

Level 3 national report on quality of statistics underlying the MIP indicators

Statistical domain: Housing Price statistics

Country: Romania

Institution: National Institute of Statistics

Reference year: 2024

Date of update: 03/2025

Generic template for national reports providing information on quality, sources and methods, together with information on the statistical processes used for the compilation of the statistics underlying the MIP indicators (including concrete specifications for **housing price statistics) – 2025 update**

Reporting institution: National Institute of Statistics

Selected principles					Some specific examples for indicators and related questions (Response options, unless indicated otherwise: not implemented; partially implemented; fully implemented)	Statistical domain specifications	Country response
European Code of Practice principles	Public Commitment on European Statistics by the ESCB	Selected elements					
<i>Institutional Environment</i>	<i>Institutional Environment</i>	<i>CoP/PC</i>	<i>IMF DQAF</i>	<i>SIMS</i>	<i>Question(s)</i>	<i>Housing price statistics</i>	Housing price statistics
CoP1 Professional Independence	PC1 Professional Independence	1.1/1.1	1.1.1 1.1.2		<p>The independence of [name of reporting institution], from political and other external interference in developing, producing and disseminating official statistics is guaranteed by law.</p> <p><i>Legal basis: Please confirm the independence by referring to the relevant national and EU legal act(s) and the formulation used in</i></p>	<p><i>Legal basis:</i> Please. specify the statutory basis for ensuring independent professional authority in all statistical decision making and activities at the institutional level. This legal authority provides the ground to exercise professional integrity to the fullest extent and is conducive to embedding a professional culture in the statistical office.</p>	<p>The professional independence of INS is fully guaranteed under the Law no. 226/2009 on the organization and functioning of official statistics in Romania, amended and completed (chapter II, article 5, point a) professional independence - statistics must be developed, produced and disseminated in an independent manner, particularly as regards the selection of techniques, definitions,</p>

					<i>the legal act.</i>	<i>Statistics work programme:</i> Please confirm the existence of a statistics work programme covering housing price statistics and specify where to find it, if available.	methodologies and sources to be used, and the timing and content of all forms of dissemination, free from any pressures from political or interest groups or from Community or national authorities, without prejudice to institutional settings, such as Community or national institutional or budgetary provisions or definitions of statistical needs).
		1.4/1.5			The [name of reporting institution] has an annual statistical work programme which is made public. <i>Statistics work programme: Please confirm the existence of a statistics work programme and specify where to find it (or similar document), if available.</i>		According to the statistical law 226/2009 amended and completed, INS in co-operation with the other producers of official statistics, draws up the Annual National Statistical Programme, with the aim to present in detail and implement the annual national statistical programme subject to be approved by the Government. This is published on the INS web site here .
CoP2 Mandate for data collection	PC2 Mandate for data collection	2.1/2.1	0.1.1	S 7.1	The mandate(s) of the [name of the institution(s)] to collect information for the development, production and dissemination of European Statistics is specified in law.	<i>Allocation of responsibilities:</i> Please explain the allocation of responsibilities for the production of housing price statistics.	The INS has the sole responsibility for the production and dissemination of Romanian house price statistics. There is no specific RO legislation for the production of house price statistics. . The mandate for the production of the

					<p><i>Allocation of responsibilities: Please explain the allocation of responsibilities in producing the relevant statistics.</i></p> <p><i>Legal basis: Please confirm the mandate by referring to the relevant legal act(s) and any other kind of formal agreements.</i></p>	<p><i>Legal basis:</i> Please confirm the mandate for the production of housing price statistics by referring to the relevant legal act(s) and/or any other kind of formal agreements.</p>	<p>HPI and the Owner-occupied price index (OOHPI) is the European Parliament and Council Regulation (EU) 2016/792, of 11 May 2016.</p> <p>The basic methodological and technical specifications for the compilation of the OOHPI is given by the Commission Regulation (EU) 2020/1148 of 31 July 2020. Commission Regulation (EU) No 1470/2023. A more comprehensive and developed implementing regulation is expected to take legal effect from the beginning of 2024 on all of the above-mentioned regulations, as well as repealed legislation and further relevant documents, can be found in the Housing Price Statistics section on Eurostat's website under 'Legislation'.</p>
CoP6 Impartiality and objectivity	PC6 Impartiality and objectivity	6.6/6.6	1.2.4	S9.1 + S9.2 S.20.1	<p>Advance notice is given on release calendars and on major revisions or changes in methodologies, source data and techniques.</p> <p><i>Advance release calendar: Please confirm the existence of an advance release calendar and</i></p>	<p><i>1.3.1 Advance release calendar:</i> Please confirm the existence of an advance release calendar for housing price statistics and provide a link to it.</p> <p><i>1.3.2 Revision policy:</i> Please</p>	<p>The HPI index is published in the Price Statistical Bulletin. The release dates for this publication are announced in advance on the INS website here.</p> <p>The HPI is not subject to systematic revisions and is</p>

