

# Project & Construction Management

## CONTENTS

	Page
<b><u>FORWARD:</u></b> <b>PROJECT MANAGEMENT .GENERAL DESCRIPTION</b>	2
<b><u>CHAPTER 1:</u></b> <b>GENERAL CO-ORDINATION</b>	6
<b><u>CHAPTER 2:</u></b> <b>CONSTRUCTION SUPERVISION</b>	8
<b><u>CHAPTER 3:</u></b> <b>PLANNING</b>	10
<b><u>CHAPTER 4:</u></b> <b>COST CONTROL</b>	11
<b><u>CHAPTER 5:</u></b> <b>ADDITIONAL SERVICES</b>	12

**AluminumNow Management's** scope is oriented towards full client support, in particular:

- ✚ Assisting the Client at all stages of the project: **AluminumNow Management** will provide the Client with all information and recommendations necessary in the decision-making process, and keep permanent control of the evolution of the Project's main parameters.
- ✚ Representing the Owner, and managing and coordinating all parties involved in order to achieve the Client's objectives in terms of quality, cost and program.

## 1. Preliminary Stage

- **At Brief definition stage: AluminumNow Management** will take part in the definition of the project brief to ensure that it meets all the Client's needs, optimizing all integrated functions.
- **Budget elaboration: AluminumNow Management** will review with the Client financial targets against Brief content.
  1. *This analysis is essential to avoid budget overrun or works not up to the expected quality standard, or not meeting the standard required.*
  2. *At this stage, AluminumNow Management's cost plan takes into account available construction and operational data. The cost plan thus provides the optimum balance between investment cost and maintenance costs, all in accordance with the client's requirements.*
- **AluminumNow Management** will optimize the project time schedule in coordination with the Client, in accordance with target delivery dates and technical options.

**AluminumNow Management commitment is to keep quality, cost and progress constantly under control, ensuring the proper balance and necessary compatibility between these three essential parameters.**

**If and when necessary, AluminumNow Management will propose to the Client remedial solutions to meet the objectives.**

- **AluminumNow Management** can assist the Client in the selection of Service Providers (Architects, engineering consultants), to this end, **AluminumNow Management** will prepare relating scopes of services and issue bids.
- **AluminumNow Management** will then review and evaluate bids, their responsiveness, qualifications and references, check that all services required are covered and advise the Client as to the proposed successful bidders

## 2. Design Stage

Once the main objectives have been clearly defined and agreed, possibly with well identified options or alternatives, **AluminumNow Management** will manage and supervise design progress and make sure that all Service Providers (Architects, design Engineers, consultants...) abide by their commitments on progress and quality of services.

If necessary, **AluminumNow Management** will identify non-conformities and chase failing parties, or inform the Client whenever choices or decisions have to be made.



**AluminumNow Management** will also prepare conditions of contract for contractors and suppliers, and contractors. These terms and conditions define the means and facilities common to all contractors on site, their use and payment methods therefore. They also define all supply, circulation, staffing, internal traffic and accounting management modes.

**AluminumNow Management's** commitment is also to submit concrete proposals to solve any problem arising.

### 3. Bidding Stage

**AluminumNow Management** will check the project specifications submitted by the Service Providers, in particular as regards:

- ✦ Conformity of drawings and bid documents to the Brief,
- ✦ Compatibility of the services described with the budget,
- ✦ Compatibility of the requirements with the project time schedule.

At this stage, **AluminumNow Management** will submit the list of pre-qualified bidders for the Client's approval, based on the contractors' experience, references and ability to complete the Project.

Bidding then follows and **AluminumNow Management** manage the whole process.

**AluminumNow Management** will evaluate bids, including:

- ✦ Responsiveness to the requirements (quality of arrangements and materials / equipment / fittings proposed, completion time, deviations, etc),
- ✦ Correction of errors, if any,
- ✦ Price levels,
- ✦ Completeness in terms of services proposed (no overlapping or loopholes) and quantities.

A bid evaluation report is submitted to the Client, summarizing all findings, recommending contractors to be selected, and providing a cost estimate compared to preliminary budget.

