

PROPOSALS FOR THE VERIFICATION OF THE SYSTEMATIC CADASTRAL WORKS

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Abstract. The systematic cadastral works are carried out on the whole ATU (Administrativ Territorial Unit) or on cadastral sectors. In this paper we refer to the implementation of the systematic cadastre on the whole ATU. The basis of the work is the Order of the General Director of the National Agency for Cadastre and Real Estate Publicity (ANCPI) no. 533/2016, published in the Official Gazette Part I no. 362/11 May 2016. There are also provisions on this type of work in Law no. 7/1996 (Law of the Cadastre and Real Estate Publicity) and in Order no. 700/2014 of GD of ANCPI. Within OGD 533/2016 we consider that many of the provisions regarding the verification and reception of works leave room for interpretation. It is not clear what error or mistake is, repeatedly mentioned as reasons for rejection of the work. We consider that it is strictly necessary to define them clearly and without interpretation.

Key words: systematic cadastre, deliverable, error, mistake.

1 Actual situation

1.1 Stages of systematic cadastre

- a) Organizing and conducting a public information campaign at national and local level aiming at informing citizens about the start of systematic registration work and about their benefits, rights and obligations during the systematic registration process;
- b) Carrying out the works prior to the cadastre: identifying the ATU (Administrativ Territorial Unit) limits, establishing the cadastral sectors, analyzing and integrating the information received from the OCPI (Office of Cadastre and Real Estate Publicity), the Mayoralty or other public institutions and authorities or from other sources;
- c) Carrying out of the specialized works: making field interviews aiming at identifying the locations and boundaries of the real estates, making cadastral measurements, identifying the legal owners of the real estates and collecting the legal acts;
- d) Updating the information gathered from the field with those from the sporadic registration and drawing up the cadastral technical documents;
- e) Receipt of cadastral technical documents by the specialized personnel designated for this purpose;
- f) Carrying out the information campaign regarding the display of the technical documents of the cadastre;
- g) Publishing and displaying, according to the law, the cadastral technical documents;
- h) Recording and solving the requests for rectification of the published cadastral documents;

- i) Updating the technical documents of the cadastre, following the settlement of the rectification requests and following the integration of the sporadic works registered during the publishing period;
- j) Closing of the systematic cadastral works, for the registration in the land book, the opening of the new land books and the closure of the old records by an order of the General Director of ANCPI, published in the Official Gazette, Part I;
- k) Communication under the terms of the law, of the land book extract for information and of the extract of the new cadastral plan;
- l) Archiving the documents underlying the registration of the real estates in the integrated cadastre and land book system;
- m) Issuance by the notary public, under the terms of the law, of the certificate for the registration in the land book of the holders as owners.

1.2 Deliverables

Deliverable 1 - Preliminary Report

Deliverable 2 - technical documents of the cadastre - copy for publication

Deliverable 3 - technical documents of the cadastre - final copy

1.2.1 Preliminary Report

The preliminary report is verified by ANCPI and the data submitted by the provider are verified. In the preliminary report, the performer presents the way the data from the OCPI and the Mayoralty were taken over, how they were integrated and if they correspond to the real situation.

1.2.2 Cadastral technical documents - copy for publication

It has three stages:

Stage 1

In this stage, all the files submitted (ID.cgxml and ID.pdf / ID-Cn-Um-Rp.jpg associated) are verified from the point of view of the structure/consistency and of the topological rules compliance.

If a percentage greater than or equal to 10% of the total files submitted shows errors, the entire delivery is considered not submitted. In this case, a minutes of the findingst shall be drawn up, containing the list of the verified real estates and the motivation of the rejection with an indication of the identified errors.

If less than 10% of the total files submitted are faulty, the receiving personnel asks the provider to repair the wrong files, which are annex to the minutes of the findings. After solving the reported problems, either only the corrected files, either the cadastral sectors whose files have been affected by errors are re-submitted, on a case-by-case basis.

The provider corrects the erroneous files within 10 days of the receipt of the minutes of the findings. Otherwise, the entire delivery is considered as not being submitted, and the contractual provisions will apply.

At the end of the first stage, the interim report states that the files are correct in terms of the structure/consistency and the observance of the topological rules, with the observation that the topological analysis of the real estates which are at the limit of the cadastral sectors, ATU or county is subsequently carried out by the OCPI staff.

Stage 2

The provider submits to OCPI the rest of the deliverables in digital format only.