					<p><i>provide a link to it.</i></p> <p><i>Revision policy: Please explain succinctly the revision policy and provide a link to material on the revision policy, if existent.</i></p>	<p>explain succinctly the revision policy for housing price statistics and provide a link to material on the revision policy, if existent.</p>	<p>considered as final once it is disseminated. However, published HPI are revisable in case of significant revisions due to mistakes, new or improved information and methodological changes. Users are informed about revisions in the publication mentioned above.</p>
Statistical Processes	Statistical Processes	CoP/PC	IMF DQAF	SIMS	Question(s)	Housing price statistics	
CoP7 Sound methodology	PC7 Sound methodology	7.1/7.1		<p>2.1 S4.3</p> <p>2.2 S4.4</p> <p>2.3 S4.5</p> <p>2.4 S4.6</p> <p>S 6</p> <p>S12.1</p>	<p>Please specify the relevant statistical standards to which the statistics abide.</p> <p><i>Links/references to existing comprehensive methodological documentation on specific aspects of the national sources and methods can also be provided</i></p>	<p><i>2.1.1 General remarks:</i> Specify if housing price statistics follow the methodological recommendations in the Technical Manual and the RPPI Handbook.</p>	<p>Statistical concepts and standards applied for the production of the HPI are in compliance with methodological recommendations and international standards set out in the Technical Manual on Owner-Occupied Housing for HICP provided by Eurostat to ensure comparability of HPI indices across Member States and the Handbook on Residential Property Price Indices (RPPIs)</p>

					<p>Please specify adherence or deviations from concepts and rules according to international standards and highlight coverage gaps that are of material relevance for the statistics.</p> <p>Please indicate whether actions to address the deviations and coverage gaps are envisaged.</p>	<p>Deviations from concepts, rules, and coverage gaps specific to housing prices statistics with material impact should be identified. .</p>	<p>Dwellings which were subject of the transfer of property ownership and transacted at the market price, in the entire national territory, are to be included in the HPI.</p> <p>The transactions including more than one dwelling, if there is no possibility to split the value for each dwelling, are excluded.</p>
CoP8 Appropriate Statistical procedures	PC8 Appropriate Statistical procedures	8.2/8.2	3.1 3.3 3.4	<p>S12.1</p> <p>S21.1</p> <p>S21.3</p> <p>S</p> <p>21.5-6</p> <p>Please provide a succinct assessment of the robustness of the statistics by elaborating briefly on the relevant sources of information, statistical methods and procedures used across the various frequencies.</p> <p><i>Please provide links/references to existing comprehensive methodological documentation on specific aspects of the national statistical procedures. The objective should be to get an overview on how much the statistical output are anchored in actual collected data rather than on estimation methods or similar judgemental inputs.</i></p>	<p><i>Main features:</i> For <i>housing price statistics</i>, this description should start by assessing the soundness of sources of information, procedures and methods used in data compilation of the most relevant frequency (quarterly), e.g. price concept, index formula, weights, and adjustments.</p> <p><i>Country specific aspects:</i> Present succinctly information on the collection methods of specific material relevance for house price data. A link could be provided to the national provisions in this respect, if existent.</p>	<p>The data source used in the production of RO house price statistics is a monthly survey of the transfer of property ownership.</p> <p>The survey is addressed to the notary offices which have to authenticate the deed of the property transfer in Romania.</p> <p>The data are collected directly from notary offices using an electronic questionnaire providing the market price for each property subject of the sales deed and the property characteristics used as explanatory variable in the HPI regression model.</p> <p>House price observations are</p>	