**In case the revised cost estimate would exceed the budget, AluminumNow Management will discuss and review solutions jointly with the Client, the Architect and Consulting Engineers, and make proposals to finalize contracts matching the Budget.**

### 4. Contracting Stage

After contractors' selection, **AluminumNow Management** will **finalize the contracts**. Contracts are such as to ensure that the Client is kept safe against any failure of any contractor. This is through appropriate clauses on insurance, performance bonds, retention moneys, lump sums payments, liquidated damages, etc.



In order to minimize risks of cost overrun and to avoid claims by contractors, design and construction contracts are preferably on a lump sum basis. Contractors commit on a lump-sum price based on contract documentation, actual quantities do not need to be measured again unless there is a change in scope.

At this stage, the budget is final. This final budget is calculated on the basis of rates and prices agreed with contractors, including alternatives approved, if any.

## 5. Construction Stage

- **AluminumNow Management** will co-ordinate and supervise the services of **Service Providers, contractors and suppliers selected to carry out the work.** This management is proactive and such as to anticipate problems before they arise on site.
- During construction, **AluminumNow Management's commitment** is to prevent errors due to construction documents not received in due time or to the use of out-dated documents, through regular meetings with all parties involved and strict management of the documents and drawings, including approval and dispatching circuits.
- **AluminumNow Management** will check the contractors' monthly statements and review memoranda for additional works. The approved payment statements are then submitted to the Client.

*The cost projection is updated monthly: it highlights the committed expenditures and projected end costs, which are compared to the Budget.*

- **At all stages of the project, AluminumNow Management** will submit monthly reports.

*These reports are discussed/reviewed in monthly meetings with the Client. They provide an accurate statement of all actions carried out during the past month, and planned for the coming month. They also provide a comparative statement "actual versus forecast" for costs and progress, and a detail of quality concerns and HSE issues, if any. Deviations are identified, analyzed and remedial actions propose*

## 6. Hand-over Stage

**AluminumNow Management** will **organize and manage final inspections, tests and trials** at commissioning stage (including performance checks).

Rectification of all and any problems or concerns are supervised and managed before final acceptance certificates can be signed. **AluminumNow Management** also approve the contractors' final accounts and provide the Client with the complete **build documents, including maintenance and technical manuals.**

\_\_\_\_\_oOo\_\_\_\_\_



In line with the general scope above, the various services proposed by **AluminumNow Management** are further broken down under the following headings:

**Chapter 1: General Co-ordination**

**Chapter 2: Construction Supervision**

**Chapter 3: Planning**

**Chapter 4: Cost Management**

Combination of two or more of these services are of course possible, the full combination of the Four(4) elements making up a comprehensive **AluminumNow Management** assignment.

\_\_\_\_\_oOo\_\_\_\_\_

## **Chapter #1 – General Coordination**

**At all stages, AluminumNow Management will keep the Client fully informed of the various project issues, progress, and improvements / changes possibly necessary for satisfactory completion.**

### **1.1 At the beginning of the project AluminumNow Management will:**

- **Set up the project Organization to include:**
  - a) List and organization chart of all parties involved  
This Organization Chart highlights the respective role and situation of every party and provides the names of people involved in the project along with their precise assignments.
  - b) Scope and distribution of services  
The scope and limits of the services of all parties to the project, as shown on the Organization Chart, are detailed in a “task distribution table”. This table shows who does, signs or approves what, at design, construction and commissioning stages.
  - c) Procedures and validation and dispatching circuits, in particular for:
    - . Drawings and written documents,
    - . Purchase orders to suppliers and orders to contractors,
    - . Payments statements,
    - . Quality, cost and progress control documents.



- **Set up the preliminary design scope** based on the Client's requirements, such as:
  - Current and future needs, in terms of quantities,
  - Functional objectives,
  - Requirements in respect of technical, financial, completion date and quality aspects.

**1.2 At Design Stage, AluminumNow Management will:**

- Co-ordinate all parties to the project, prepare and chair meetings, and issue the relevant agendas and minutes.
- Control conformity of the design to the specified brief.
- Centralize decisions on Architectural and technical issues
- Set-up documents defining construction management arrangements such as split by separate trades and job-site organization, contractors' common means and working procedures (job-site facilities, health and safety, traffic, storage etc.)
- Prepare the general conditions and conditions of particular application of the contracts.

