

Systematization and accounting of buildings and structures

Jurakulov Doniyor Ochilovich

Associate professor, head of the department of Cadastre of buildings and structures, Samarkand state architectural and civil engineering Institute, Samarkand, Uzbekistan

Ibragimov Lazizbek Toshpulat o'g'li

Researcher, senior Lecturer of the department of Cadastre of buildings and structures, Samarkand state architectural and civil engineering Institute, Samarkand, Uzbekistan

Akhmedova Madina G'ayrat qizi

Master student of TIAME. Tashkent, Uzbekistan

Hazratov Shaxzod Sunnatillo o'g'li

Student of Samarkand state architectural and civil engineering Institute, Samarkand, Uzbekistan

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Abstract: *This article describes the important tasks of summarizing and systematizing cadastral data on buildings and structures in each region as of each quarter and 31 December, as well as maintaining a general account (balance) for the region.*

Key words: *Building, structure, territory, account, balance, system, quality, quantity, information, technology, monitoring, resource, database, property, farm, inventory, inventory, law, protection, historical, cultural, technical, economic, indicator.*

Introduction:

The state cadastre of buildings and structures is maintained to ensure the effective use and protection of buildings and structures, the rights of property owners and other users of these objects, as well as the state registration of ownership and other property rights to buildings and structures [1,2].

When maintaining the state cadastre of buildings and structures, a cadastral collection is prepared on the basis of information on the legal, economic and architectural-construction status of buildings and structures and entered in the state register in the cadastral book.

Generalized and systematized information on buildings and structures in order to ensure the efficient use of buildings and structures, their protection, compliance with the rules of urban planning, engineering, construction on a scientific basis, further deepening the market relations of buildings and structures and creating organizational and legal aspects of complex economic development is of great importance.

The computer database of cadastral data on buildings and structures of the region should be compiled on the basis of information included in the cadastral book on the legal, economic and architectural-construction status of these objects and summarized, systematized and published quarterly and final status by year 2].

The need to develop a procedure for the classification and general accounting (balance) of the territory on the basis of information on the legal, economic and architectural-construction status of buildings and structures determines the relevance of this research.

Research methodology and methods. The object of the study was the results of a survey of the types of buildings and structures in the territory of Payshanba settlement of Kattakurgan district of Samarkand region as of the end of the year. The subject of the study is

the development of procedures for systematization and accounting of buildings and structures in the region on the basis of indicators of legal, economic and architectural and construction status. The research process used statistical analysis, field recording, grouping, systematization, statistical re-verification of the reliability of the results.

Reliability and discussion of research results:

Information on the legal, economic and architectural-construction status of buildings and structures in the state cadastre of buildings and structures in the cadastral register on property rights or other property rights to buildings and structures (their emergence, transfer, restriction and termination), as well as other information describing the object is recorded [2].

Location of buildings and structures, their ownership or other property rights to legal entities and individuals, the grounds and terms of these rights, the period of their suspension, the conditions of restriction of property rights and other property rights, information on the rights of third parties to these objects information on the legal status of facilities.

The value of buildings and structures, the characteristics of their use, the purpose of production of these objects, their use for their intended purpose and other information form the basis of the economic status of buildings and structures.

Compliance of buildings and structures with land management schemes, master plans of cities, projects for the settlement of settlements, as well as the requirements of urban planning norms and regulations, building parameters (floors, common, residential, industrial areas), land plot, date of construction, engineering the availability of communications, seismic resistance and other technical information is the architectural and construction status of buildings and structures.

Taking into account the division of buildings and structures into groups of

buildings and structures - residential buildings, non-residential buildings, structures, architectural and historical monuments, and their legal, economic and architectural-construction status, buildings and structures are divided into administrative-territorial systems. and form the balance sheet (Figure 1).

❖ Accounting of buildings and structures is a complex activity of obtaining, processing, systematization and creation of a database on the quantity, condition and quality of buildings and structures, as well as the systematization and accounting of state-registered buildings and structures by administrative territory. should be done as an event.