						<p>grouped into sets of observations on houses new to household's sector or existing in the household's sector, type of housing (flats or houses), location (capital city and other city for flats and urban or rural for houses).</p> <p>The elementary price index is calculated by using the hedonic regression method. The variables used in the regression are: the area of the dwelling (in meters squared), location of property (county level), the construction year of the dwelling (grouped by intervals), material used in the construction of the house, other price determining characteristics, such as, number of bedrooms, a garage, type of heating used, comfort level, type of finishes, the financing sources used to bought the structure, etc.)</p> <p>Elementary indices are then aggregated to obtain two sub-indices (new and existing dwellings) and the overall index.</p> <p>The formula used for the aggregation is Laspeyres type</p>
--	--	--	--	--	--	--

							formula. Weights are updated yearly and are estimated on the basis of the same data base used for processing price information.
<i>Statistical Output</i>	<i>Statistical Output</i>	CoP/PC	<i>IMF DQAF</i>	<i>SIMS</i>	<i>Question(s)</i>	<i>Housing price statistics</i>	
CoP11 Relevance	PC11 Relevance	11.1-11.3	0.3	S.14	<p>Please specify briefly why the statistics are relevant by referring to the multiple purposes for which the statistics are used at (i) international, (ii) EU and (iii) national level.</p> <p>References to the statistical legislation and other formal or informal commitments could be sufficient.</p> <p>In addition, if applicable, the outcome of user consultation processes could also be given.</p>	<p>A variety of potential uses of HPIs are provided for consideration:</p> <ul style="list-style-type: none"> - to assess housing affordability over time - a measure of specific price trends - for inflation targeting - to monitor economic imbalances and financial stability - an input for national accounts purposes - an input to economic forecasting and analysis - an input for decision making in respect to the housing market 	<p>Monitoring the property prices is important as boom and busts in real estate markets affecting the real economy through a variety of channels and can be an important source of macroeconomic imbalances.</p> <p>The most recently economic and financial crisis highlighted the necessity at the European level and not only to adopt a legislative package regarding a new surveillance procedure, the so called Macroeconomic Imbalance Procedure (MIP). One of the MIP scoreboard indicators is the average of 12 months growth rate of the deflated house price index, with an indicative level of 6%.</p> <p>Measures of changes in real estate prices can provide valuable input to both monetary policy and</p>

							<p>financial stability analyses. Therefore one of the most important user at the national level is the National Bank of Romania</p> <p>There is no a formal feedback from users, however by participating in several domestic meetings dedicated to the real estate markets (workshops, real estate trade fair, etc.) we found out that the users (real estate agencies, households, media etc) are more interested in the transaction price level by specific location than an aggregate HPI.</p>
CoP12 Accuracy and reliability	PC12 Accuracy and reliability (including stability)	12.1/12.1	3.5	<p>S 15.1</p> <p>S 15.2</p> <p>S15.3</p> <p>S.18.2</p> <p>S 20.2</p>	<p>The analysis should be based on the following indicators (to be compiled by the ECB/Eurostat on a common data vintage) on the reliability of first releases for the relevant series (selected for their material impact and to avoid compensatory effects in the case of balancing items):</p> <ul style="list-style-type: none"> - Directional reliability indicators; - Revisions indicators (e.g. MAPE, MACE or RMSRE depending on the indicator). 	<p>The accuracy of housing price statistics can be monitored by assessing the methodological soundness of price and weight sources and adherence to the methodological recommendations.</p> <p>Please also provide a detailed description on the data sources for both weights and prices, and price collection methods.</p>	<p>The HPI estimates are subject to potential sources of non-sampling errors. In theory the survey should cover all deeds of property transfers authenticated by the notary offices in RO. In practice, comprehensive cannot be guaranteed and a number of transactions are not declared by the notary offices. Also, the information provided could be incorrectly declared or recorded in order to reduce the tax charges.</p> <p>In order to ensure that these errors</p>

