

Design Cost Information System

ARCHITECT'S SERVICES

This document was developed within the Working Group "Design Cost Information System" and was approved by the National Council of the Romanian Order of Architects.

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When using the digital version, a link structure has been created, that allows to navigate through the document. Thus, by clicking on any row in the Table of Contents, one can immediately reach the page one needs.

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06 INTRODUCTION

ARCHITECT'S SERVICES

Introduction

INTRODUCTION

Building always involves complex processes that, observed in detail, allow us to observe that they can be organized in different ways, with different nuances and customs, according to different legislative frameworks and with different practical results from the perspective of the quality of architecture obtained. Certainly, it is not necessary to intend a perfect standardization of the building process and, implicitly, of the participation of all architects to it. Building means relationships and communication, evolution, and decisions. Different situations occur in the case someone builds for himself or to sell or rent, or if one is acquainted with the end user of the construction from the beginning or addresses a generic one. Moreover, situations differ if the building is publicly funded, as the responsibility assumed for such funds differs from the one in the private sector, or if funding comes from private sources or bank loans.

In Romania, the impression persists that the building process, which involves the most visible stages as those of conception, authorization, and actual construction, are clearly defined by law, so there are no variants, alternatives or even room for custom ways to run them. This perception is obviously caused by the memory of the pre-1989 period when the client was a singular entity: in the design process all actors acted in the absence of competition, entrepreneurs being also appointed, and thus lacking the pressure of bidding procedures or managing reputations. Things have evolved fundamentally, but the current formulas that exist in the field of construction in other European countries have not yet been reached in Romania.

In the Romanian building culture, the role of the architect is different from what is needed of him, or what is expected of him to do, and from what he usually does in countries such as Great Britain, Germany, France, The Netherlands, or Austria. The general lack of buildings' quality and the failure of public architecture in Romania stem mainly from the way in which the architect is used and the way in which he himself is involved in projects and construction. Practices, and especially time, establish certain behaviors which can only be changed through sustained effort. An example of such an effort is stating what is the usual role of the architect is, common to the different cultures of construction, and what are the additional activities for which the architect is prepared and skilled for, meaning activities that guarantee the success of the project or that can increase its quality.

Some of the common mistakes regarding the role of the architect and the building process are: ignoring his integrated role of coordinator in projects and the common conception that a project is simply the cumulation of several subprojects or separate independent parts, such as architecture, structural resistance and installations; the misconception that the role of the architect is exclusively to carry out the project before the start of the construction works and that all the elements of the project can be established exhaustively before execution; ignoring the need for time and financial resources to develop a project, necessary for going through all the phases that ensure a healthy maturation including a series of in-depth and informed decisions of the actors involved. For Romania, where the culture of construction in the post-communist period has not yet formed consistently, these errors can cause disasters related to architectural quality, which is even more dramatic as failures are not analyzed, nor are the processes corrected to evolve and reduce risks.

How can one explain that, although having at our disposal the current digital technology and highly developed materials and construction systems, along with extremely diverse alternatives and solutions, the building sector performs worse than 50 or 100 years ago? The answer is as simple as it is unpleasant: many of those involved in the construction sector bring in superficial contributions, do not play their roles correctly and, even worse, do not know their actual roles. These practices were lost and influenced by the rupture produced by Communism in the modernization of Romania and altered by speculative neoliberalism and the inability of the political class to form and impose its will in the direction of architectural quality.

Architects from European Union Member States are actively trying to consolidate the different experiences related to the architectural practice to learn from each other, following good practice models. ACE (Architects' Council of Europe) has conducted a series of studies benefitting from the contribution of experienced architects from several countries with different practices, to provide guidance for all member organizations. The activity of the Romanian Order of Architect's work group related to the architects' services was based on the experience of ACE and on these guidelines. For example, the Services and Fees Group (misiuni i onorarii), later called Scope of Services (tematica serviciilor), provided a comprehensive description of the roles an architect can play anywhere in Europe. A description of the construction method and of the Services of the architects was developed starting from the German document HOAI (2013), from HIA in Austria, from the RIBA (UK) work plan of 2013, and from the European Standard on Engineering Consultancy Services EN 16310, published in 2013 by the European Commission. The phases of the processes are described in these documents as: project initiative, project initiation, design (concept project, developed project and detailed project), construction, construction use and end of construction life. For each of them, defined in accordance with the European standard EN 16310, the architect can perform services related to several large groups of activities: design services and construction management, legal approvals and authorizations, procurement and supply of construction materials and systems, architectural programs (the buildings' function), construction sustainability, health and safety, specialized design consultancy, information exchange and communication.

OAR developed the present document, Architect's Services, in accordance with the results of these studies, with the practice of high-performance Romanian offices and with the legal and the normative framework in force, making sure that it stays within the limits set by it. The document has a practical, organizational, and even educational value for the next generations of architects and for those who want to manage an architecture office. Reading this document gives those interested a possible narrative of the key stages of the construction process, in a professional, effective, and thorough manner, resulting from the cumulation and interpolation of the experiences gathered from several European countries and from expert opinions adapted to the contemporary Romanian culture and oriented towards a progress achievable only if architects, promoters and clients apply them correctly. The document is edited in a format that is easy to print and multiply in an office and to be transmitted online, so that it can easily reach all those involved in the building process regardless of their role.

OAR recommends that all member architects pass this document on to their clients, present it and explain it to the trainees' architects. By describing and configuring the services that need to be fulfilled within a project in general and especially by architects, we will be able to contribute to the increase of the quality of the built environment.

Arch. Serban Tiganas, President of OAR

O9 PREAMBLE

THE ARCHITECT'S SERVICES

Preamble

PREAMBLE

a. The Architect's Services, part of the Design Cost Information System

The list of architectural services is the first module of the Design Cost Information System (shortly referred to as SIC), drafted in accordance with the provisions of Art. 42 from the Code of Ethics of the profession of architect dated 21.05.2012, published in the Official Bulletin, Part I no. 342 dated 21.05.2012.

The main components that form the modular structure of the Design Cost Information System are:

- The list of design services, as detailed in this document.
- The time estimate assigned to the design process (to be drafted based on a sociological survey conducted by a multidisciplinary team).
- Calculation methods for fees/ information support (software for cost calculation)
- Draft contracts (including procurement options).
- Annexes (Best practice, Examples, etc.).

b. Use of the document

The list of services as well as the detailing of each service are meant to be consulted firstly by architects. At the same time, the present document is meant for clients or any other active participants in the design process, construction, and post-execution stage, where appropriate.