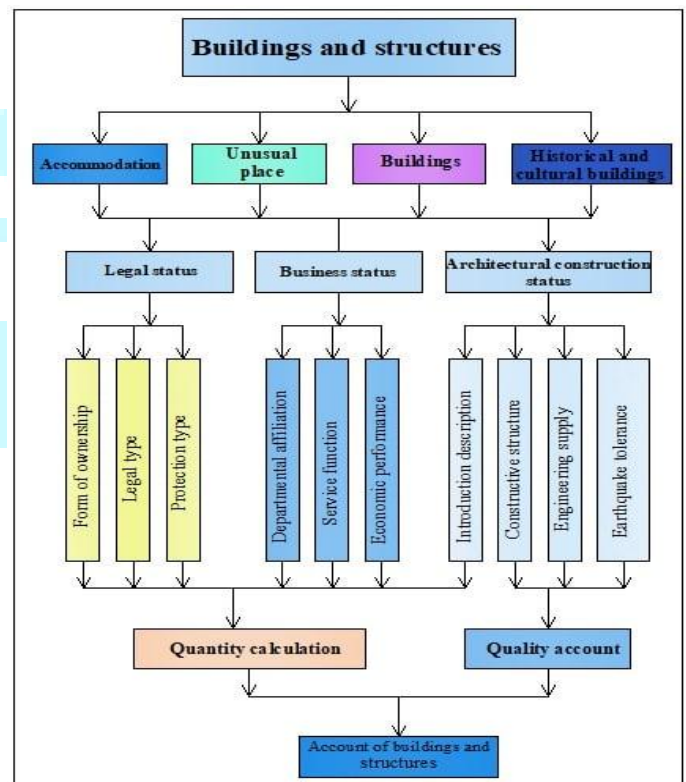


Figure 1. Accounting system of buildings and structures.

➤ Given that the quantitative calculation of buildings and structures - includes information on their distribution by a particular territorial unit, departmental affiliation, functional nature of the settlement, it is expedient to conduct

quantitative calculations on the basis of the following indicators:

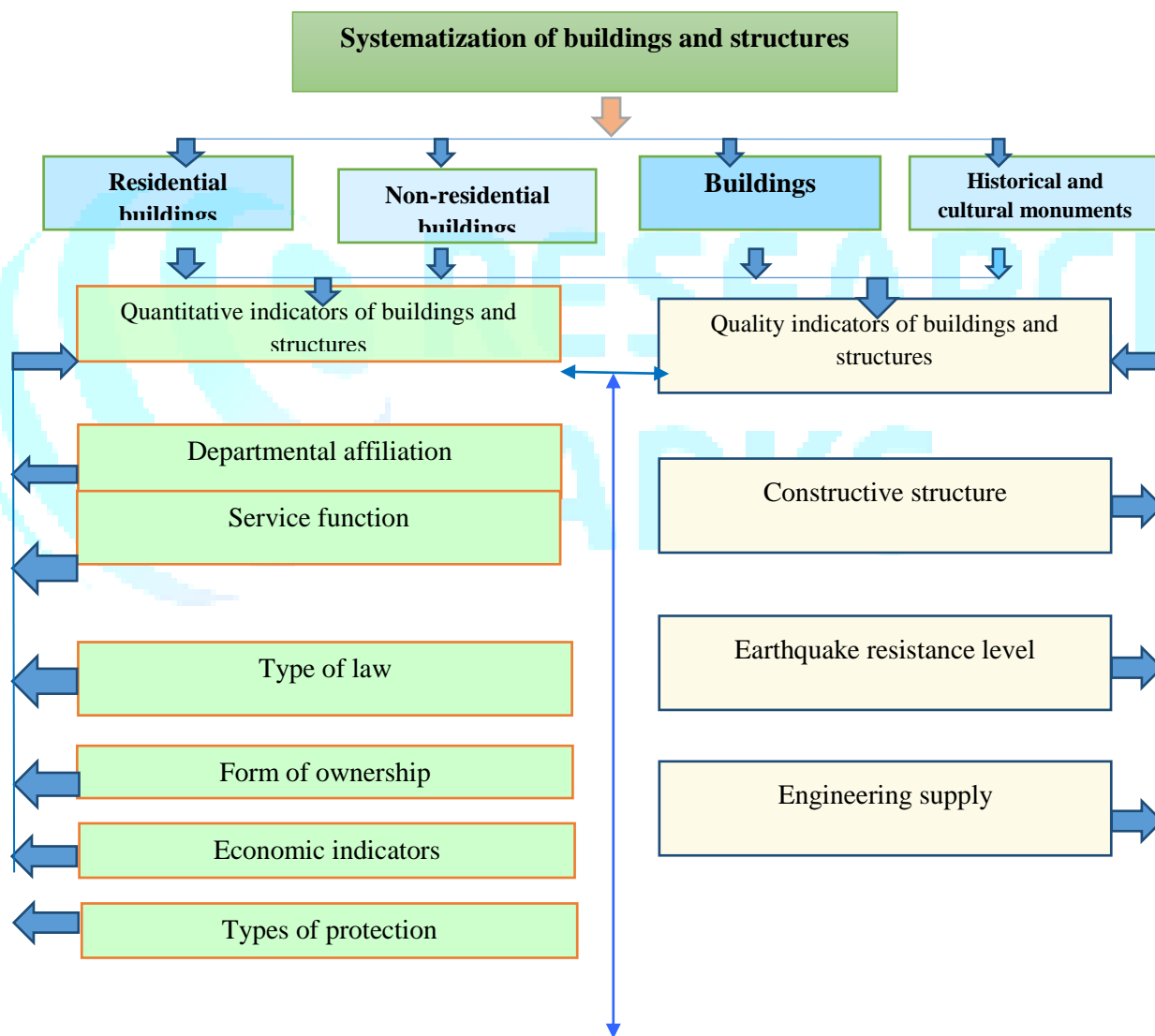
Quantitative indicators of buildings and structures:

- ✚ **By departmental affiliation (to find out who owns the building and structure):**
 - Fuel and energy;
 - Social complex;
 - Light industry;
 - Chemical complex;
 - Water management;
 - Mechanical engineering;
 - Aviation industry;
 - Metallurgical industry;
 - Electronics industry;
 - Transport and communications;
 - Defense industry
 - Agro-industrial complex;
 - Construction;
- ✚ **By type of law (to know the management of the building and structure):**
 - Property rights;
 - Business management rights;
 - Operational management rights.
- ✚ **By type of property (to know the owner of the building and structure):**
 - Private property;
 - advisable to conduct quality accounting on the basis of the following indicators:
 - Buildings - indicators of quality accounting of structures:**
 - **Structural structure (to know the building material and strength of the building and structure):**
 - ✓ **Buildings built without earthquake precautions**
 - Divided roofs, buildings made of raw bricks, straw and straw, etc.
 - Brick houses, buildings made of small and large blocks, buildings made of cut natural stone.
 - Panel type buildings, frame reinforced concrete buildings, quality wooden houses.
 - ✓ **Earthquake protection structures**
 - Community (company) property.
 - State property
 - Property of foreign legal entities and individuals.
- ✚ **By economic indicators (to find out the profit from the building and structure):**
 - To conduct business
 - Excessive real estate.
 - Investment property.
- ✚ **According to the description of construction (to know the height and appearance of the building and structure):**
 - Multi-storey (3-9 floors);
 - Single storey;
 - High-rise (more than 10 floors);
 - Continuous construction;
 - Low-rise (1-2 floors);
 - Pavilion construction.
- ✚ **By types of protection (to ensure the protection of buildings and structures):**
 - In state protection;
 - Under the auspices of UNESCO
 - Under the protection of local authorities;
 - Taking into account the quality of buildings and structures - the type of construction materials, capital, material and moral obsolescence, engineering support, it is
 - Buildings made of brick, ceramic and cut natural stone, small and large concrete blocks.
 - Reinforced concrete or frame buildings.
 - Buildings made of large panels, large blocks, monolithic concrete.
 - **Earthquake resistance level (to protect buildings and structures from natural disasters):**
 - Earthquake resistant
 - Low earthquake resistance
 - Low earthquake resistance
 - Earthquake resistant
 - **Engineering support (to know the equipment of the building and structure):**
 - Heating system

- Garbage pipe
- Water supply
 - Power supply
- Hot water supply
- Cable television
- Sewage
- General television antenna
- Gas supply
- Radio network
- Bath

- Elevator

It is expedient to systematize buildings and structures on the territory and keep records (balance) based on the activities of local cadastral services (cadastral agency), ensuring the sequence of types of work (Figure 2), because the systematization of buildings and structures data are required to be completed quarterly [2].