					<p>and provide a succinct assessment of the accuracy and reliability of the statistics on the basis of the results, with an attempt to provide a relative objective measure, explaining also the main reasons for revisions.</p>	<p>are minimised, the production process include various procedures:</p> <p>Non-statistical checking is undertaken by checking the input data, by setting filters taking into account the results of the analysis of the market value of transaction price range, the quality of input data on total useful area of the houses, the information on the useful area according to the legislation, the expert guidance on the appraisals indicative values of real estate.</p> <p>Statistical checking or filtering is done by using different types of means or the median of the each characteristic observed on the basis of which an acceptance interval is generated.</p> <p>Also some mixed indicator are checked for their reliability. For instance, the price ratio statistics is used for checking the price/square meter and square meter/number of rooms to check the plausibility of data set.</p>
--	--	--	--	--	--	---

							Published HPI are revisable in case of significant revisions due to mistakes, new or improved information and methodological changes. Users are informed about revisions in the publication mentioned above.
					Please provide a succinct assessment of the level of the statistical discrepancies (“ <i>internal consistency</i> ”)		The HPI at elementary level is calculating using hedonic regression model. These indices are aggregated together by using transaction based weights to produce the upper level price indices. Therefore the overall HPIs are fully consistent with their component indices.
CoP13 Timeliness and punctuality	PC13 Timeliness (including punctuality)	13.1 13.4	4.1	S.16	Please specify the timeliness requirements for international and EU purposes and the national target publication dates. Please specify punctuality defined as deviations in relation to the timeliness requirements and target dates specified above.	3.3.1 <i>National requirements</i> : HPIs may be required at national level at different frequencies and timeliness. 3.3.2 <i>EU and other international requirements</i> : HPIs are released after 100 days from the end of the reference quarter. The release schedule has significantly improved and close to T+1Q at present, which is the target	The following expenditure categories are covered in the HPI: H.1. Purchases of dwellings H.1.1. Purchase of new dwellings H.1.2. Purchase of existing dwellings The quarterly HPI datasets following the above expenditure categories are provided to Eurostat 85 days from the end of the quarter to which the indices relate.

						timeliness for this indicator	At the national level the expenditure categories are: Total HPI Flats: Total, Bucharest and Rest of the country (only for existing dwellings) Houses: Total, Urban and Rural (only for existing dwellings)
CoP14 Coherence and comparability	PC14 Consistency and comparability	14.1/14.1	4.2.1	S17.2	Please provide a succinct assessment of the results of the consistency check of the statistics with other related domains or data sets with which the statistics must show coherence (“ <i>external consistency</i> ”).	3.4.1 <i>Consistency with related statistics</i> : Housing price estimates may be confronted with other indicators available at the national level, e.g., price valuation by a national appraisal board.	In addition to the official HPI published by INS, there are several HPI data available for the public. The official HPI is not compared directly with these other indicators due to the differences in both data and methodology used by each source.
			4.2.2 4.2.3	S 18.1	The results should provide a relative objective measure to facilitate cross-country comparability, e.g. be presented as a ratio of the inconsistency between compared statistics, as a percentage of GDP, where appropriate.		
					Please provide a succinct assessment of the time series consistency, specifying (i) whether the time series presents breaks and	3.4.2 <i>“Time” and back data consistency</i> : In the housing price statistics context, specify the following:	The RO HPI series started in 2009. The coverage of transactions, concepts and methodology used for produce the HPI is the same for the

					if so explaining the reasons for the breaks; (ii) the length of the series for which back data are consistent; and (iii) whether the statistics are consistent across the various frequencies (monthly/quarterly/annual) where relevant.	- breaks in time series and reasons (whether they relate to methodological or other changes) - time periods for which data are consistent - availability of back data and back calculations performed.	entire datasets, therefore the index is full comparable over time.
CoP15 Accessibility and Clarity	PC15 Accessibility and Clarity	15.1/15.1	5.1.1 5.2.1	S9.3 S 11 S12.1	Please provide a brief description of the dissemination policy and dissemination means, including links to the data and respective metadata.	Please provide a brief description of the dissemination policy and dissemination means, including links to the data and respective metadata.	The HPI index is published in the Price Statistical Bulletin following the national expenditure categories. This publication is available on the INS website here . Microdata access is currently available only for scientific research purposes according to legal provision.