Together with other components of the modular structure of SIC, the document mainly aims to be a communication platform between architect and client, but also between the architect and other participants in the design process, construction works and - where appropriate - post-execution stage. Based on the stages and on the services from this document, one can establish the content of the essential clauses of the contract with the client: scope (services provided), fees, rights, and obligations of the contracting parties, etc.

This document does not replace a contract, nor can it be used by any of the parties as justification for failure to comply with some assumed contractual obligations.

The contents of this document are based on relevant legislation. The main envisaged legal texts are:

- Law no. 184 of April 12th, 2001, on the organization and practice of the profession of architect, republished and modified.
- Methodological Norms from September 1st, 2010, for the application of the Law no. 184 of April 12th, 2001, on the organization and practice of the profession of architect.
- The Code of Conduct of the architectural profession from May 21st, 2012, published in the Official Journal of Romania, Part I, no 342 of May 21st, 2012.
- Law no 50 of July 29th, 1991, on the authorization of construction works, republished, and modified.
- Methodological Norms from October 21st, 2009, for the application of the Law no 50/1991 on the authorization of construction works modified.
- Law no 10 of January 18th, 1995, on construction quality, modified.
- Law no 21 of April 10th, 1996, on competition, republished and modified.
- Government Decision no 28/2008 regarding the approval of the technical and economic framework related to public investment, as well as of the structure and methodology of elaborating general estimates for investment objectives and intervention works.

The contents of this document cannot be used or interpreted for the derogation from the imperative norms imposed by the applicable law at the time the contract with the client is signed and/or, where appropriate, at the time the services described below are delivered.

1 PREAMBLE

c. Stages and Services

The services described in this document are drawn up based on the legal provisions incidental in the matter, and they represent a natural development of the services proposed in the documents previously published by the Romanian Order of Architects (OAR), i.e. The Guide on the profession of architect – 2006, corroborated with the current national, European, and international praxis.

The services are grouped considering the services delivered during the project performance stages, during works execution and in the post-execution stage. The stages are mainly organized chronologically, but there may also be overlaps. The services within one stage can be fulfilled in almost any order.

The services from each stage are divided in two main categories: basic services and additional services. The "additional services" are those services necessary to ensure an extensive design service; their achievement depend on the express demand from the client or of a contractual provision.

d. Annexes

The annexes meant to complement and clarify the list of services are:

- The list of studies, expert assessments, and other special services
- Glossary
- The list of specialties and design specialties

e. The architect - head of project

The architect is the best qualified person to be head of project who coordinates the design process. Thus, he is responsible for the elaboration and implementation of the project.

The architect may agree under the contract with the client to fulfill only a few stages or configurations of services out of the ones listed and defined throughout this document.

The take-over of a design process started by another architect shall be made in compliance with the incident legal provisions and the provisions of the code of conduct.

Within this document, for the ease of use, the architect - head of project (project coordinator) - will be referred to as the "architect".

f. Setting out the fee

The detailed list of services should not be understood as a rigid structure of the costs that define the fee. Considered outside a context, certain singular services/activities cannot be remunerated independently. The architect will propose the stages and services that will constitute the specific design process for each project. This set of services accepted by the client will be basis for assessing the assigned time and, implicitly, the fee, irrespective if this is established globally or for each stage/service.

g. General design

In this document, the notion of general designer was only used to illustrate a possible contractual relationship and does not represent a synonym for "architect" or "architect as head of project." In the preliminary stage, as part of the tendering service, three methods of offering design services are described – services that only architects can do, mixed services provided by technical

collaborators, or, in some cases, services for general design, meaning the services of all necessary specialists involved in a design project

PREAMBLE

h. Projects targeting interventions on the historical monuments in protected built areas or in the protected areas of historical monuments

The services described in this document apply also to intervention projects on historical monuments within the protected built areas or within the protected areas of historical monuments. In such cases, the list of services will be configured by taking into consideration the complexity of the project and the specific legal provisions. Within this category of projects, the focus on services may differ from the ones related to new constructions that are not in protected built area or in protected areas of historical monuments.

3 INTERMEDIARY STAGE



PRELIMINARY STAGE

The first contact with the client takes place in the preliminary stage (bidding, contracting and consultancy). Considering the client's wishes, the legislative, physical, cultural, and economic framework, the architect's professional conduct, the budget, etc., the main input data are agreed upon. The architect advises the client and gets involved in the decision-making process. The design process is also set out in this phase.

1.1. STANDARD SERVICES

1.1.1. Preliminary design brief

In this stage, the client must provide the architect with the necessary information for the preparation of the offer for architectural design services, mixed services, or general design services. The architect will carry out an initial appraisal of the land/existing building/interior space subject of the future project, from the point of view of technical, urban, and legislative constraints and possibilities, and will inform the client on his conclusions.

1.1.2. Design offer

Based on the information in the preliminary design brief and initial appraisal, the architect presents the design offer. The contents of the design offer must include a minimum of information regarding the specialists involved in the design process, design stages, design timeline, design fee – organized in design stages / services (where appropriate: the architect's fee, engineers and other consultants' fee or the general design fee).

To avoid confusions when the client evaluates the offer, it is recommended to mention the specialists whose fees are not included and/or services that are not included in the offer.

1.1.3. Agreeing upon the design offer and closing the design contract

Based on the accepted design fee (as well as the technical offer, where applicable) the architect will negotiate the clauses of the design contract. The architect presents the client with the contract draft, or, in some exceptional cases, the client proposes his preferred draft contract. Generally, to negotiate the contractual clauses (other than the ones provided in the model contracts recommended by the Architects' Chamber of Romania (OAR) and the ones included in the Annexes regarding technical and economic parameters, or as often as required) the architect should ask for specialised legal consultancy.

The contract between the architect and the client should represent the freely made agreement between the parties, the content of which results from negotiation and assumed clauses. Using model contracts recommended by the Architects' Chamber of Romania (OAR) should not constrain the liberty to negotiate of the parties, as regulated by current law.