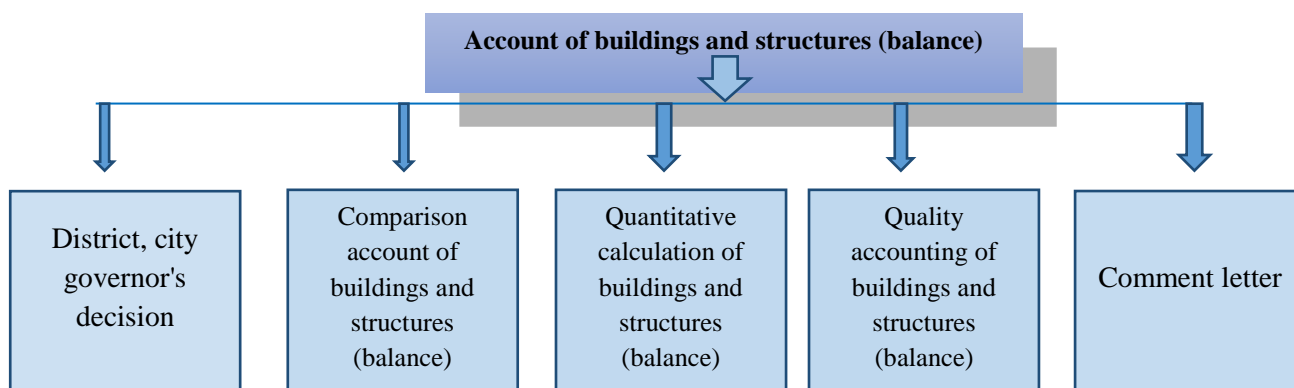


Figure 2. The process of systematization and accounting (balance) of buildings and structures

According to the systematization of buildings and structures by type (Table 1) based on the results of the inventory of existing buildings and structures in the territory of Payshanba settlement of Kattakurgan district, at the end of this year we can see that a total of 4011 buildings and structures are located on 435.57 hectares.

Table №1

Systematization calculation by types of buildings and structures

Name	Total number	Total area, ra	Hence the types of buildings							
			Accommodation		Unusual place		Buildings		Cultural heritage	
			how many	area (ha)	how many	area (ha)	how many	area (ha)	how many	area (ha)
2. On duty										
16. Buildings	7	6,52					7	6,52		
16.1. Waterworks	1	1.59					1	1.59		
16.2. Gas facilities	1	0.36					1	0.36		
16.3. Sewage facilities	1	1.20					1	1.20		
16.4. Power lines	1	0.82					1	0.82		
16.5. Communication networks	1	0.15					1	0.15		
16.6. Cemeteries	2	2.40					2	2.40		
Total:	7	6,52					7	6.52		

3. By form of ownership											
3.1. State property	35	44.38	-	-	28	39.06	5	4.12	2	1.20	
3.2. Community property	28	23.32	-	-	26	20.92	2	2.40	-	-	
3.3. Private property	3947	367.77	3907	351,01	40	16.76	-	-	-	-	
3.4. Foreign property	1	0.10	-	-	1	0.10	-	-	-	-	
Total:	4011	435.57	3907	351.01	95	76.84	7	6.52	2	1.20	
4. By type of law											
4.1. Property law	3948	367.87	3907	351.01	41	16.86	-	-			
4.2. The right of economic management	40	44.95	-	-	33	37.23	5	4.12	2	1.20	
4.3. The right of operational management	23	22.75	-	-	21	22.75	2	2,40	-	-	
Total:	4011	435.57	3907	351.01	95	76.84	7	6.52	2	1.20	

- Of which - 3907 residential buildings with an area of 351.01 ha, 5 multi-storey buildings with an area of 1.80 ha, 3902 individual residential buildings with an area of 349.21 ha.

- Non-residential buildings - 97 in total, area 78.04 ha;

- 7 buildings, 6.52 hectares of land;

- We can see that historical and cultural monuments are located on 2, 1.20 hectares of land.

➤ **If we conduct this analysis on the type of ownership of existing buildings and structures:**

- Residential buildings: mainly Private property in 3907, 351.01 ha of land;

- Non-residential buildings: State property - 28, 39.06 ha, Communal property - 26, 20.92 ha, Private property - 40, 16.76 ha, Foreign property - 1, 0.10 ha;

- Buildings - State property - 5, Public property - 2, 2.40 ha, Private property - no, Foreign property - no.

- Historical and cultural monuments - only State property - 2, located on 1.20 hectares of land.

➤ **Accounting (balance) of buildings and structures** - based on the results of the inventory of buildings and structures in the administrative territory as of December 31, the data entered in the district, city state cadastre

register and approved by the relevant khokimiyat.

