner.	<p>- As it only requires a property to be specified, an AVM can function merely based on property address, or cadastral reference or other forms of unique property identification (and possibly a few basic property characteristics), but it does not necessarily require any Previous Values of the property to be provided as input. An AVM, just like a Surveyor Valuation, can therefore value even properties that have never transacted before or whose history is not known to the user. This feature is one of the key differentiators between AVMs and HPIs.</p> <p>- As it deploys modelling techniques, hence the "M" in the acronym, an AVM is typically a lot more complex and therefore more accurate than just applying a simple adjustment to a Previous Value: again, this is one of the key differentiators between AVMs and HPIs. Typically, an AVM consists of sophisticated mathematical formulae requiring the deployment of bespoke technology and it includes elements of a Comparables based valuation approach, similar to Surveyor Valuations.</p> <p>- As it is an automated solution, hence the "A" in the acronym, an AVM operates without any human intervention post-initiation, making it an entirely objective tool, whose results are completely independent of the circumstances of the Valuation. Clearly this rules out, for example, any manual selection of Comparables or any other ad-hoc subjective adjustments and it is one of the key differentiators between AVMs and Surveyor Valuations.</p>
Average Absolute Error or Mean Absolute Error	Literally the average of the absolute Error, i.e. of the Error taken without its + or – sign.	A frequently used measure of Dispersion.
Average Error or Mean Error	Literally the average of the Error.	A frequently used measure of Bias, although Median Error is the preferred measure for that. See also under Bias.
AVM Assisted Appraisal (AVMAA)	A Semi-Automated Valuation that relies on the experience and judgement of a qualified surveyor, to translate the output of an AVM into Valuation complying with all legal requirements applicable to appraisals. Please note this is obtained without conducting a physical inspection of the Subject Property, although it is supported by Comparable Evidence, which may or may not incorporate data from the AVM.	Please note that the modifications or manipulations introduced by the surveyor onto the AVM output and/or the Comparable Evidence removes the objectivity and integrity of the fully automated process and it may compromise its unbiased nature.
AVM Performance	Generic term used to refer collectively to AVM Coverage, AVM Accuracy and the reliability of the Confidence Levels.	Not be confused with AVM System Performance.
AVM Property Database	The database of property information available to an AVM to draw Comparable Evidence and produce a Valuation.	It includes both Description Data and Transaction Data, typically address-matched, Geocoded, merged, reconciled and cleansed by the AVM provider, hence it is typically proprietary.

AVM System Performance	Generic term used to refer to AVM speed and up-time.	
Back-Testing	The simplest and most common type of AVM Accuracy test, where the AVM is run on properties where a Benchmark Value, although not used in any way within the test itself, was already obtained in the past.	See also Blind Test, Bulk Test and Lender Test.
Basis of Value	A statement of the fundamental Assumptions of a Valuation, underpinning its purpose and usability.	Typical Bases of Value include for example Market Value, insurable value, mortgage lending value, repossession value, value for taxation purposes etc.
Batch Valuation	The process where a large number of AVM results are obtained without individual manual submission.	
Benchmark Value (BV)	The property value against which the Accuracy of a valuation solution (e.g. an AVM result) is measured.	It is intended as the correct Market Value; hence it typically consists of either a reliable Surveyor Valuation or Sale Price, which of the two often depending on the established market practice in different jurisdictions.
Bias	Any tendency of an AVM to systematically overvalue or undervalue properties when compared to the Benchmark Value.	AVM Bias can be quantified by the Average Error, but in order to minimise the effect of a few potentially spurious outliers, e.g. due to questionable Benchmark Values, the more robust Median Error is usually preferred.
Blind Test	An Accuracy test where the AVM has no access to the Benchmark Value.	In the context of Back-Testing, this may require removal of certain pieces of information by the AVM provider before running the test or removal of certain cases by the AVM user after the test. Blind testing is critical to meaningful AVM Accuracy assessment.
Bulk Test	An AVM Accuracy test where the Subject Properties and their Benchmark Values are extracted from the AVM Property Database.	The AVM provider still ensures that these be Blind Tests by not using the Benchmark Value for the purpose of computing the AVM result, but the user has to take this on trust and has no way of validating the integrity of the test. This is the main disadvantage of the Bulk Tests, their main advantage being the ability to source very large samples and conduct very specific analyses on cases with only certain given characteristics.
Comparable	A property used during the Valuation Process as evidence in support of a Valuation of a different property.	The description of the Comparable typically includes its address, some value information such as Sale Price at a particular date and some indication of the similarities with, or differences from, the Subject Property.
Comparables Based Model	A Valuation Model seeking to identify recent Comparables that resemble the Subject Property in terms of location and attributes, possibly adjusting their values to compensate for any dissimilarities, to produce an estimate (a Valuation) of Market Value.	
Comparable Evidence	A set of Comparables used in support of a Valuation.	
Competitive Test	A Lender Test where the client is assessing the Accuracy of several AVMs on the same test sample.	Please note that in the context of a Competitive Test, the suitability of the Benchmark Values becomes key, e.g. any cases whose Benchmark Value (or proxy of it, e.g. Asking Price, Customer Estimate etc) may already be available to some of the AVMs being tested must be excluded. For this reason Competitive Tests should focus on very recent cases not yet captured in any