1.1.4. Analysis of the urban, technical and legislative contexts

The architect appraises the site / building context from urban, technical and legislative points of view, as well as possibilities and constraints, compared to the investment objective set by the client (including the topic of available/necessary infrastructure services). The analysis of the urban, technical and legislative contexts consists of gathering data and above all, corroborating and interpreting it and identifying / illustrating the real possibilities of achieving the development objective.

The architect can request and collect documents from the competent authorities on the behalf of the client, if thus decided by both parties. These are additional services that imply extra costs.

PRELIMINARY STAGE

1.2. ADDITIONAL SERVICES

1.2.1. Real estate consulting

The architect can also provide real estate consulting when the client wishes to buy a building or make a real estate investment.

As part of this service, the architect can provide "test plans" regarding compatibility of the real estate property with the design brief (whether the client prefers private usage of the building or the capitalization to the maximum limits of the technical parameters and urbanism).

Moreover, as part of this service, the architect evaluates and informs the client regarding the elements that are related to the urban context and the technical possibilities of the interior space, maximal parameters, building limitations and implications regarding safe exploitation, fire safety, hygiene, health and environment, energy savings, thermal insulation, soundproofing, etc.

The architect's service of real estate consulting should not be confused with that of a real estate consultant. The architect does not offer real estate promotion and brokerage services, and does not evaluate the costs or benefits of such acquisitions.

1.2.2. Preliminary concept design for the offer

In the offer stage, the architect can decide, at the client's request or on his own, to prepare a technical offer, to support the fee offer. The technical offer is a document made up from written and drawn parts, and is prepared for the client to see one of the possible solutions, as compared to the initial project brief and the conclusions of the appraisal of the urban, technical and legislative contexts. Moreover, the project simulation aims at presenting the architect's professional capacity to respond to a brief (creativity, experience etc.). In order to complete this service, the architect should only present those documents that come in the support of the offer.

Making detailed technical offers without perceiving a fee can be considered as anti-competitive practice, according to the law.

1.2.3. Pre-feasability study

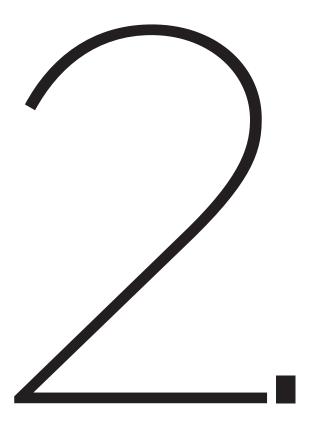
In the stage of biding and contracting design services, the architect's service regarding the analysis of the pre-feasibility investment is usually limited to drafting sketches and performing minimal calculation. Just as the design brief related to this stage, pre-feasibility is primarily aimed at setting the parameters needed to develop the offer.

In the case of public works, according to the legal provisions regarding the planned investment, the architect assists the client in the consolidation of the necessity and the opportunity of the investment, respecting the framework of the current applicable law, within the limits of the attributions and competences of the architect, according to the law.

In order to establish the pre-feasibility, the urban planning parameters, the estimated value of the investment, as well as the operating costs and potential benefits are analysed. The format (the content framework, deliverables) of the pre-feasibility study is the one provided by the law, and in the case of private investments, it will be adapted to its complexity degree and established through contract. During this stage, for the cost estimation, setting up the project programme or the economic efficiency calculations, in the case of program - themes of great complexity, it is recommended to collaborate with specialists, under the coordination of the architect.

Evaluation of the pre-feasibility of the investment can consider alternative solutions of siting and/or layout plan, construction techniques or functional structure establishment studies.

PREPARATORY STAGE



PREPARATORY STAGE

This is an intermediary stage between the contracting of the project and its implementation. At this stage, the main parameters of the building or of the space to be organized are defined and communicated to the stakeholders via drawings and text notes.

The full development of the design solution is not required at this stage, detailed plans are to be carried out later.

The goal of this stage is to establish the main parameters of the real estate investment in relation to the space it will occupy and its surroundings.

STANDARD SERVICES

2.1.1. Preliminary design brief

The preliminary design brief consists of collecting and structuring the information supplied by the client regarding his intentions to build (fit-out,rebuild, restoreThe preliminary design brief will not provide solutions, but will state elements of the development objective.

Within the preliminary design brief, references can be made to the incident legislative texts, as well. The omission to exhaustively mention the current legal texts does not relieve parties of their obligation to fully comply with the current legislation.

The design brief assumed by the client, along with the contract, are key documents when assessing how much the architect respected the client's request.

The design brief and the changes made during the design process, agreed by both client and architect, may be annexed to the design contract. The client and the architect negotiate each change of the brief that appears after the start of the project. Brief changes can influence the work volume and the time needed to deliver the project and can lead to fee renegotiation.

The preliminary design brief represents the basis for the detailed design brief (see 3.1.1). 4.1.1.?

2.1.2. Necessary documents and surveys

The architect will draft the list of necessary documents and surveys or studies (such as the geotechnical survey, topographical survey, environment studies etc) that are required for the design development and permitting process. The list constitutes, , the communication platform regarding the client's responsibility to make various materials available for the architect (documents, surveys or studies, etc.) during the project. The responsibilities of the client and the architect related to sharing and preparing the necessary documents should represent an integrated part of the contract or an Annex to the contract signed by the parties. The list of documents and studies can be supplemented as a result of legislative amendments and / or express requirements of the competent public authorities. The architect is responsible to notify, in due time, the need to elaborate or make indispensable preliminary documents / studies available during the design process.

2.1.3. Specialists involved in the design process

In this stage, based on the design brief, the architect proposes the technical / engineering collaborators (structural, services etc). According to the contractual understanding, where appropriate, the technical collaborators are chosen by the architect, with the client's approval. The technical collaborators are contracted by either the architect, or the client. The architect is responsible to notify the client in due time about the need to involve different specialists in the design process. It is recommended to state in the contract or in the Annexes the list of specialists that need to be involved in the design process. The contract will specify the collaborators that will be subcontracted by the architect.

2.1.4. Preliminary concept design

The first draft implies the preparation of a document made of drawings and texts, sufficiently detailed for the understanding of the interaction between

PREPARATORY STAGE

requirements and possibilities and for illustrating the possibilities to meet the design brief. The material presented in the project simulation includes any drawings and texts made in order to establish the main characteristics of the future development. Generally, in this stage facades, colours, materials or other issues related to the detailed concept of architecture are not presented and analysed (see stage 3, concept stage).