**1.3. At Bidding Stage, AluminumNow Management will:**

- Organize bids for all construction trades,
- Agree with the Client shortlists of contractors, based on capability, professional qualification, references, all in consideration of the size and features of the project,
- Build-up bid documents, including drawings and specifications provided by Architects and Consulting Engineers,
- Upon bid submittal, review and evaluate bids, negotiate with responsive bidders,
- Submit a bid evaluation report to the Client, which includes due advices on alternatives proposed and contractors recommended as successful bidders.
- Build-up full finalized contract documents, including revised drawings and specifications, if any, provided by Architects and Consulting Engineers. Arrange to have all contracts duly signed.

**1.4. At construction Stare, AluminumNow Management will:**

- Issue orders to start works,
- Assist contractors in getting all administrative clearances,





- Propose to the Client any pre-construction statements which may be necessary (condition of adjacent properties, etc),
- Manage and co-ordinate all trade contractors and suppliers and relating works.

**1.5. At all stages of the Project. AluminumNow Management will:**

- Liaise with the Client, the Architect, the Consulting Engineers, Classification Society and contractors, prepare agendas and minutes of meeting.
- Control that all steps necessary to obtain administrative permits and authorizations are taken in due time.
- Prepare and issue monthly reports

The Client is provided with monthly reports describing the main events and the progress of the Project.

These reports cover:

- The relevant events of the past month and those planned for the coming month.
- The progress status versus forecast.
- Actual expenses versus forecast, and project end cost projections.
- Quality issues and quality control.
- HSE issues.
- Actual contractor's means (personnel, equipment).
- Proposals to correct defective items or deviations, if any.

**1.6. Operation and maintenance:**

Upon the Client's request and in view of the future maintenance of the technical fittings incorporated into the Project works, **AluminumNow Management will** issue bids for the equipment concerned (lifts, H.V.A.C., plumbing, water treatment, electrical outfits, fire protection / detection system, etc.) and assist the Client in negotiating and finalizing relating contracts.

The service can be extended to cover facilities management.

\_\_\_\_\_oOo\_\_\_\_\_



## Chapter #2 – Construction Supervision

**AluminumNow Management will** supervise construction from site opening to commissioning and final hand-over.

### 2.1. **Upon site opening, AluminumNow Management will:**

- Manage surveyors' work, and control that surveys are properly carried out.
- Control that relating drawings are properly dispatched.

### 2.2. **During construction**

- Control that works comply with the contract documents. Obtain, if and when necessary, the Architect's and Consulting Engineers' advice, in particular for works design and aesthetic aspects.
- Control works progress against Construction Program. Give contractors all instructions necessary to carry out their works in compliance with their contract, and within the agreed completion time.
- Organize and chair all timely site meetings (typically weekly meetings), and all other meetings necessary for due execution of the work
- Draft and dispatch related minutes of meeting.
- Supervise works, accept or reject materials and/or works performed and obtain replacement by contractors of defective and rejected materials.
- Obtain the Client's approval on main decisions, in particular as regards improvements and unforeseen events and/or works.

### 2.3. **Upon commissioning and hand-over, AluminumNow Management will:**

- Plan and arrange, before works final acceptance, all necessary tests and trials to be carried out on equipments jointly with Consulting Engineers and contractors concerned. Organize relating technical inspections, and inspections by phase.
- As a result of these tests, trials and inspections, draft with the assistance of the Consulting Engineers the list of works still required prior to final hand-over, for every trade concerned, and set up program and deadlines for such works. Coordinate and supervise the execution of said works and, in case of contractor(s)' failure, propose to the Client solutions allowing completion in time.
- Organize final inspections of the works prior to final acceptance, draft the lists of outstanding works and defects with the assistance of the Architect and Engineers concerned.





- Supervise snagging and remedial works until final completion.
- Prepare completion certificates, have the same signed by all concerned and submitted to the Client.
- Collect all documents issued, up-dated to reflect the as-built condition, enclose maintenance and technical manuals necessary for future operation, and build-up a comprehensive <<as-built>> file.
- Submit this <<as-built>> file to the Client.