Taking into account the state-registered buildings and structures, the general account (balance) for the territory as of December 31 of

this year is based on the decision of the relevant district (city) khokim (Form 3) and its annexes 1 and 2 and the content of the commentary (Annex 3). prepared.

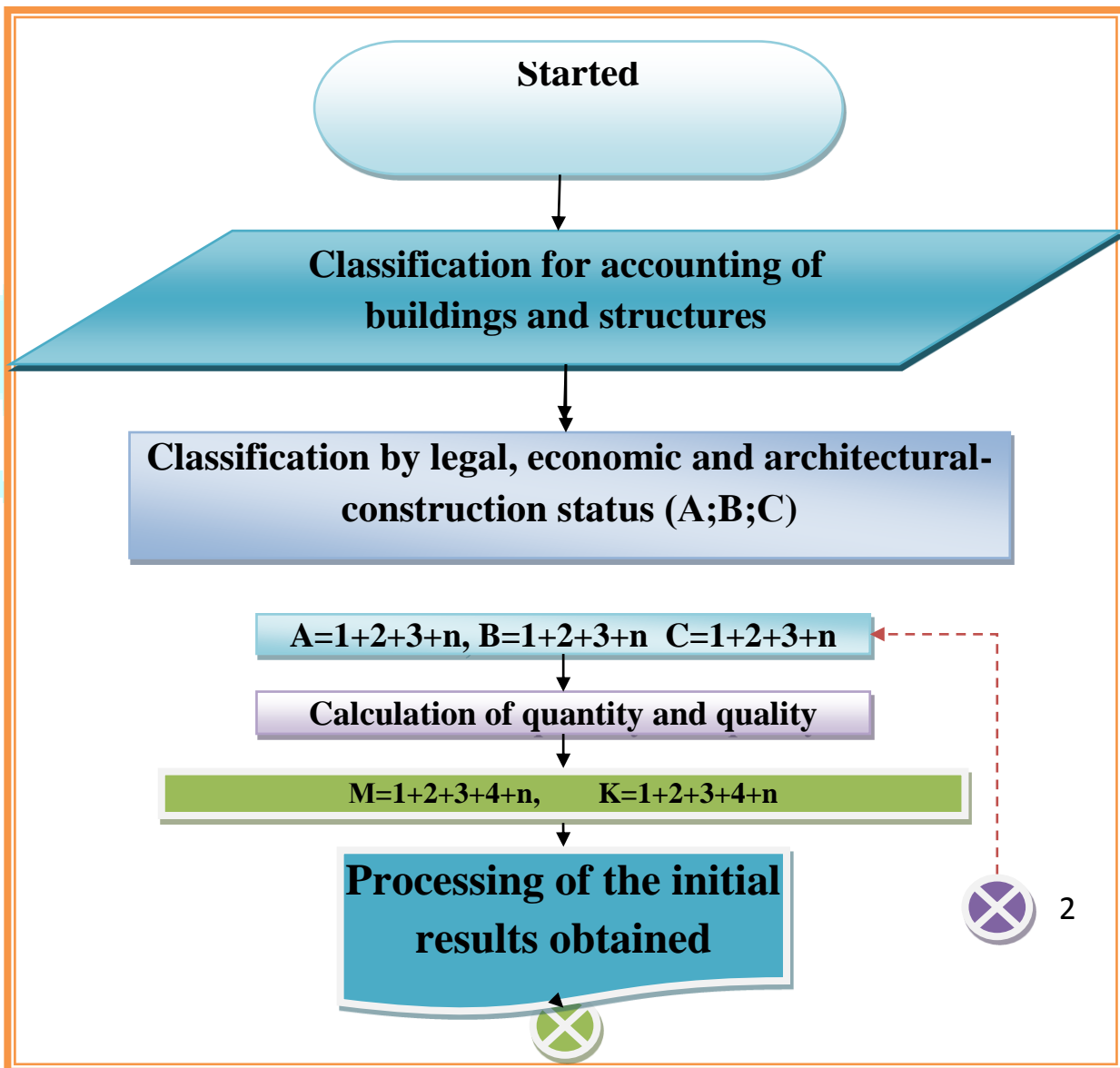
Kattakurgan district is located on the territory of Payshanba settlement of buildings and structures as of December 31, 2019 account (balance)