The preliminary concept design can be adjusted on client's demand, according to the design brief, as long as it does not imply completely different alternatives. The alternative options study is considered an additional service and is budgeted separately (see 2.2.1.).

2.1.5. Investment cost plan

In this stage, budgeting represents the estimation of the execution costs of the development (index-based cost, with maximum acceptable error margin of 3 25%). Estimations are needed for the expenditure plan of the investment, part of the design brief.

2.1.6. Planning the investment roll-out

The project programme is made at macro level, considering the design time, tender actions and construction works estimations. Starting with this stage, deadlines for obtaining the permits and authorizations can be set, the investment can be spread out and different parts of the building can be done (structural engineering, roofing structure, interior and exterior installations, finishes, etc.).

2.1.7. Measured survey

The architect will measure the physical dimensions of the existing sites and buildings, parts of buildings or areas covered by the project. The accuracy of the measured survey will be adapted to the specific project requirements. Other specialists may participate in the development of the measured survey, where appropriate. The measured survey made in this stage should not be mistaken for measurements done during the construction works for assembling various components or for post-execution project.

2.2. ADDITIONAL SERVICES

2.2.1. Concept designs study

When the complexity of the program and / or the difficulty of the site or of other factors impose it, the main characteristics of the future project will be established with a comparative study with variants. Fees are to be decided beforehand.

2.2.2. Requesting, monitoring the status of preparation and obtaining the urban planning certificate (cu) and of preliminary endorsements and approvals

In this stage, the architect can request the Urban Planning Certificate (CU) and the necessary permits for the design brief and pre-feasibility stage, if this is

settled with a contract or a special mandate. The architect can subsequently monitor the development status and pick up, on behalf of the client (or, if appropriate, on behalf of the project beneficiary – should the beneficiary of the construction works be different from the client).

PREPARATORY STAGE

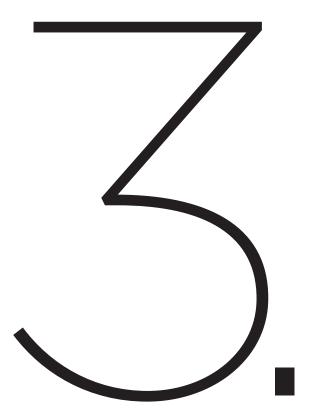
2.2.3. Budgeting operating costs

A separate chapter within the budgeting / cost estimation service represents the estimations of the operating / maintenance costs. Estimating these costs will influence the "development / operating costs balance".

2.2.4. Consultancy regarding options for modifying the technical and economical parameters of the building

The architect can offer consultancy regarding the optimal way of modifying the technical and economical parameters of the building by having urban planning documentation prepared by specialists. The architect thus indicates the urban planning specialists and subsequently represent the client in front of decision-making authorities.

21 CONCEPT STAGE



CONCEPT STAGE

In the design process, this is the first stage. At preliminary, conceptual level, the future building is defined: the building's exterior and interior, its functions, and the equipment and finishing details considered critical for the future development of the project.

The goal of this stage is to provide the functional and visual configuration of the building.

CONCEPT STAG

3.1. **STANDARD SERVICES**

3.1.1. General concept and architectural concept

The architect will propose a technical and aesthetic solution to the client, based on the design brief agreed upon in advance. Although this is an early stage, the architect has the obligation to make sure that his proposals are technically and economically feasible, and that further development of the project will not entail major changes to the technical and aesthetic solutions due to the impossibility of total or partial application of the proposed solutions.

It is the architect's duty to make sure that the structural engineering and installations do not conflict with the architectural solutions presented (technical and aesthetic), although in this stage there is no need to present them in detail.

The general concept and the architectural concept can only be considered finalised if the aforementioned conditions are met. The architect assumes full responsibility for going onto the next stage. The client's approval is mandatory for going on to the next stage.

This service also entails the client's comments / observations / amendments into the general concept and the architectural concept, as long as they do not lead to major changes in the design brief.

3.1.2. Planning the investment roll-out

The architect plans the timeline of the project, including all design stages, as well as subsequent stages, such as tender actions, endorsements and approvals, and construction works.

3.2. ADDITIONAL SERVICES

3.2.1. Alternative concept design proposals

The client may occasionally ask for alternative additional options after the general concept and the architectural concept are presented.

3.2.2. Cost management

In order to complement the service and general concept and architectural concept, the architect incorporates the adjustments resulting from the need to reduce the investment cost. Such adjustments will be determined by the architect and the client, based on a document prepared by the former.

3.2.3. Estimating investment costs

The architect will calculate the amounts of units (built square meters or detailed) and prepare the construction cost estimate. These cost estimates will be taken into account when deciding on adjustments / changes of the proposed solutions, either through recalibrating specifications for the proposed construction materials, or by changing building technologies, or, where appropriate, even by reducing the quantities (see 3.2.2.).

CONCEPT STAGE

3.2.4. Estimating operating costs

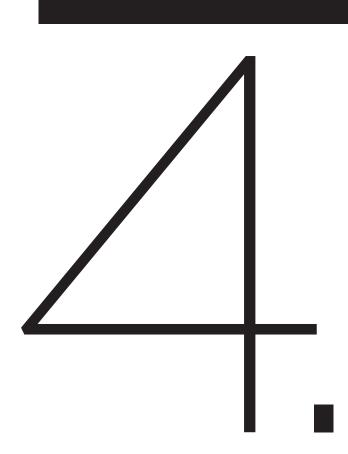
Operating and maintenance cost estimations are a different chapter in the cost estimation service.

Estimating these costs can influence the "development/operating costs balance". In this service, important decisions regarding the size of the building or the materials used in its development can be determined by the values of the operating costs.

3.2.5. Design for a low impact on the environment

Should the client wish to obtain green certifications for the development objective, the architect can offer specialised consultancy as part of this additional service and, where appropriate, foresee constructive solutions for the project with a low impact on the environment (as stated by the law, specialised literature and modern design practice).

Respecting the design principles for a reduced impact on the environment and for sustainable development is recommended for all projects, as much as possible.



DEFINITIVE DESIGN STAGE

A final version of the project is provided at this stage. Solutions for the structural system, the plumbing system, the building façade, the building's safety, and fire safety, etc. are to be calculated and presented.

