Capability Statement

Contents

EXECUTIVE SUMMARY 1
COMPANY DETAILS 2
CLIENTS AND PROJECTS 3
COST MANAGEMENT SERVICES 5
   Cost Management 6
   Procurement Management 7
   Contract Management 8
   Value Management 9
   Risk Management 10
   Dispute Avoidance and Claims Management 11
   Lifecycle Costing 12
   Programme Management 13
   Progress Measurement and Earned Value Analysis 14
   Development Monitoring 15
Executive Summary

Key facts

- Professional cost management advice
- Expert Korean cost knowledge with global systems outlook and performance
- JV by leading construction consultancies
- Backed by parent organisations with over 2,900 staff and 70 office world-wide

A Joint Venture approach

Turner & Townsend Korea Co Ltd is a 50/50 joint venture partnership established between HanmiGlobal and Turner & Townsend International Limited providing professional cost management consultancy services to the Korean construction market and to Korean companies with global construction activities.

Why was Turner & Townsend Korea formed?

To deliver valuable services to the Korean construction industry at a time of great change requires a combination of local experience and global outlook. HanmiGlobal has been the leader of construction management services in Korea for over 15 years, whilst the Turner & Townsend Group has been providing cost management services for over 60 years. The companies have been working together since 1998 and the shared values and synergy has led to the creation and incorporation of Turner & Townsend Korea Co. Ltd with full support of the parent company partners.

HanmiGlobal

HP are the undisputed leaders in construction management in Korea with a total staff of 620 operating from 7 offices in Korea, UAE, China, Macau, Saudi Arabia and Libya. Their key knowledge and capability comes from delivery across a range of sectors.

Turner & Townsend International

Turner & Townsend International is part of the Turner & Townsend Group, which since its formation in 1947 has now over 2,200 staff from a network of 68 offices in seven regions around the world. It delivers construction consultancy and management services across a broad range of markets including transport, energy, high-tech production, commercial residential and leisure, supporting many global clients in their developments in emerging markets.

Korean Construction

Global competition within the construction industry is increasing both within Korea and for Korean companies with overseas activities. However, the management of cost of Korean construction projects is often basic and not prepared for the challenges ahead. There is a lack of recognised delivery systems, trained qualified professionals and insufficient technical knowledge of costs to enable world-class performance to be achieved.

Cost Management Services

Turner & Townsend Korea provides effective cost management from the initial planning stage to final delivery of a project. Greater economy and value is delivered by using expert cost knowledge, proven systems, data and tools by professional staff at every stage during the project development.

The aim is to improve value and certainty, whilst minimising cost and waste for Korean clients’ projects. Our client-focused approach strives to ensure that reliable project cost controls gives accurate financial information throughout the project lifecycle and that risks value opportunities are properly managed.
Company Details

Joint Venture – Turner & Townsend Korea Co Ltd.

The JV of HanmiGlobal and Turner & Townsend International Limited was incorporated in Korea in December 2009. Turner & Townsend Korea Co Ltd is the result of close working relationships formed by the parent companies since 1998, when it was realised that the shared synergies, culture and approach could be used to bring great benefits to existing, mutual and new clients in Korea, the wider Asian region and around the world.

Turner & Townsend Korea Co Ltd is wholly and equally owned by the parent companies, providing impartial cost advice to Korean clients and the Korean construction industry. All operational staff in the JV are full time employees.

A dedicated aim of the JV is to bring greater value and benefits to Korean construction by the introduction of proven cost management skills and tools that have been widely adopted by other high-performing industries around the world.

Services offered

As an introduction, the following lists the services offered by Turner & Townsend Korea Co Ltd, with further supporting information following later in this document.

- Strategic Cost Planning
- Cost management
- Contract management
- Procurement and bid management
- Value management
- Risk management
- Development monitoring
- Dispute avoidance and claims management
- Lifecycle costing
- Earned Value Management
- Programme management and PMO

Additional services offered through parent organisations include:

- Project management
- Construction management and supervision
- Management Consultancy

Benefits

The key benefits of our services are to provide cost certainty and greater value at a lower overall cost for construction delivery. Better performance is gained by understanding total costs at an early stage in a project, setting goals for better value, introducing improvements and then setting and applying a rigorous cost control process. Professionally trained experts can identify opportunities for greater value and apply proven tools to accurately safeguard the client’s budget continuously to achieve defined project goals.