\_\_\_\_\_oOo\_\_\_\_\_

## Chapter #3 – Planning

### 3.1. At Design and bidding stages, AluminumNow Management will:

- **Set up the general project program**, showing the various stages of design, bidding, construction works and start up operations as well as the time required to get due permits and authorizations necessary prior to construction.

This program shows major steps and milestones such as:

- ✦ Applications for administrative permits and authorizations, and related approvals,
- ✦ The various design phases,
- ✦ Issue of every type of key documents and approval thereof by the Client,
- ✦ Completion of bid documents, by trade,
- ✦ Call for bids, by trade,
- ✦ Award of the various contracts to contractors and suppliers,
- ✦ Key dates for construction phases and/or main trades,
- ✦ Tests and trials, commissioning and final hand-over.

- Set up the detailed design and bidding program.
- Control progress of design work and bidding process.
- Set up the Construction Program, defining key construction milestones. This “Contract Construction Program” is made part of the bid and contract documents, and as such becomes binding for successful contractors.



### 3.2. At Construction Stage, AluminumNow Management will

- Issue the **detailed construction program**, and have it agreed by the Contractors.

This document, based on the contract construction program, takes into account the contractors' construction constraints and amendments to the initial Construction Program as requested by the Client, if any.

Progress is then controlled by reference to this detailed construction program. Deviations, if any, are identified and solutions proposed to keep the project on schedule. If necessary, the detailed construction program is revised to reflect the actual progress of the various trades and the agreed changes resulting from approved solutions, if any.

\_\_\_\_\_oOo\_\_\_\_\_

## Chapter #4 – Cost Management

At all stages, **AluminumNow Management will** ensure that all arrangement described in the documents issued by the Architect and Consulting Engineers match the budget. If/when required, **AluminumNow Management will** request changes or adaptations necessary to keep the project within budget.

### 4.1. At Design Stage, AluminumNow Management will:

- Prepare the preliminary cost plan, after approval of the project Brief.
- Update the cost plan as design work progresses.
- Advise the Client on decisions to be taken to achieve the cost objective.
- Review and approve all invoices submitted by the various parties involved in the project.
- Draw up provisional cash flow forecasts.
- Check the compatibility of the project works as designed with the budget, and propose appropriate actions to the Client, if necessary.

### 4.2. At Bidding Stage, AluminumNow Management will:

- Review prices, quantities and quality standards of the bids, and fully evaluate the same cost-wise and through queries to contractors, if necessary.



- Appraise alternatives proposed by contractors with the assistance of Architects and engineering consultants, and make resulting appropriate arrangements to improve the Project or optimize its cost, in agreement with the Client.

#### 4.2. At Construction Stage, **AluminumNow Management will:**

- Update the cost plan to reflect final design and contract arrangements, and build-up the final budget, based on actual contract amounts, incorporating the estimated cost of alternatives accepted as a result of negotiations with contractors.
- Make sure that committed expenses remain within the cost plan based on the final budget, and keep the Client regularly informed of this control, of revised cost projections, of possible deviations and remedial actions proposed, if necessary.
- Check all additional works, variations, and statements.
- Issue if and when required, addenda to the contracts, and issue change orders.
- Ensure that payment statements submitted by contractors conform to the contract documents and ad-hoc project procedures.
- Check monthly payment statements and submit to the Client relevant applications for payment issued by contractors.
- Prepare a monthly summary of expenditures highlighting the cost of works done, and comparing actual committed expenses against plan and projected end projection against budget.
- Check final accounts of all contractors, and have them agreed and signed-off by all parties.

\_\_\_\_\_oOo\_\_\_\_\_

## Chapter #5 – ADDITIONAL SERVICES

**AluminumNow Management will** on the instructions/request of the client provide one or more of the following services:-

- |                           |                             |
|---------------------------|-----------------------------|
| 1. Shipping arrangements. | 5. Travel & Accommodation   |
| 2. Delivery Crew          | 6. Insurance Coverage       |
| 3. Permanent Crew         | 7. Yacht or Ship Management |
| 4. Crew Management        | 8. Charter Management       |

\_\_\_\_\_oOo\_\_\_\_\_