The goal of this stage is to establish all the components of the building and to have them validated by all those involved in the design process (client/beneficiary, design team, technical team, authorities, auditors (if the case), etc.)

4.1. STANDARD SERVICES

4.1.1. Detailed brief (final)

The architect will detail the design brief in order to start the preparation of the definitive design stage. The design brief will include, in this stage, all the operational technical parameters required for the definitive design. For this, the detailed brief should be done in close collaboration with all the specialists involved in the project. In this stage, the design brief is technical and final.

The final detailed brief also encompasses all adjustments made during the previous stages, including approved comments/ observations/ amendments, if they do not imply the doing over of previous stages and are part of the brief data for the current stage.

The final detailed brief is approved and assumed by the client, and any subsequent changes give the architect the right to re-evaluate the fee, compared to the additional resulted services.

4.1.2. Definitive design at a general level

The definitive design at a general level implies the preparation, based on the general concept and architectural concept (including the client's comments regarding the project and the budget included in the final detailed brief), of the written and drawn parts in final format, in order to describe and decide the general design of the project. To this end, the project will be presented for validation to the authorities, to the technical/ engineering collaborators, as well as to the project verifiers, according to the law (this stage only requires a preliminary check). However, in this stage, the written and drawn parts do not have to qualify for the specific requirements of a technical project (except for the documentation to be submitted to the authorities that has to be in line with their specific requirements). The verificationsd will be preliminary, not final, and will address major issues. In this stage, all relevant permits should be requested for the authorisation process of construction works based on the project (for the Urban Planning Certificate -CU- and others, according to Law).

It is acceptable, at this stage, for all the parts of the projects to be pre-technical. In order to organize the tender for the construction contractor selection, all written and drawn parts from the project will be detailed and completed. Given the fact that all written and drawn materials are initially viewed by the client, it is also understood that they do not have to include the legal detail / graphics requirements for a technical project. The architect should make sure that further project details are in conformity with legal provisions and do not cause changes in the technical solutions drawn at a general level.

This service involves the incorporation of the client's comments / observations / amendments, which would not lead to changes in the detailed design brief.

4.1.3. Planning the investment roll-out

The architect will plan the timeline of the investment project, covering all stages of design, as well as main subsequent stages of tendering, approval and authorization, and construction works. In this stage, the planning will only consist in the revision of the previously planned schedule, taking into account the latest changes of the technical solution. The schedule should also take into account the supply of materials and other implications.

4.1.4. Brief for specialty projects

The architect will develop briefs for all specialty collaborators involved in the project. The briefs will be drawn up following discussion and check-ups of the proposals with all the specialists involved.

4.1.5. Preliminary coordination of the project

This stage includes the pre-coordination of the specialty projects. The architect will receive the structural engineering and installation schemes, will assess the compatibility of the various proposed systems and structural engineering elements and will harmonize / integrate the architectural solution.

In this stage, most of the differences between the specialty projects and the architectural project are solved, while various minor corrections are only stated and left for subsequent stages. The architect has the responsibility to choose the disparities that must be addressed in this stage and those that can be solved in subsequent stages.

The schematic project will be considered final only after the aforementioned conditions are met. The architect decides when the resulted material satisfies the legal and contractual corresponding requirements of the execution stage and can be presented to the client. The architect also decides if the project can be taken to the subsequent stage. The subsequent stage is approved beforehand by the client.

4.2. ADDITIONAL SERVICES

4.2.1. Investment feasibility study or the documentation for approval of intervention works (dali)

The architect makes the content framework/deliverables that describe the feasibility of the investment, in accordance with applicable legal provisions, for public works, or in conformity with contractual provisions, for private works.

The architect must prepare a specific technical-economic documentation in view of the feasibility of the project in the concept stage (see chapter 3).

Completing this service also presupposes cost estimation, time planning, requesting, monitoring the stage of preparation and pick-up of documents and permits (if the parties, by mutual agreement, decide to leave this in the responsibilities of the architect).

If the architect assumes this responsibility and decides on the fee, he is in charge of doing the aforementioned steps and other necessary deliverables for the feasibility of the investment, according to law and the contract.

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The architect must prepare a specific technical-economic documentation in view of the feasibility of the project in the concept stage (see chapter 3).

Completing this service also presupposes cost estimation, time planning, requesting, monitoring the stage of preparation and pick-up of documents and permits (if the parties, by mutual agreement, decide to leave this in the responsibilities of the architect).

If the architect assumes this responsibility and decides on the fee, he is in charge of doing the aforementioned steps and other necessary deliverables for the feasibility of the investment, according to law and the contract.

4.2.2. Requesting, monitoring the status of preparation and pick-up of approvals and permits

In order to substantiate the functional, technological, constructive and economic solutions, the architect can request, monitor the status of preparation and pick-up the documents and permits, on behalf of the client (or the beneficiary, where appropriate). The architect will respond to any requests for preparing additional documentation or additional information, requested by the authorities/entities that issue the permit in question (the missing elements will be provided by the designer in accordance with the standard services).

The development of the documentation required for obtaining the permits does not constitute the object of this service (see 5.2.1.).

4.2.3. Cost management

As an addition to the service regarding the project at a general level, the architect will include the adjustments determined by the construction cost reductions in the project in order to fit within the budget. Such adjustments will be decided by the architect and the client, based on a material prepared or not by the former. The architect will apply, with the client's approval, any changes considered necessary in order to respect the initial established budget. The client will tell the architect the adjustment requests; respecting the limits defined in the detailed design brief (see 4.1.1.).

4.2.4. Estimating investment costs

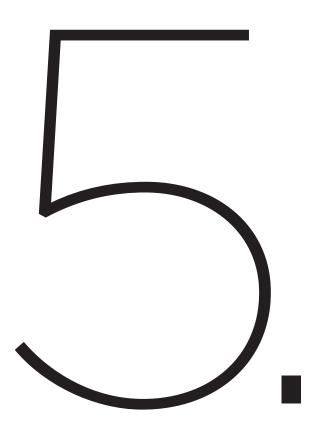
In this stage, the evaluation of the volume of works and materials, as well as the budgeted costs, are revised. The count of the quantities is made in a system of calculating index (norm estimates). The maximum margin of error, deemed acceptable, is 3 15%.

As a result of the recalculation of the estimated cost, decisions will be taken in order to adjust the project and remain within the approved budget (see 4.2.3.).