Geographical coverage

Turner & Townsend Korea is based in Seoul, Korea, but through the parent organisations it is able to provide services anywhere in the world.
Clients and Projects

**Turner & Townsend**

Turner & Townsend has a wide and diverse project portfolio, delivering global clients a range of construction consultancy services. The number of global clients continues to grow increasingly and the volume of repeat business is evidence to the value we bring and the trust shown by our clients.
HanmiGlobal has a wide range of project experience. Over 15 years, delivering about 700 projects a range of construction consultancy services for domestic and international clients.
Cost Management Services

The services offered by Turner & Townsend Korea represent the leading edge delivery provided to global clients to enhance the value and success of their projects. The focus is to always satisfy the client’s needs for individual project situations and design solutions that offer the greatest benefit.

Strategic Cost Planning

Strategic Cost Planning begins with a full understanding of the scope and brief for the project and captures all costs necessary for its completion. It then sets out those costs in a plan to allow value to be identified and maximised and enables comparative benchmarking to target world-class performance.

Cost planning is not merely one-off reactive cost estimating, but is a proactive continuous exercise that is focused on getting better value and setting cost limits and challenging goals against which the progressive stages of design can be reviewed.

Typically, the Cost Plan format adopted by TTK is on an elemental basis, since this is an international recognised approach that allows accurate comparisons and identifies areas of key expenditure and value.

Key activities

- Price the project from the start
- Understand the brief
- Confirm scope and requirements
- Get the best solution
- Identify abnormal costs
- Prepare cost models
- Benchmark and compare
- Identify options for improvement
- Undertake technical studies
- Finalise improvement options
- Produce project cost plan
**Cost Management**

Having established a realistic and achievable cost plan, sufficient safeguards need to be put in place to ensure that the design and accepted tenders are kept within the client’s budget.

### Key activities

- Define the key project processes
- Define future information requirements
- Devise the procurement strategy
- Develop the project risk plan
- Define the change control process
- Agree the contingency control policy
- Identify process improvements
- Continue to cost manage the design
- Regularly review the risk management plan
- Update the opportunity register
- Report movements against the cost plan
- Produce a pre-tender estimate
- Ensure contractual processes are followed
- Secure the best price from contractors and suppliers
- Assess claims for fair reimbursement
- Provide valuations for interim payment
- Assess the final account and make recommendations for settlement.

Every dynamic within the project environment will have an impact on cost and therefore in order to maintain the affordability of the project it is incumbent on us to ensure that appropriate governance and systems are in place to protect that position. Some of the systems and processes required will be designed and owned by us in our capacity as Cost Manager. However, our extensive experience means that we must provide advice on all of the systems and processes that should be in place to safeguard and effectively manage the smallest to the largest and most complex of projects.

**Project Cost Database**

Project Cost Database contains cost data from not only Turner & Townsend Korea but also HanmiGlobal. It provides an outline and cost of delivered projects and the information can be searched by various conditions including project type, size and location. It also enables effective cost planning through Element Break-down.

*Project Cost Database – Main Page*

*Project Cost Data – Searching Page*
Procurement and Bid Management

Turner & Townsend Korea offers a full procurement service to our clients. The role of the procurement adviser is to guide the client through the procurement process bringing informed thinking and innovative procurement solutions at the inception stage of the project to manage the client’s risk exposure at an early stage and set in place a plan that will achieve the client’s objectives. A full procurement strategy will address all relevant issues in the procurement process although a particular Client may only require a partial service such as a contract strategy.

After initial consultation with the client Turner & Townsend will produce a draft procurement strategy report presenting the potential procurement solutions for the client. A further detailed critical review of the potential procurement solutions will follow with key stakeholders to identify the optimum solution(s). The output of this review will be distilled into a comprehensive final Procurement Strategy Report containing practical procurement advice on the procurement route and contracting strategy. This recommendation will provide a robust and/or flexible solution to address the client’s aims and requirements.

We commonly manage the procurement process for our clients including sourcing suitable tenders and arranging pre-qualification reviews. Compliance with good practice in tendering procedures gives better confidence and keener pricing. We agree the tender list and distribute the tender documents and in addition to holding mid-tender reviews we manage the bid evaluation process to select the best tender.

Range of available procurement solutions

- Lump sum
- Two-Stage tendering
- Design and Build
- Cost plus
- Management Contracting
- Guaranteed Maximum Price
- Target Incentive Price
- Private Public Partnerships
- Build Operate Transfer
- Consultant and Contractor Framework contracts
- Supplier Framework contracts
- Partnering
- Supply chain management
**Contract Management**

We can provide a Contract Drafting and Negotiation service. This will take the risk-management report and procurement strategy and incorporate its principles into a clearly, concisely and coherently drafted contract and relevant ancillary or supporting contract documents. This enables the client to appreciate at an early stage the structure of the deal.

We maintain the client’s risk position from initial drafting through post-tender negotiations to avoid any discrepancies in the final executed contract and provide the client with assurance that the risk allocation and structure is being maintained.