At this stage is verified the correctness of the integration, of the information and data obtained from the OCPI, the mayoralties, other institutions and the holders, with the data obtained from the fieldwork.

It is verified the correctness of the data of the .cgxml files and if the data in .cgxml files are properly included in the other deliverables. It is checked also the other components of the delivery: the Technical Memo with description of the work carried out, Internal Quality Control Report, etc.

The total number of real estates within a delivery (TN) is the number of land-based real estates with or without construction (which is equal to the number of .cgxml files of the delivery) plus the UI (Individual Unit) number of the condominium constructions of the respective deliverable.

The total number of real estates to be verified (N) consists of $N_1 + N_2$, where:

- N_1 = the number of real estates containing information in Part III of the land book (in this case, the list of real estates to be verified will consist of all the real estates containing information in Part III of the land book), of the total of the real estates delivered (NT);

- $N_2 = 10\%$ of the $TN - N_1$ (in this case, real estates containing information in Part III of the land book will not be part of the verified property list).

If errors are found to be equal to or greater than 20% of the total of the verified real estates (N), the entire delivery shall be deemed not to be submitted and the provisions of the contract will apply.

In this case, a minutes of the findings shall be drawn up, containing the list of the verified real estates and the motivation of the rejection with an indication of the identified errors.

If errors are found to be less than 20% of the total of the verified real estates (N), a minutes of findings, accompanied by the list of the verified real estates and the report of errors found, to be transmitted to the provider, shall be drawn up.

The provider shall correct the errors within 15 days of the communication of the minutes of findings.

If, when verifying the data from the files re-submitted by the provider, they are found to contain further mistakes, the personnel receiving the work draws up a minutes of the findings together with the list of the verified real estates and the report of the errors, which is transmitted to the provider. The provider shall correct the errors within 10 days of the communication of the minutes of findings.

If the data from the files re-submitted by the provider are verified and it is found that they still contain mistakes, the work is not the entire deliverable is considered as not submitted and the contractual clauses shall apply.

At the end of this stage, when the verified data are error-free, the interim report for stage 2 shall be drawn up and the provider will be notified in writing to submit the deliverables in analog format as indicated in the table of deliverables in section 3.3.5.2.

Stage 3

When stage 2 is passed and acceptance is given, stage 3 is just printing the documentation for publication.

1.2.3 The technical documents of the cadastre - final copy

Stage 1

The provider submits the entire delivery in digital format.

The OCPI verifies whether the data update is properly integrated into the deliverables.

All real estates whose data has been modified following the settlement of the rectification / appeal requests are verified.

If errors are found to be equal to or greater than 20% of the total real estates verified, the entire delivery shall be considered as not submitted and the contractual provisions shall apply.

In this case, a minutes of the findingt shall be drawn up, containing the list of the real estates verified and the motivation of the rejection, with an indication of the identified errors.

Where a percentage of less than 20% of the real estates verified contains erroneous data, a minutes of findings, accompanied by the list of the real estates verified and the report of errors found, to be transmitted to the provider, shall be drawn up.

The provider shall correct the errors within 15 days of the communication of the minutes of findings.

In the event that, when checking the data from the files re-submitted by the provider, it is found that they still contain mistakes, a minutes of findings, accompanied by the list of real estates verified and the report of errors found to be transmitted to the provider, shall be drawn up. The provider shall correct the errors within 10 days of the communication of the minutes of findings.

In the case when the data from the files re-submitted by the provider are verified, they still contain mistakes, the work is rejected and the entire delivery is considered as not submitted and the provisions of the contract shall be applied.

When the delivery is complete and free of errors, the interim report for Stage 1 shall be drawn up and the provider shall be notified in writing to submit in analog format the deliverables, as set out in the table referred to in section 3.3.5.2.

Stage 2

When stage 1 is passed and the acceptance is given, stage 2 is just printing the documentation for publication.

2. Problems identified at the reception of deliverable 2, stage 2

2.1 Errors at deliverable 2

From the content of the deliverable 2, stage 2, it results: *If errors are found to be equal to or greater than 20% of the total real estates verified (N), the entire delivery is considered as not submitted and the provisions of the contract shall apply.*

In this case, a minutes of the findings shall be drawn up, containing the list of the real estates verified and the motivation of the rejection with an indication of the identified errors.

OGD 633/2016 does not show anywhere what is the error. For this reason, each inspector or registrar, member in the verification committee, may be mistaken for anything that seems to him.

2.2 Errors at deliverable 3

As in the previous case, after settling the complaints, the provider must update the data. From the content of deliverable 2, stage 2, it results:

The provider submits the entire deliverable in digital format.