All estimates shall be made using the information systems based on cost or offers. Depending on size and complexity, the architect can work with specialists.

4.2.5. Assigning manufacturers, suppliers and products

For every material, equipment and facility, the architect will suggest at least one manufacturer, product and, if necessary, a supplier. This service can be met in the final project stage or, where appropriate, in the tendering / evaluation stages, project execution or in the execution assistance stage.



BUILDING PERMIT STAGE

(Technical Documentation for Permit to Carry Out Construction Works; Technical Documentation for Permit to Carry Out Demolition Works; Technical Documentation for Permit to Carry Out Works)

This stage implies the design and the drafting of documentation to the (minimum) level required in order to obtain the building permit.

All the written documents and the drawings will comply with the legislation in place.

The documentation will be afterwards verified, according to the law.

BUILDING PERMIT STAGE

5.1. STANDARD SERVICES

5.1.1. Design for authorisation

The architect will prepare the written and drawn parts that make up the technical documentation for the building permit or, in some cases, demolition permit, respecting the main obligations concerning the quality of constructions according to law, on the basis of the final project and in conformity with the law, in an adequate technical format.

The technical documentation for the building permit can be extracted from the technical project.

This service also includes the written and drawn parts that are required by law and support the request of issuance of the building permit.

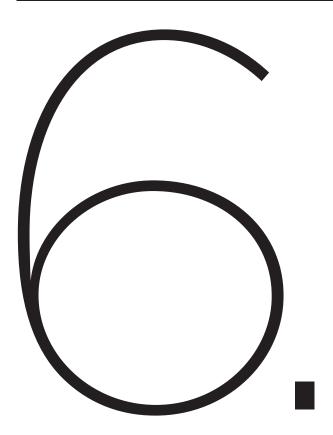
5.1.2. Estimating construction costs

In this stage, estimating the costs of construction is necessary for the calculation of the building permit taxes.

5.2. **ADDITIONAL SERVICES**

5.2.1. Submit the documentation, monitor the status of preparation and colect the building permit and other permits, endorsements and approvals

This serviceif it was not partially carried out in previous stages, implies submitting all documentation provided for by law to the competent authorities and also reviewing the file and adding the missing documents mentioned by the specialised services of taking over and processing (missing items will be made available by the designer in accordance with standard services), organizing and monitoring the file completion and solving additional issues, picking up the building permit and other permits on behalf of the client (or the beneficiary).



EVALUATION/OFFER PROJECT STAGE

The project for assessment/tendering is the technical documentation that the construction company contracted to do the works will use.

Likewise, at this stage, quotes are to be obtained for the planned investment.

6.1. STANDARD SERVICES

6.1.1. Technical design

In order to supplement the technical documentation for the building permit of the construction works, the architect prepares all necessary written and drawn parts, requested by law and building contract, respecting the conditions imposed by the building permit and its annexes, in specific technical format, on the one hand in order to obtain fee offers from potential contractors and on the other hand for the construction works. The project includes technical reports, scope of works, data sheets and lists of quantities.

The architect will provide additional information needed for the construction works and the execution project (see pt. 7).

The evaluation/ offer project will be detailed by the architect, so that the price offered by the contractor for the construction works firmly stays the same throughout the process (except for potential brief changes or unforeseen works caused by third parties or unpredictable reasons).

6.1.2. Technical coordination of specialty projects

Technical coordination of final specialty projects consists of identifying all minor inconsistencies between the specialty projects and the architectural project, conflict situations of various building elements and their solutions, in compliance with the economic and technical solutions included in the building permit and the documentation that lays at its basis.

6.2. **ADDITIONAL SERVICES**

6.2.1. Estimating investment costs

The calculation of work volume and quantities of supplies and materials, as well as their costs are reviewed in this stage. The cost estimate will be final, with a maximum acceptable error of 3 10%, and can be used as a reference in the process of selecting bids for the execution of the project.

6.2.2. Cost management

The project is reviewed and adjusted as a result of the necessary cost reductions, on the basis of the result of the tender process, taking into account the differences among the agreed budget, estimations made throughout the project and the winning tender.

As part of this service, upon receiving the corresponding fee, the architect makes all the necessary adjustments to the project, according to the final brief parameters.

6.2.3. Estimating operating/maintenance costs

The calculation of operating/maintenance costs of the building is reviewed.

6.2.4. Assigning manufacturers, suppliers and products
See pt. 4.2.5.



DESIGN FOR EXECUTION STAGE

At this stage, the details and their execution should be clarified.

Under no circumstances should the project to be executed alter the documentation submitted for the permit, the tendered project, the approved budget, or the calendar of the works. The goal of this stage is to choose, based on the quality/time/price ratio, the best offer for the execution of works.

7.1. STANDARD SERVICES

7.1.1. Detailed design

To supplement the technical documentation for evaluation / tendering, the architect will prepare all the necessary details for the technical solutions of assemblage, execution, formation, installation, as well as other operations regarding construction or installation parts / elements, in view of the authorised construction works.

Apart from the execution project, throughout the construction works, decisions will be taken regarding: material samples, data sheets, manufacturing projects etc.

The details contained in the execution project cannot change the fee agreed on with the contractor.

A part of the execution project will be the documentation that fundaments the assessment / selection of price bids for the construction works.

7.1.2. Detailed coordination of the project

Detailed coordination of the technical projects implies the adjustment of the solutions, dimensions, specifications of all sorts, as long as they do not change the costs agreed by the client and the contractor.

The service of detailed coordination implies additional documents that help the development of the construction works in the best conditions – for example execution plans, coordinating cross-sections, etc.

7.1.3. Health and safety plan (ssm)

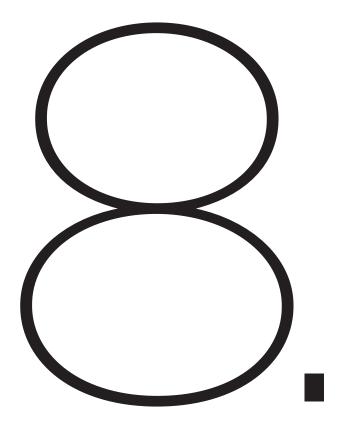
To be developed according to the law.

7.2. **ADDITIONAL SERVICES**

7.2.1. Assigning project manufacturers, suppliers and products

See pt. 4.2.5.