		publicly available sources, e.g. national cadastres, and on Remortgage cases, whose Property Characteristics and/or proxies of values have not been advertised.
Computer Assisted Mass Appraisals (CAMA)	A Mass Valuation conducted by a government agency using a software solution for the purpose of computing property tax.	The main differentiators between CAMA systems vs AVMs include <ul style="list-style-type: none"> - the purpose of the Valuation: for property tax calculation vs for mortgage lending - the typical recipient of the Valuation: a municipality, State or national governmental office vs a bank or other stakeholder within the mortgage industry - the frequent inclusion of surveyors' / appraisers' input vs the entirely objective and mathematical nature of an AVM - the less up-to-date nature of CAMA systems typically producing Valuations only on a yearly basis or even every few years vs the very up-to-date nature of AVMs including daily or monthly data refreshes and the ability to value properties even as of the most current Effective Date.
Confidence Interval	See Value Range (preferred terminology).	
Confidence Level (CL)	A predictive measure expressing the estimated Accuracy of each AVM result and as such directly translatable into a Forecast Standard Deviation. It is typically given on the EAA's 0 to 7 proprietary scale.	Please note that the degree to which the Confidence Level actually correlates with the Accuracy of the AVM result when compared with the Benchmark Value is key to the assessment of AVM Accuracy.
Confidence Measure	Similar to Confidence Level, but intended as a looser term, which may be given on any scale of less universal use, e.g. defined by and specific to a given AVM provider.	
Confidence Score	See Confidence Level (preferred terminology).	
(AVM) Coverage	Collective term referring to the ability of an AVM to produce an acceptable result.	AVM Coverage depends on all of the following <ol style="list-style-type: none"> 1. The quality of the data provided as input (completely independent of AVM performance) 2. The AVM Input Requirements and the AVM's ability to interpret and backfill incomplete and/or invalid data (key to AVM Coverage) 3. Hit Rate (key to AVM Coverage) 4. User-defined Output Rules (typically dependent on AVM Accuracy) The overall Coverage of an AVM is typically quantified by its Success Rate, but it can really only be meaningfully measured in the context of a given test sample, where the variability introduced by the non-AVM-dependent points 1) and 4) above is removed. Otherwise Hit Rate is the measure most often quoted independently of a given test sample, but it needs to be considered in conjunction with the strictness of the Input Requirements.
Current LTV	See Updated LTV.	The use of the misleading term 'actual LTV' should be avoided: while in many languages 'actual' may seem equivalent to 'Current', in English it is not.
Customer Estimate	The value estimated by a borrower when requesting a loan from a lender, typically in the context of a Remortgage.	It may or may not be a realistic view of the corresponding Market Value, the latter typically being lower if the borrower is going for high LTV and is keen to meet loan product rules..
Data Cleansing	The process of merging and reconciling data from different sources relating to the same property and rejecting or re-weighting any	It is typically applied in two separate contexts: <ol style="list-style-type: none"> 1) in the creation of the AVM Property Database 2) in the validation of a Subject Property's inputs

values deemed as spurious or possibly unreliable, in order to maximise AVM Accuracy.