Buildings and structures types of service task	How many			Area, ha		
	Last year	In the reporting year	Difference (+; -)	Last year	In the reporting year	Difference (+; -)
1. Residential buildings.	3941	3907	-34	356.12	351.01	-5.11
1.1. Multi-storey residential buildings	5(40)	5(40)		1.80	1.80	
1.2. Individual housing	3936	3902	-34	354.32	349.21	-5.11
2. Domestic service buildings	6	6	-	2.43	2.43	
3. Utility buildings	5	5		7.53	7.53	
4. Cultural buildings	2	2		4.98	4.98	
4.2.Theaters and cinemas	2	2		4.98	4.98	
5. Enlightenment buildings	12	13	+1	20.59	20.65	+0.06
5.1. Preschool education institutions	4	4		2.74	2.74	
5.2. Schools	4	4		11.03	11.03	
5.3. Colleges and lyceums	1	1		6.12	6.12	
5.5. Librarys	-	1	+1	-	0.06	+0.06
5.6. Mosques and churches	3	3		0.7	0.7	
6. Commercial buildings	13	18	+5	8.5	11.0	+2.50
6.1. Markets	3	3		6.2	6.2	
6.3. Shops	10	15	+5	2.3	4.8	+2.50
7. Administrative	19	19		5.05	5.05	

buildings.						
7.1. Offices p	12	6	-6	4.78	2.78	-2.00
7.2. Offices	7	13	+6	0.27	2.27	+2.00
8. Service buildings.	8	8		1.70	1.70	
8.1. Gas stations	2	2		0,75	0.75	
8.2. Maintenance outlets Auto	6	6		0.95	0.95	
9. Health facilities	7	11	+4	6.41	7.91	+1.50
9.1.Hospitals	2	2		3.19	3.19	
9.2. Polyclinics	1	1		0.08	0.08	
9.3. Pharmacies	3	5	+2	2.84	3.84	+1.00
9.4. Dentistry	1	3	+2	0.30	0.80	+ 0.50
10. Industrial buildings	4	5	+1	11.33	11.58	+0.25
10.1. Processing plants	2	2		10.78	10.78	
10.2. Building materials production facilities	2	3	+1	0.55	0.80	+0.25
11. Transport buildings.	-	-	-	-	-	
12.Communication buildings.	4	4		0.81	0.81	
12.1.Mobile communication buildings	2	2		0.26	0.26	
12.2. Telephone, telegraph communication facilities	1	1		0.20	0.20	
12.3. Post offices	1	1		0.35	0.35	
13. Defense buildings.	-	-	-	-	-	
14.Separately protected buildings.	2	3	+1	2.4	3.2	+0.8
14.2. Health facilities	2	3	+1	2.4	3.2	+0.8
15. Historical and cultural buildings.	2	2	-	1.2	1.2	-
15.1.Mosque	2	2		1.2	1.2	
16. Buildings	7	7		6.52	6.52	
16.1. Waterworks.	1	1		2.4	2.4	
16.2. Gas facilities.	1	1		1.59	1.59	
16.3. Sewage facilities.	1	1		1.20	1.20	
16.4. Power grid facilities.	1	1		0.82	0.82	

16.5. Communication network facilities	1	1		0.15	0.15	
16.6. Cemeterys	2	2		0.36	0.36	
Total nonresidential buildings and structures	92	104	+12	79.45	84.56	+5.11
Total on town Payshanba:	4033	4011	-22	435.57	435.57	

As a result of many years of research, a software algorithm for accounting of buildings and structures has been developed, and this algorithm can be described as follows.