35 CONSULTING STAGE



CONSULTING STAGE FOR THE SELECTION OF THE PREFFERED BIDDER FOR THE CONSTRUCTION WORKS

At this stage, the goal is to choose the best offer for the execution of works taking into account the quality/time/price ratio..

CONSULTING STAG

8.1. ADDITIONAL SERVICES

8.1.1. Organization of tender documents

The service of organizing the tender documents implies putting together all the necessary papers (project, property deeds, instructions, rules etc.) so that the response time is the shortest possible (easing the answering) and the information detailed enough to allow the contractor to give a firm offer.

8.1.2. Prepare the short list

The architect identifies and proposes a list of contractors that qualify for the project, based on competences, experience etc. The short list is prepared based on a file that must include the justification of the choices (scores etc.). The list can include interviews with the contractors or pregualification activities.

8.1.3. Tender management

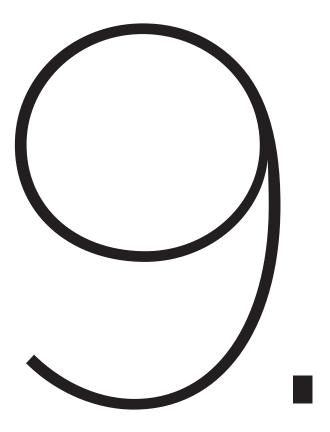
The service implies the management of the tender actions, answering clarification questions, receiving and registering bids. During the tender procedure, the architect can recommend ways of communicating to bidders in order to adjust the answering time, based on monitoring everybody's status (delays, cessation of work packages, etc.).

8.1.4. Recommending the adequate tender

Recommending the adequate tender must be based on a comparative study. The architect's advice, in some conditions, can imply buying services from several bidders.

8.1.5. Hiring the contractor

The architect offers technical support for the negotiation and the signing of the building contract. Specialised legal advice is recommended. The architect has to prepare the technical annexes to the contract and their correspondence to the project. It is recommended that the project should be annexed to the building contract.



CONSTRUCTION MONITORING STAGE

At this stage, the architect must fulfill her/his legal obligations providing consultancy during the works so that the timeline, the budget, and the quality indicators are respected.

9.1. STANDARD SERVICES

9.1.1. Participation in decisive stages

According to legal provisions, the architect will participate in construction works verifications on the construction site, at decisive stages of the works (set in the project, stated in the contract - before the beginning of construction works). The visits will be focused on the object of each decisive stage and their validation protocols and are not to be considered random checking visits.

9.1.2. Monitoring the ways of carrying out the construction works

The architect also provides the service of site inspection. This will be assessed on a case by case basis, depending on the client's abilities and the contractor's expertise. The incidence of visits and the maximum period during which they are made shall be determined a priori.

On-site inspections can take place at the hearing of the executive building coordination meeting as well, periodically, with random checks, or can imply the daily presence of the architect on site, in order to ensure understanding and the proper execution of the project.

Typically, the executive building coordination meetings happen on a weekly basis. In the case of small and medium sites, random checks can also occur.

Following these checks, the architect will issue a report that will show whether the construction works are done according to the project.

Solving execution flaws, execution project modifications and other changes in the provision of the project are detailed in 9.2.1.

The architect has an active prevention role in the executive building coordination meetings and will try to prevent execution flaws, will point out elements of increased difficulty and will clarify uncertainties related to the project.

9.1.3. Project management

The service of project management is mainly related to the on-site activity and implies a continuous effort that typically consists of the following activities: training the contractor for the handing over of the site, training the client for other services for the execution stage, compared to the client's legal responsibilities (health and safety plan, surveying and geodesy, documentary photography, various studies, etc.), analysis of applications for payment issued by the contractor and issuance of "good for payment" for them, periodic on-site visits or permanent on-site presence, where appropriate, to ensure an effective deployment of construction works (including technical check-ups followed by conformance and non-conformance reports), organizing meetings with the authorities in decisive stages on behalf of the beneficiary, final reception, preparing the building book – including the final calculation of the value of the development for the regulation of the building permit taxes, keeping track of building site orders, detailed time management (monitoring the contractor's activities, such as orders of materials, equipment, facilities).

9.1.4. Reception of the project

The reception of the project will be made according to legal provisions.

This service does not imply the reception of projects in order to give the building in use.

9.1.5. Property handing over

The handover of the building means the delivery of the development objective to the client. The architect will prepare the building owner's manual, annex all technical documentation of the equipment that is needed for its management, organize the testing of all systems and train the client on operating them

As part of this service, all on-site inspection for the quality of construction works and technical tests will be made. The architect will be present at all inspections, in order to make sure the building is ready to be used (suppliers of equipment, fire brigade, etc.).

The architect has the legal obligation to prepare the building book.

9.2. **ADDITIONAL SERVICES**

9.2.1. Technical assistance

The architect will provide technical assistance throughout the construction works, based on checks on works or on the client's request. Technical assistance generally means works that cannot be foreseen from the design stage and therefore cannot be evaluated in the system other than on a "time estimate", an estimate that usually adjusts as the construction works advance.

Technical assistance includes such activities as: adapting the project to the sizes resulting from execution, adapting the project to the available technologies imposed during the construction works (others that the ones specified in the project), design changes to reduce execution costs, solutions to remedy the mistakes of execution, approval of the samples of materials proposed by the constructor, approval of the shop-drawings and changes/adjustments of the project, as proposed by the contractor, making the post-execution project.

9.2.2. Shop - drawings

Shop-drawings are documents that detail the technological way of making a certain component of the construction. On-site details solve such matters as: optimizing the use of materials, drawings for the personnel who makes the material (debits it, processes it in the shop, etc.). The shop-drawings should address the appearance, performance, and prescriptive descriptions in the specifications and construction drawings. Examples of works that might require on-site detailing include steel works and curtain walls. Shop-drawings should not be confused with the execution drawings...