Data Input	The information available, e.g. to an AVM or other Statistical Valuation Method, to produce a Valuation.	Comprising elements for property identifications (e.g. address, governmental unique identifier etc), any known Property Characteristics and possibly transactional information from the property's history (e.g. Previous Values etc).
Description Data	The information within an AVM Property Database that relates to Property Characteristics, i.e. typically of a static nature.	Examples include floor area, number of bedrooms, approximate construction year, parking facilities etc.
Desktop Valuation	Ambiguous term used sometimes to indicate all Semi-Automated Valuations, sometimes to indicate only AVMAA.	
Dispersion	The relative frequency of all different sizes of Errors.	This typically displays the shape of a Bell curve with a tall narrow peak and thin tails if Dispersion is low, or a low broad peak and thicker tails if Dispersion is high.
Drive By	The Valuation produced by a qualified surveyor based only on the external inspection of a property. This is typically conducted literally through a drive-by, merely checking the property's existence, apparent external condition and neighbourhood characteristics, without stopping to assess any of its individual characteristics.	
Effective Date	The specified date as of when the AVM is requested to value the Subject Property.	
Error	The relative difference between a valuation result, e.g. from an AVM, and the Benchmark Value, expressed as a percentage of the Benchmark Value (not of the AVM): $(AVM - BV) / BV$	
External Valuation	See Drive By (preferred terminology).	
Forecast Standard Deviation (FSD)	The Standard Deviation of the Error distribution predicted for a set of AVM results with a given Confidence Level.	
Forward-Testing	A more sophisticated type of AVM Accuracy test than Back-Testing, where the AVM is run "a priori" on all properties within a certain perimeter and then, when a Benchmark Value becomes available for some of them at some point in the near future of the run, that subset of properties is used as the test sample.	<p>Forward-Testing is especially relevant in circumstances with high market liquidity and good data availability as this results in reasonable sample sizes.</p> <p>It also allows to test AVM performance at the latest possible point in time rather than at some point even in the recent past. For this reason it is again especially relevant in markets experiencing fast changes.</p> <p>Forward-Testing is also especially useful in circumstances with significant time-lag between gathering Comparables data from available sources and loading it onto the AVM Property Database. A slow data gathering cycle results in a lower availability of Comparables Evidence for a current Effective Date. This is likely to lead to better apparent AVM Accuracies for Effective Dates in the past versus a truly current</p>

		Effective Date where many recent Comparables may not be available yet.
Fraud Detection	A specific application of an AVM being used as a Second Opinion. It requires that the Surveyor Valuation be provided as input when the AVM is run, so that the AVM can produce a Y/N flag as to whether the Surveyor Valuation is likely to be overstated. The sensitivity of the flag can be tuned to meet the user's operating requirements, while the underlying AVM result and Confidence Level may not be necessarily disclosed.	
Further Advance	A transaction where an existing mortgage is amended to merely increase the loan amount.	Here, both the property and the borrower are already well known to the lender, hence the least strict of all possible underwriting procedures apply, e.g. often just using HPI.
Gap Product or Gap Solution	See Semi-Automated Valuation (preferred terminology).	
Geocoding	The process that attaches spatial coordinates to a property record.	
Granularity	Measure of the degree of detail at which location is identified and Property Characteristics are captured, e.g. Property-Specific (unique to a given individual property) or Location-Specific (based merely on more generic locations like postcode, neighbourhood, city, region etc).	See also Location-Specific (Valuation) and Property-Specific (Valuation).
Hedonic Model	An analysis of how various Property Characteristics influence property value in a given time period and geographic area. These Valuation Models typically describe property value as a function of the attributes of both the property itself and of its location.	
Hit Rate	The ratio of cases producing an AVM result divided by the number of cases where an AVM can be attempted (after points 1. and 2. to do with Coverage have been considered).	Unlike the Success Rate, Hit Rate can be quoted in general terms, regardless of a given test sample.
House Price Index (HPI)	A time series capturing the price development of residential properties over time.	This can be used as a set of multipliers to be applied to a Previous Value in order to update it to a subsequent point in time, thus producing an Indexed Value. An HPI can be computed following different methodologies, e.g. Repeat Sales, Hedonics, Weighted Averages or other techniques adjusting for differences in location, characteristics and condition of the properties available as data: this often results in contrasting figures from different HPI providers. Also the use of an HPI within an Indexation Model to produce an Indexed Value clearly requires a Previous Value and Previous Valuation Date to be known for the Subject Property and to be provided as input. As a result, this technique cannot be applied to properties that have never transacted before or whose history is not known to the user. This feature is one of the key differentiators between AVMs and HPIs.