Our people have training, experience on diverse projects and access to tools which include a library of contract forms to a variety of templates from the many and varied projects that we have worked on.

Our skills can also be used to negotiate amendments to a contract or supporting contract document that has been prepared by a third party.

During the construction stage we can advise the client on the proper course of action in contractual matters including notices, instructions, roles, responsibilities, obligations, payment, remedies, instructions, enforcement and handover.

---

**We have experience in preparing the following:**

- Contracts
- Construction contracts
- Professional appointments
- Supply Agreements
- Purchase orders
- Term supply contracts
- Volume discount agreements
- “Buy-club” agreements for major programmes
- Ancillary contract documents
- Pre-construction services agreements
- Novation deeds
- Supporting contract documents
- Collateral warranties
- Parent company guarantees
- Retention bonds
- Performance bonds
- Advance payment bonds
- Licenses
- Performance warranties
- Professional appointments
- Memoranda of Understanding
- Business to business agreements
- Bespoke drafting where needed
**Value Management**

The Value Management Model implemented by Turner & Townsend Korea provides a structured approach which facilitates continued value improvement throughout the life of the project / initiative. This model can be applied to projects of any size or discipline, from large construction and infrastructure programmes, to small service delivery schemes.

It achieves this by:

- Developing a clear list of objectives which are in line with the strategic goals of the sponsoring organisation, and agreed by all those involved in the project

- Continuously challenging the project team to demonstrate how value is being created and realised

- Facilitating the controlled analysis and evaluation of options/decisions against the project objectives, and based on the balance between benefit and risk

- Providing an audit trail which confirms why and on what basis key decisions have been made

The Value Management Model is structured into a number of key stages which take place throughout the life-cycle of the project, with no stage being either too early or too late for successes to be delivered and benefits to be realised.

VM0 – Strategic Value Management focuses on identifying opportunities at a strategic level to enhance the overall ability to deliver the objectives.

VM1 & VM2 – Tactical Value Management is concerned with identifying, exploring and evaluating options and opportunities to enhance function and performance.

VE – Value Engineering focuses on details within a design or process to identify the potential for value improvements.

PPE – Post Project Evaluation looks at lessons learnt and identifying potential for value enhancement on future projects.

Typically, at each stage, value management is delivered through facilitated workshop interventions, which represent the ‘hub’ of Turner & Townsend Korea’s involvement. Alternatively, if workshops are not appropriate or desired, scoping meetings and working groups can also be used.
Risk Management

Turner & Townsend Korea’s approach to Risk Management is based around a five-step dynamic process within which we promote and drive the ownership of risk and embed a culture of continued risk awareness. The schematic below demonstrates the connection between each of the five steps.

Five steps

Identification & Definition of Risk
- A series of facilitated interviews, workshops and/or questionnaires in which a broad spectrum of potential Risks, opportunities and issues are identified. We then challenge and check the information collected, arriving ultimately at a specific and actionable set of Risks.

Assessment & Evaluation
- For each Risk identified, the likelihood of occurrence and potential severity of impact is assessed. Having collated the assessments for all of these Risks, we work closely with the client to generate and evaluate a number of choices for further action.

Mitigation & Control
- Implementing the preferred course of action in response to the Risks identified. We will reduce Risk exposure through action planning, assigning ownership and management of realistic deliverables. Recognising that not every Risk can be fully mitigated, we also put in place a series of Risk Controls to manage any residual exposure.

Monitoring & Reporting
- Setting benchmarks for performance and maintaining tight control of the Risk Management System. Identifying changes in circumstance and amending the assumptions upon which the Risk information is based. Looking forwards to spot trouble and ‘planning-in’ to avoid disruptions. The process outputs can be collated and presented in a variety of ways, providing our clients with the level of detail they require to meet their objectives. Examples include executive summaries, Risk registers, action plans, quantitative and qualitative analyses and more.

Improve
- As reflective practitioners we continually challenge our people, tools and processes to find ways to improve our service. As we learn more about your organisation and our professional relationships mature, we apply lean methodologies to deliver results even more quickly and efficiently. Where there is an opportunity to improve, we take it.
Dispute Avoidance and Claims Management

The Turner & Townsend Korea claims management role may be the defence of an incoming claim on behalf of a client, the preparation of a claim on behalf of a client or assisting and advising existing consultants on a project. The role may involve interpreting contractual entitlements and influencing decision making in respect of handling the claim, use of SWOT analysis and tactical positioning for pursuit or defence of claims utilising our extensive knowledge and experience.

We can carry out an appraisal of contractual liability and / or entitlements and will also provide and clarify the commercial position under contentious final accounts including extensions of time. We can then assist the client in the negotiation of the issues to achieve a settlement of the dispute on the client’s behalf. Early engagement to manage claims offers the best opportunities to avoid disputes, by resolving issues amicably under the contract, and by mediating solutions as part of claims management.