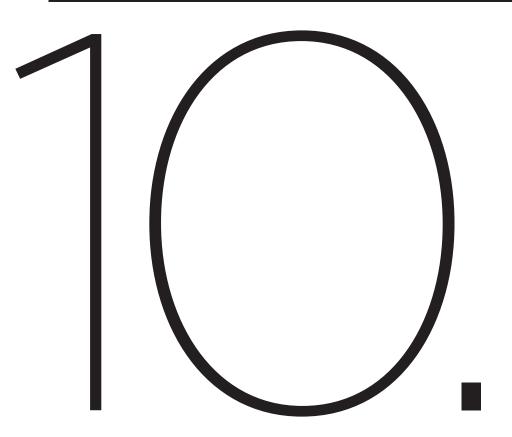
9.2.3. Reevaluating construction costs

This is a management service that can only be carried out in conjunction with the technical assistance service.

The service mainly refers to bidding for alternative solutions, but it can also imply the search and identification of research directions.

9.2.4. Assigning project manufacturers, suppliers and products

See pt. 4.2.5.



TRACKING THE BEHAVIOUR IN TIME OF THE BUILDING AND INTERVENTIONS STAGE

According to the law and to the good practices in the field, after the completion of the building, during its use, the architect's intervention may be necessary.

The goal of this stage is to ensure the building's safety while in use until the end of its life cycle

10.1. ADDITIONAL SERVICES

10.1.1. Observation of the building operation in use

Tracking the behaviour in time of the construction is done based on the project delivered by the architect in the design stage, and, where suitable, during post completion stage.

This service implies observing the building's behaviour during use and sending reports regarding the results of the check-ups, as well as recommendations for intervention and fine tuning, taking into account the degradation of certain construction elements or even a low performance of the building, under the stated parameters.

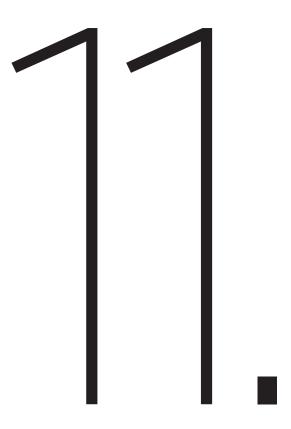
10.1.2. Agreement of the initial designer

The service of the initial designer of approving the interventions on the building can be imposed by legal provisions, by the client's will and as a consequence of the fact that the initial designer knows everything about the said building.

The agreement of the initial designer must state the evaluation criteria and also, if necessary, the recommendations regarding the changes of the intervention project.

The agreement of the initial designer cannot replace the project, the technical expertise or verification, according to the provisions of law.

The agreement of the initial designer will not be conditioned by the aesthetics of the proposed intervention.



SERVICES OUTSIDE THE DESIGN STAGES

During the design or execution phase, promotion activities may be required to boost the project's completion or its sale.

Their goal is to contribute to the success of the project.

11.1. ADDITIONAL SERVICES

11.1.1. Supporting the project

Supporting the project in front of a third party, other than the ones approved by review committees, according to the law – investors, media, etc. Supporting the project also includes the organization of meetings, preparation of specific materials, as well as planning of the feedback after the aforementioned presentations.

11.1.2. Marketing materials

This service implies the adjustment of the plans in accordance with the requests of the end-user with the commercial parameters, as well as the measuring of the surfaces in order to better communicate them to potential clients.

Moreover, certain investments or requests of some clients involve the elaboration of special presentations (high definition 3D visuals, videos, presentation leaflets, commercialisation plans with special graphics, etc.) Special presentations are not included in the mandatory services and can be completed on demand, in any design stage and many times throughout the project.

They are not to be taken for the presentations that the architect makes to communicate the design solutions which are included in the mandatory services, the architect being able to choose a technique according to his style. The architect owns these presentations thus they cannot be used for commercial purposes without the architect's approval.

5 OTHER SPECIALISTS

OTHER SPECIALISTS

participating in the design process

Specialists in:

- structural resistance
- indoor installations
- electrical installations strong and weak electricity
- heating and ventilation systems
- plumbing
- outdoor installations
- utility distribution facilities
- outdoor lighting
- irrigation systems
- plant technology
- vertical systematization
- other areas

STUDIES, EXPERT ASSESSEMENTS AND VERIFICATIONS

Studies and expert assessments:

- Geotechnical study
- Topographic survey
- Historical study
- Historical site study
- Archaeological study
- Study of building materials
- Analysis of traffic conditions
- Environmental impact assessment
- Aeronautical study
- Sunlight analysis
- Lighting analysis
- Facies analysis and stratigraphy
- others

Verifications:

Verifications according to the legal provisions

GLOSSARY GLOSSARY

GLOSSARY

1. Architect

In this document, "architect" is used with the following meaning: registered architect, recognized under the conditions of the legislation on the organization and practice of the profession, who leads and coordinates the process of designing a construction/investment.

Concept (project stage)

At this stage of the project, the construction is defined from a functional and aesthetic point of view. Although the description of the construction configuration is not at a detailed level, it is the architect's responsibility to make sure that the submitted proposal is technically valid.

Historical monument

Real estate, constructions and lands located on the Romanian territory, significant for the history and culture and the national and universal civilization, whose regime is regulated by a special legislation.

4. Services (of the architect)

Duties, obligations, competencies, responsibilities, tasks, activities assumed (engaged) through a contract concluded with a client or established by a normative or legislative act.

5. Basic services

The following two types of services are "Basic Services":

- Mandatory services established through legal norms and provisions.
- Services recommended by OAR for a good execution/realization of the planned construction.

6. Additional services

"Additional services" are those services necessary for an extended design service. Their realization depends on the existence of an express client request or a contractual provision.

7. Anti-competitive practices

Acts and facts which restrain, impede, or distort competition, as defined by a special legislation.

GLOSSARY

8. Project

All the written and drawn pieces that describe the investment objective to be achieved. The finality can be the execution of the respective objective or its definition for other purposes, such as the realization of a cultural manifesto, the exemplification of some alternatives to an existing situation, etc. In a broader sense, the "project" incorporates other services too, that contribute to its completion.

9. Design

Activity that results in the development of a design project. Architectural design includes other missions too, necessary to achieve the investment objective or the envisaged purpose of the project.

The design process encompasses the totality of the services necessary to accomplish the envisaged construction.

10. Post-execution project

Also known as "as built", it is the representation of the complex project, as it was built.

11. Protected areas of historical monuments

According to the law, the protection area of an historical monument is established, delimited based on topographic, geographical, or urban landmarks, depending on the street plot, relief, and the characteristics of the historical monument. Thus, the historical monument and its built or natural setting are valued and protected.