OCPI verifies whether the data update is properly integrated into the deliverables.

All the real estates whose data have been modified following the settlement of the rectification / appeal requests are verified.

If errors are found to be equal to or greater than 20% of the total real estates verified, the entire delivery shall be considered as not submitted and the contractual provisions shall apply.

In this case, a minutes of findings shall be drawn up, containing the list of the real estates verified and the motivation of the rejection with an indication of the identified errors.

Even here is no explanation of what the error is.

3. Proposals to remedy the actual situation

3.1 Circumstances:

The technical specifications do not distinguish between substantive errors and material errors, although the consequences between them are extremely different.

It has come to the very serious situation in which, for simple formal issues, works are rejected as not submitted.

Moreover, in the specifications the language is not unitary, using, as the case may be, the terms "error" or "mistake" as if it were the same.

For these reasons, it is necessary to supplement / correlate the terms used in the technical specifications.

In the verification procedure, in the Minutes of Findings and in the Verified Files Report, the OCPI representatives shall analyze the Substantive Errors and Material Errors distinctly, stating in detail the reasons for the finding of each of them and the article in the violated law / rule.

In the Verified Files Report, instead of the Comments column, two columns shall be inserted: one called SUBSTANTIVE ERRORS, the other called MATERIAL ERRORS.

Only substantive errors will be considered when the percentage of 20% of the real estates verified are analyzed, which may result in the rejection of the documentation or the request for completion.

Thus, in the specifications for all the paragraphs referring to the verification procedure, the phrase "substantive errors" or "material errors" shall be explicitly mentioned instead of "errors" or "mistakes" and the procedural provisions shall be completed with references aiming at qualifying the type of error.

3.1.1 Material error

The material error may consist of the mistaken mention resulting from the recording activity in a procedural act as an instrumentum. The material error is evident when it results from comparing what was wrongly recorded with the data contained in the technical or legal documentation or the actual act in which the material error occurred.

It is also a material error, the lack of a mention or the signature of the provider / owner from the real estate sheet, as long as such deficiencies do not have substantive consequences concerning the essential technical or legal characteristics of the real estate, as they can be completed at any time at the simple request.

Obvious material errors can be corrected by the person who drafted the document, at the request of the person concerned or ex officio.

According to art. 281 Cpc, correction of decisions may be made on mistakes about the name, quality and claims of the parties or those of the accounts, as well as any other material mistakes occurred in a decision.

Also, according to art. 196 paragraph 2 Cpc: (...) the lack of signature can be covered throughout the course of the trial before the first instance. If the lack of signature is claimed, the applicant who is missing at that term will have to sign the application at the latest at the next following term, being notified in this respect by summons.

According to art. 221 of Order 700/2014 (2) it constitutes a material error any inaccuracy contained in an entry in the land book or in the conclusion which does not produce any substantial effect, namely does not affect the existence, the extent or the opposability of the registered right, of the fact, or the legal relationship.

Material errors examples:

- misspelled items in the data sheet such as: a letter from the holder's name, the wrong address, the wrong PNC - if they can be found correctly in the IC copy;
- the wrong name of an act (instead of a notarial act, administrative act or vice versa);
- wrong written number or date of the act (instead of 13, No. 133 or instead of 12.04.2017 - 12.05.2017);
- the inconsistency between the number of the parcel or plot in the documentation and in the property documents;
- inconsistencies between the categories of use in the acts and in the documentation;
- the real estate property sheet not signed by the provider.

Material errors are not counted in the percentage of the real estates verified, which may result in the rejection of the documentation, but once their existence was found, the verification committee will communicate the observations and ask the provider to make the correction / completion.

Material errors will be corrected / complemented by the providers within the term allocated through specifications for correction of the substantive errors, following the procedure described in the specifications.

If, after the deadline has been met, the provider does not correct / complete the material mistakes notified, they are automatically added to the number of substantive errors and follow the regime applicable to them according to the specifications.

Situations that are not errors attributable to the providers.

Inaccuracies in the documents of the holders of the real rights:

There are circumstances that are independent of any acts or facts of the providers that concur to keep errors in the documents attached to cgxml files.

In the procedure for the implementation of the systematic cadastre, insofar as such errors are corrected by the owners of the real estates, it is possible that the provider integrates all the corrected documents as well.

But, if the owners do not perform the necessary procedures to correct the errors, they will be included in the .cgxml files in the comments section without being imputable to the providers - nor counted in the number of errors that can concur to the rejection of the work.