Hybrid Model	An analysis that incorporates elements from different Valuation Models, e.g. Comparables Based, Hedonic, Indexation etc.	
Hybrid Valuation	See Semi-Automated Valuation (preferred terminology).	
Indexation Model (or Index Model)	A computation that applies a House Price Index to a previous property value in order to update it to a subsequent point in time.	See House Price Index.
Indexed Value or Indexed Valuation (IV)	The valuation result resulting from an Indexation Model.	
Input Requirements	The pieces of information needed for an AVM to attempt a Valuation. They often vary depending on intended AVM use, e.g. for mortgage origination vs portfolio revaluation vs Fraud Detection etc, and as the Subject Property needs to be specified, they also define which identifiers are acceptable, e.g. cadastral reference and/or property address.	Please note that - adopting stricter Input Requirements may result in an apparently higher Hit Rate, but may actually reduce overall Coverage - if an unformatted or un-normalised address is also acceptable as input, the Address-Matching Rate too needs to be considered in conjunction with the Input Requirements.
Input Rules	User-defined rules preventing an AVM to be attempted, not because the Input Requirements are not met, but because the user does not wish to employ AVMs in those circumstances.	
Lender Test	An AVM Accuracy test where the Subject Properties are controlled by a Lender and their Benchmark Values are disclosed to the AVM provider only <i>after</i> the AVM results have been delivered to the Lender.	This aims to ensure that the exercise be truly a Blind Test, hence the typical requirement for the Lender to use only recent cases, whose Benchmark Values or any other indications of value (e.g. Asking Prices, Customer Estimates etc) should not yet be available to the AVM provider being tested. The main disadvantage of the Lender Tests is the resulting relatively small sample, as well as sometimes the reliability of the Benchmark Values.
Loan Amount (or Loan Balance)	The amount owed by the borrower to the lender in the context of a mortgage loan.	Typically the term Loan Amount is preferred at Mortgage Origination, while Loan Balance is mostly used ever after, when the original Loan Amount has been subsequently affected by interest charges, mortgage repayments, Further Advances etc.
Loan-To-Value (LTV)	The ratio between Loan Balance and property value, widely used as a key measure of mortgage risk.	Please note that the details of the LTV definition and its calculation can vary significantly, e.g. see Origination LTV, Updated LTV, LTAVM etc.
Loan-To-AVM (LTAVM)	Loan-To-AVM, the ratio between the loan balance and the property value as computed by an AVM. It can be produced at origination or at any point in the future life of a mortgage, e.g. to update key risk measures to the current date.	
Location-Specific (Valuation)	A Valuation is Location-Specific, which is a less stringent feature than for example Property-Specific, when it is not based on information that is unique to an individual	See also Property-Specific (Valuation).

property, but simply on information referring to a larger class of properties, e.g. within a given locality like postcode, neighbourhood, city, region etc.