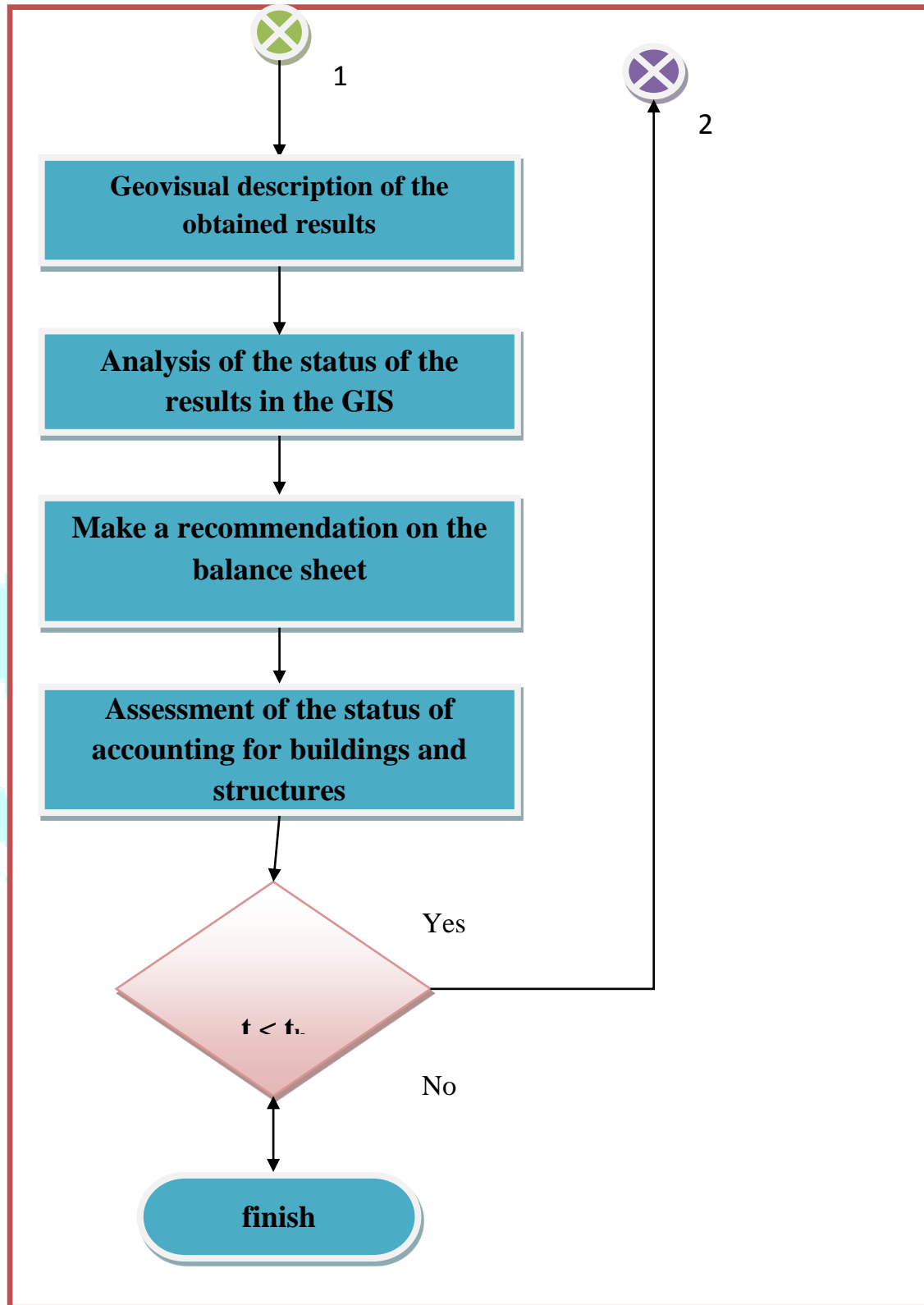


Figure 3. Software algorithm for accounting (balance) of buildings and structures

Here A is the legal status of buildings and structures;

B- economic status of buildings and structures;

S- architectural and construction status of buildings and structures;

M - quantitative indicator of buildings and structures;

K- quality indicator of buildings and structures;

t- it is the number of benefits from buildings and structures on the legal, economic and architectural-construction status;

t_k - the number of illegal uses of buildings and structures in violation of the legal, economic and architectural status.

Conclusion: Based on the research, opportunities will be created for the positive solution of the following issues:

1. Generalization and systematization of cadastral information on buildings and structures in the district, city on a quarterly basis and as of December 31 of the year and submission to the National Geographic Information System aimed at a single system of state cadastres and integration of state cadastres.

2. Creation of a collection of modern and historical geoinformation of buildings and structures of the district, city geofund warehouse.

3. Control of any transactions with buildings and structures, including tax revenues in the territory and the supply and revenue indicators of engineering communications (gas, water, electricity, etc.).

4. Further deepening of market relations of buildings and structures, including tax, rent, insurance, investment and accurate, fast and quality services in business development;

5. Compliance with the rules of urban planning, engineering and construction on a scientific basis for the effective and rational use of buildings and structures, as well as the creation of organizational and legal aspects of integrated economic development of the territory, etc.

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