Examples:

- property titles / property acts that contain name errors, plot/parcel identifiers;
- absence in the property titles/property acts of the number of the sector, plot, parcel, etc.
- the surface of the acts is different from the one resulting from the measurements;

- the category of use or the destination of the real estate are mistakenly mentioned in the legal acts of the holders, in the evidence of the Majority, etc.
- lack of signature of the holder or other occupant (excepting the owner) of the data sheet;
- the data sheet is not signed by all the owners (some people are missing from the country / locality);
- the difference between the area mentioned in the data sheet and the one resulting from the measurements - there are circumstances in which, after the data sheet was signed by the owner, the surface resulting from the measurements differes from the one initially mentioned by the Majority;
- the attestations/certificates issued by the Majority, etc. are incomplete or contain inaccuracies.

Other circumstances that are not errors of the provider:

There are other circumstances that are independent of any acts or facts of the providers that lead either to the incomplete/apparently incomplete documentation of some real estate/cFXML files.

Other circumstances, which are generic, not exhaustively defined, cannot be added to the percentage of the real estates verified, in relation to which a work submitted can be rejected/required to be completed:

Examples:

- the scanned documents are not attached to the .cFXML files when they are already in the archive by the cadastre offices (property titles, other legal acts, scanned or converted land books);
- there is no error in the fact that the technical documents of the cadastre are incomplete or contain inaccuracies, if they result from the failure to communicate by the OCPI / Majorities etc. the documents, attestations, extracts from the evidences about the real estate, or from not granting the access to the databases etc. required for drafting the documentation;
- it is not an error that the attached documents are not legalized / conformed - as long as OCPI / Majority did not fulfill their obligation to legalize / make them comply.
- there is no error in the inaccuracies caused by the non-participation in the cadastral works of the Majorities' or holders' representatives, or in the case when they do not present the documents held on the real estate and its owners;
- there is no error to keep all or part of the previous legal acts in the attached documents in the folders, and not just the last act;
- there is no error the non provision in the plan of a construction if that construction has no foundation or is built after the measurements have been made. If the construction was built after completion of the measurements and has a construction permit, it will be entered in the LB, based on the building permit and the the minutes of reception;
- it is not an error not to foresee a real right or a new task, not previously registered in the LB, in the absence of an express legal justification;
- the errors in the owner's declaration are not imputable to the provider. The owner gives the statement on his own responsibility. He also encloses a copy of IC and the attestation issued by the Mayor that are recorded in the cFXML file. The provider can only be responsible for the correct completion of the .cFXML file and of the "Technical Documents of the Cadastre", not for third-parties' statements.

3.1.2 Substantive error:

The wrong registering in the technical documents of the cadastre of some essential information about the real estate: the limits of the real estate established in breach of the allowed margin of error allowed by the technical norms, the wrong specification of the cadastral sector, the wrong specification of the real estate's position towards the locality, the wrong specification of the real rights, the non specification of (all) the holders of the quotas from the real right of ownership of the property, the lack of mentioning some of the tasks enunciated in the land book that encumbers the property.

Examples of substantive errors:

- wrongly determination of the position and dimensions of the real estate / in breach of tolerance admitted;
- the property sheet not signed by the owner;
- non-registering the existing tasks in the land book;
- the quotas in which the good is held are not foreseen or are wrongly calculated / written;
- omission, in the plan, of a construction identified at measurements that has a foundation;
- absence of individual units surveys in condominium constructions.

3.2 Procedure for on-site verification of the position of the points and of the works of the systematic cadastre:

In terms of the on-site verification, it is stipulated in Art. 322 paragraph 1 of Order 700/2014, without specifying the procedure as such.

In this regard, we propose the Specifications to be completed with the following:

Verification on the ground must be carried out within two months from the completion of the field works by the provider.

The verification must be carried out both in the presence of a representative of the provider and of the owners of the real estates.

Prior to the start of the verification, OCPI must identify, beforehand, the real estates to be verified, estimate the volume of the measurements, and make a timetable of the verifications, on days, and transmit it to the provider at least 5 days before the start of the verification.

Field verification is done by determining the coordinates of the characteristic points of the real estates and constructions. The coordinates of these points are obtained from the measurements' processing and compared with the coordinates delivered by the provider.

As to the errors that can be found during the technical verification, the following clarifications are required:

The technical verification of the position of the points consists in the creation of a comparative table with the coordinates of the points obtained by the provider and verified by OCPI.