Market Value	For the purposes of immovable property, the estimated amount for which the property should exchange on the date of valuation between a willing buyer and a willing seller in an arm's-length transaction after proper marketing wherein the parties had each acted knowledgeably, prudently and without compulsion.	This definition is taken from Article 4 (76), Regulation (EU) No. 575/2013 of the European Parliament and of the Council of 26 June 2013 on prudential requirements for credit institutions and investment firms.
Mass Valuation	The practice of valuing large numbers of properties as of a given Effective Date by the systematic and uniform application of Valuation Methods and techniques that allow for statistical review and analysis of the results.	
Match-Pair Analysis	An analysis conducted on a sample of properties whose Benchmark Value is known at two distinct points in time.	This allows for a direct comparison of the accuracy of an AVM and an HPI.
Median Error	Literally the median of the Error.	See also under Bias.
(Valuation) Method	An approach or tool used to execute a Valuation.	A Valuation Method may refer to Assumptions and/or data from various sources, but makes no implication as to the degree of complexity, sophistication or nature of the procedures followed. Some Valuation Methods may be statistical, deterministic etc (hence objective), whereas others may be empirical, manual etc (hence subjective).
(Valuation) Model	A special type of (Valuation) Method deploying mathematical techniques to estimate or predict a given quantity.	Unlike many Valuation Methods, a Valuation Model is defined by being complex, sophisticated and of a mathematical nature, thus always being entirely objective, whereas a Valuation Method may include subjective elements.
Mortgage Applications	The mortgages being applied for by borrowers. Its number includes multiple applications to different lenders and declined mortgages.	Applications constitute the universe of potential AVM hits at Mortgage Origination.
Mortgage Approvals	The number of mortgages actually granted by lenders.	Please note that approval volumes understate the universe of potential AVM hits at origination, but they are often the only figures being published.
Mortgage Origination	The circumstances and purpose where an AVM is used to underwrite a new or amended mortgage. It therefore includes all of the following Transaction Types: Purchase, Remortgage and Further Advance.	
Open Market Value	See Market Value (preferred terminology).	
Origination LTV	The ratio between the loan amount issued at Mortgage Origination and the property value at the same time. The latter can be provided	

for example by a Sale Price, a Surveyor Valuation or an AVM.

Outliers	Extreme values in a distribution.	
Output Rules	User-defined rules preventing an AVM result to be returned, not because it could not be produced, but because the user does not wish to employ AVMs in those circumstances, e.g. minimum CL requirements, minimum LTAVM requirements etc.	
Pass Rate	The ratio of valid AVM results passing the Output Rules divided by the total number of AVM results.	This refers specifically to point 4. to do with AVM Coverage, which is both sample-dependent and user-dependent. As such the Pass Rate can really only be meaningfully measured in the context of a given test sample, e.g. in a Competitive Test, not quoted in general terms, unlike Hit Rate.
Percentage within 10%, 15%, 20% etc	The percentage of results (from an AVM or other valuation solution) with an Error \leq 10%, 15% or 20% respectively, regardless of its + or - sign.	This is the most often used measure of AVM Accuracy, capturing the Dispersion of the Errors in perhaps a more intuitive way for the layman user than the Standard Deviation or other indicators that may be preferred by the statistician.
Portfolio Valuation	The circumstances and purpose often defining a distinct AVM product, where Batch Valuations are used to value a large number of properties, e.g. for capital modelling, provisioning, whole loan trading, surveyor management etc.	This specifically excludes Valuations for the purpose of Origination, hence typical features of this AVM product include artificially long response times and reduced outputs (e.g. no Comparable Evidence).
Previous Valuation Date	The date applicable to the Previous Value.	Naturally it always precedes the Effective Date.
Previous Value (PV)	A property value, typically the most recent available, produced at a point in time preceding that being considered, i.e. belonging to the history of the property. It may be provided for example by a Sale Price, a Surveyor Valuation or an AVM.	Naturally it is never available for new-build properties. Even for non-new-build properties, where it may exist, it may not be known to the user or Valuer.
Property Attributes	See Property Characteristics (preferred terminology).	
Property Characteristics	The attributes describing the features of a property, e.g. Property Type / Style, floor area, number of bedrooms, approximate year of construction, parking facilities etc.	See also Property-Specific Valuation.
Property-Specific (Valuation)	A Valuation is Property-Specific, which is a more stringent feature than for example Location-Specific, when it is based on information that is unique to an individual property and distinguishes it and its value from every other property.	For example, Geocoding must have occurred in such a way that the property can be located individually (e.g. at rooftop level). This means that the assigned coordinates must refer exactly to the very building in question and not to a whole street or other locality like postcode, neighbourhood, city etc. Typically, also the attributes of the property should form the basis of a specific treatment, e.g. the selection of a list of Comparables unique to that property, not used simply in the context of non-Property-Specific Valuation Methods, like HPIs, Single Parameter Valuations (e.g. price per square metre) or Hedonic Models (which apply to whole classes of properties in the same way). This

		<p>point may be illustrated more clearly as follows. For example, a Hedonic Model may accept Property Characteristics that refer to a given property, but instead of using the precise address, the model only uses the postcode. All Property Characteristics being equal, in such a case there is no differentiation between properties within that postcode. Such a Valuation is not Property-Specific. On the other hand, a Comparables-Based AVM selects a specific list of Comparables for each Subject Property based on its individual location (full address), as well as on its specific Property Characteristics. Such a Valuation is Property-Specific.</p> <p>Property-Specific Valuations are a key feature of Advanced Statistical Models.</p> <p>See also Location-Specific (Valuation).</p>
Property-Specific Variable	A Property Characteristic that refers specifically to an individual property.	See also Property Characteristics (preferred terminology).
Property Style	See Property Type.	
Property Type	The Property Characteristic that expresses which wide category of residential real estate a given property belongs to, e.g. house or flat.	Property Type is often accompanied by Property Style, i.e. a secondary classification that applies within a given Property Type. For example, when the Property Type is a house, typical Property Styles may be Detached, Semi-Detached and Terrace (or End-Terrace and Mid-Terrace); when Property Type is a flat, typical Property Styles may be Converted and Purpose-Built.
Purchase	A transaction where a property is sold. It comprises both cash transactions and transactions financed through a mortgage.	Mortgage originations for a Purchase attracts the strictest underwriting procedures, because the property (and often the borrower as well) are typically unknown to the lender, who tends to pass all costs onto the borrower.
Purchase Price (PP)	See Sale Price (preferred terminology).	
Random Error	The intrinsic value range due to the fact that for any individual property at a particular point in time, different prices are possible due to different circumstances of sale, differing buyer preferences, different buyer information sets or other factors.	
Real-Life Testing	An AVM Accuracy test that entirely replicates the real-life circumstances of AVM at Mortgage Origination, ensuring no possible data leakage or retrospective improvements.	The test is run in Blind Test conditions and is in many ways similar to Forward-Testing, as typically a Surveyor Valuation or Sale Price has not yet even been produced or happened. For example, the AVM result is produced as part of the initial Mortgage Application or at the beginning of a sale cycle, and then subsequently tested against a Surveyor Valuation or Sale Price that is itself produced in the future of the moment in time that the AVM is run. This ensures there can be no possible advantages afforded to the AVM that become available in Back-Testing, including access to historic data, data leakage of the Benchmark Value and other valuation details, and any model enhancements / improvements that have occurred in the intervening time period. This test enables users to evaluate AVM performance in true real-world conditions.
Reference Value	See Benchmark Value (preferred terminology).	

Remortgage	A transaction where a new mortgage is originated because the borrower changes lender and/or product, e.g. for a new interest rate, new terms and conditions etc.	In this case the property has been inspected and valued before at the time of purchase and the borrower already has some mortgage history often resulting into a lower LTV, hence Remortgages are regarded as a lower-risk scenario and lenders compete fiercely in this space, e.g. by offering no fees deals, creating an incentive to minimise valuation costs.
Repeat Sales Index	One type of HPI computed through a specific methodology that only uses pairs of Sales Prices of the same property at two or more points in time, thus removing any effects from spatial factors and Property Characteristics.	Examples of a Repeat Sales Index include the Case-Shiller index in the US and the Land Registry Index in the UK. Other methodologies to compute an HPI include for example Hedonics (e.g. the Halifax and Nationwide indices in the UK), Weighted Averages etc.
Sale Price (SP)	The price agreed between buyer and seller within an Arm's Length Transaction.	
Second Opinion	The circumstance where an AVM is used at origination as a check for, not as a replacement to, a Surveyor Valuation.	
Semi-Automated Valuation	Generic term used to indicate all valuation solutions that comprise both automated and manual elements.	They include for example all of AAAM, SAAAM and AVMAA. Please note that, as they comprise a manual element, Semi-Automated Valuations can be subjective, unlike fully automated Valuations that are entirely objective.
Single Parameter Valuation	A Statistical Valuation Method that estimates property value on the basis of one Property Characteristic, e.g. most often floor area or Property Type.	The concept can be extended to comprise a combination of two or more Property Characteristics, e.g. number of bedrooms and property type / style (like 4-bedroom detached houses). These can be referred to as Multiple Parameter Valuations.
Standard Deviation	Frequently used measure of the Dispersion of the Error, computed through its well-known statistical formula.	
Statistical Valuation Method (SVM)	A mathematical tool or approach used to estimate property value (a Valuation) through deterministic computations rather than human judgement.	Different Statistical Valuation Methods can vary widely in the degree of their complexity, both from a mathematical as well as from a technical point of view. They comprise the following main types: - Single Parameter Valuations - House Price Indices - Hedonic Models (also called Hedonic AVMs) - Comparables Based Automated Valuation Models (also called Comparables Based AVMs or simply AVMs) The techniques underlying the various Statistical Valuation Methods can comprise a variety of different analytics approaches, such as linear and non-linear regressions, genetic algorithms, neural networks and fuzzy logic, among others. Statistical Valuation Methods are entirely objective in the sense that the values are calculated on the basis of measurable characteristics of the property and its location without applying any element of subjectivity.
Subject Property	The specified property being valued.	
Success Rate	The ratio of cases producing a valid AVM result (after all points 1. to 4. to do with AVM Coverage have been considered) divided by the total number of cases.	As point 1. is sample-dependent and 4. is user-dependent, the Success Rate can really only be meaningfully measured in the context of a given test sample, e.g. in a Competitive Test, not quoted in general terms, unlike Hit Rate.