The points verified must be materialized and stable over time in order not to have the situation where the provider measured one point and the verifier another.

The difference between the two sets of coordinates must be below the precisions required in the technical specifications in Chapter 3.3.2.

3.3.2. Identification of the boundaries of the real estates

The precisions to be ensured are those corresponding to the plan, scale 1:5000, for the extraurban area and the scale 1:2000 for the intraurban area.

These precisions are calculated with the formula $P = N * e$

In which:

- **P** is the precision;

- **N** is the denominator of the plan's scale;

- **e** is the reading error on the plan and has the value +/- 0.2 mm - +/- 0.3 mm (the eye cannot distinguish better).

From here results the precision:

- +/- 0.4m - +/- 0.6m for the intraurban area;

- +/- 1.0m - +/- 1.5m for the extraurban area.

The difference between two points determined by two operators may be a maximum of 0.80 - 1.2 meters in intraurban area and 2 - 3 meters in extraurban area.

Here again we have to define what is difference in absolute coordinates and relative coordinates.

The difference in absolute coordinates can only be compared if a verification is made on the geodetic network points.

It is possible for the performer to use the total station in traverses or networks restricted on points of the state geodetic network, when the verifier has used the ROMPOS (Romanian Position Determination System) technology. There is a difference between these two systems, another one in each area of the country. For this reason, the comparison of absolute coordinates is a mistake.

The verification must be made in relative coordinates, ie it must be determined if between two points measured on one property the distance from coordinates, measured with the total station and with ROMPOS, is the same (the difference is within the tolerance).

The measurement with ROMPOS technology is not very accurate. ROMPOS measurements in intraurban areas can be greatly disturbed by external factors because GNSS receivers can make errors in many cases:

- measurements with the receiver attached to a construction;

- measurements with the receiver under the trees;

- measurements with the receiver under the high voltage line;

- satellite geometry may be faulty at the time of the measurement;

- the signal from the satellites may be disturbed by another signal from the ground (for example, it may be a simple defective vacuum cleaner);

- the sunrise or sunset of a satellite may induce a negative effect on the position.

These are just a few of the errors that can occur. For this reason, any verification with the ROMPOS technology must be carried out at least twice at each point, in independent conditions. Otherwise, the results are questionable.

For the coordinates of the characteristic points of the real estates which do not fall within the tolerances accepted as a result of the on-site verifications, it shall be drawn up:

- a technical memorandum setting out the procedure by which these coordinates have been determined, the method of compensation of the measurements, the way of obtaining the final coordinates, the measurement precisions (both relative and absolute precision) and the precision indicators of the compensation;

- a dxf file in which both the coordinates of the points obtained in the verification process and those submitted by the provider are graphically reported;

- an excel or word file containing the coordinates determined in the verification process, the coordinates determined by the provider, the differences between the determinations, the differences against the admissible tolerances.

If the verification is done according to the above procedure by the OCPI and after verification it is found that some points do not fall within the above mentioned error margin / Specifications, the real estates where such differences are found will be included in the Report of the verified files in the category of substantive errors.

4. Conclusions

It is strictly necessary to define in the technical specifications the error that is mentioned in deliverables 2 and 3 because the ambiguity at this moment leads to confusion and discriminatory interpretations. Any provision that is not well-defined cannot be applied correctly. ANCPI must take into consideration the opinions of those who carry out the works, not only the opinions of those who verify them.

If we do a parallel with critics and writers, it is easier to criticize a literary work than to produce a literary work.

We do not forget that the National Cadastre and Land Book Program, which Romania has undertaken to fulfill in a very short time, is currently in progress. If the work is not verified on objective criteria, then the works will not be completed either.

On the other hand, we must not forget that such a work can only be done if the OCPI, the Mayorality, the provider and the owners cooperate sincerely. When one of the actors does not follow the rules or does not play properly, then the work will not be completed in good conditions.

A work of this magnitude cannot be 100% perfect. Not all the holders are in good faith, they do not bring the property documents, they do not come to contestation, etc. This might cause problems in identifying the property boundaries, identification, and more.

A good collaboration can only lead to accelerating the systematic registration process in Romania.

5. Reference

1. *Law no. 7/1996 (Law of the Cadastre and Real Estate Publicity);*
2. *Order no. 700/2014 of GD (General Director) of ANCPI (National Agency for Cadastre and Real Estate Publicity);*
3. *Order no. 533/2016 (Approval of technical specifications for realising the systematic cadastral works).*