Surveyor Assisted AVM (SAAVM)	A Semi-Automated Valuation that relies on the experience and judgement of a qualified surveyor, to validate and supplement the output of an AVM.	Please note that the modifications or manipulations introduced by the surveyor onto the AVM output and/or the Comparable Evidence removes the objectivity and integrity of the fully automated process and it may compromise its unbiased nature.
Surveyor Valuation (SV)	The Valuation produced by a qualified surveyor following the full internal physical inspection of a property.	
Transaction Data	The information within an AVM Property Database that relates to property values, i.e. typically of a dynamic nature.	This includes e.g. Surveyor Valuation, Sale Price, Valuation Date, Valuation Type, Transaction Type, data source etc.
Transaction Price	The value associated to a property in the context of a commercial or legal transaction, e.g. its Sale Price or Surveyor Valuation.	
Transaction Type	The circumstance leading to the production of a property value, e.g. Purchase, Remortgage, Further Advance, Arrear Management.	
True Value	This is a subjective term. The term Benchmark Value should always be used in the context of AVM Accuracy.	
Unique Property Identifier	The field(s) used by the AVM to uniquely reference individual properties, e.g. cadastral reference, UPRN, AddressPointToid, 3D coordinates etc.	
Updated LTV	The Loan-To-Value based not on property value at the time of Mortgage Origination, but on a value updated in light of the subsequent market developments. The update could be obtained trivially via an HPI or preferably by performing a re-valuation completely independent of the property value previously obtained, e.g. one performed by an AVM (see LTAVM).	Please note that ideally the Loan Amount should be updated too from the one issued at Mortgage Origination to the outstanding balance at the time of the Valuation. When referring to the current date, this may also be termed Current LTV, but please avoid the misleading term 'actual LTV': while in many languages "actual" may seem equivalent to "current", in English it is not.
Usable Hit Rate	See Success Rate (preferred terminology).	
Valuation	The act or process of providing an estimate of value of a specified property at a specified date.	
Valuation Date	Ambiguous term that may refer both to the Effective Date and/or to the date when a Valuation was conducted.	
Valuation Process	The temporal sequence of procedural and operational steps taken in support of a property Valuation, from the receipt of instructions to the recording of relevant information, like purpose, property characteristics and other circumstantial details.	Please note that these procedural and operational steps typically precede or follow, hence are quite distinct from the algorithmic step whereby the valuation result is actually computed, which may be proprietary (e.g. for the most advanced Statistical Valuation Methods) or undocumentable (e.g. in the case of human judgement).

Valuation Type	The process producing a property value, e.g. Sale Price, Asking Price, Surveyor Valuation (full internal), Drive By, Desktop, AVM, HPI etc.	
Valuer	An individual, group of individuals or a company who possesses the necessary qualifications, ability and experience to execute a Valuation in an objective, unbiased and competent manner.	
Value Range	The value range within which the Market Value is expected to fall with a given level of confidence, hence a result of the Forecast Standard Deviation.	For example, a Value Range of $\pm 1\text{FSD}$ is expected to include the Market Value with approximately 68% confidence; a Value Range of $\pm 2\text{FSD}$ is expected to include the Market Value with approximately 96% confidence and so on.