Key issues

Claims may initially arise in formats which are not readily identifiable. They may be appended to interim applications, may become apparent through contract correspondence or may arise from formal claims submissions. They may be for extensions of time and associated loss and expense, but can also relate to issues such as disputed rates, variations, Provisional Sums and Contract/Specification interpretations, or even the Contractor going into Receivership.

Turner & Townsend Korea will work with the client and consultants as required to understand the issues giving rise to the claim. Integral to the successful defence of a claim is the quality of supporting documentation, which governs the analysis which can be carried out to establish the correct contractual Liability and Quantum of the claim.

We may act as Claims Manager, as External Advisor, or as a Project Team member, depending on whether it is in the best interests of the Client for our involvement to be high or low profile.

The timing of our involvement is critical. Early involvement produces significant advantages; there is more scope for us to proactively manage the claim process and ensure that the quality of documentation requested is produced. Early involvement gives greater opportunity to influence and affect the commercial outcome.

Should settlement not be achieved by negotiation, Turner & Townsend will assist the client in taking the next steps forward in crystallizing the disagreement as a formal dispute, and moving towards formal Dispute Resolution procedures.
Lifecycle Costing

It is widely accepted that whole life cycle costing can clearly demonstrate cost and value are not the same. Many investors in both the public and private sectors are prepared to consider a higher initial capital commitment today if an accurate Whole Life Appraisal can show that this will create commercial advantages tomorrow. This focus on long term, holistic viability has been particularly important in the application of new procurement strategies for project with 30 years lifecycles such as PPP/PFI.

As a leading cost management consultant, Turner & Townsend Korea has invested in the development of unique and sophisticated cost databases and whole life cost models. The models have been used to illustrate in a non-technical manner that the extra costs of sustainable development can have commercial benefits over the life cycle of a building or other capital asset.

Quite often analogy is drawn from whole life project cost and an iceberg. Like an iceberg, the bulk of a project’s whole life costs, such as operating and maintenance costs, are hidden beneath the surface. The Operating costs for an asset over a 30 year cycle are estimated at five times the capital cost, and the cost of occupation could be 200 times greater. And like an iceberg, sustainability and environmental considerations are an increasingly crucial factor in trying to predict future outcomes.

The key benefits of Whole Life Analysis services are:

- Improvement in design detailing and co-ordination leading to better informed decision making in the choice of systems and components.
- Modelling of the future cost and carbon implications of design proposals made today.
- Tools and targets to manage and control energy consumption and carbon emissions.
- Improved and accurate budgeting for operation and maintenance activities.
- Whole life cost estimating of existing and proposed fixed assets, processes and developments.
Programme Management

The Programme Management Office (PMO) is a key management tool for a major project or programme. The PMO is a support function providing resources, systems and procedures to produce prompt and accurate cost and time information to enable informed decisions to be made on a project. We commonly work within client’s staff and other team members to integrate our services to deliver PMO services.

Approvals and Sanctions
The overall governance process for the project / programme is established and controlled by Turner & Townsend Korea’s PMO team.

Baseline Schedule, Risk and Estimate
It is vital to establish robust baselines for the schedule (timeline) and estimates for construction and operating costs. Even if costs are confidential it is important to assign budget holders who are responsible for advising on all financial matters since there is an interface with risk and time. These documents are key to management and control of the programme or project.

Supplier and Subcontractor Controls
As contracts are formed we establish supplier controls so that all supplier performance data is seamlessly integrated into the overall programme performance and we are able to adequately assure supplier performance.

Stakeholder Management
We work with the client to establish a stakeholder management plan that recognises the impact and influence that stakeholders can have on the success of a programme or project.

Document Control
We capture all records and stakeholder communications via a document control system that gives accurate and up to date information that is necessary for the various stakeholders to use in order to perform their section of the programme or project.

Project Reports
We collate and produce all necessary project reports that formally capture the status of the programme or project and allows informed decisions to be made.

Change Control
Changes to the baseline documents are managed via a change control system so that the client sanctions the necessary changes that have an impact on the programme or project. Risks and issues are addressed in this system in an integrated manner.
**Progress Measurement and Earned Value Analysis**

**Planning Services**

Progress measurement is a comparison of the ‘actual’ progress against the ‘planned’ progress on a project. Turner & Townsend Korea establishes a logic-linked baseline schedule at the commencement of a project using recognised software systems, such as Primavera P3e, that forms the basis for periodic reviews to determine how much progress has been achieved. Forecasting both positive and negative deviations from the planned progress allows the project team to initiate changes.

**Progress Measurement**

By recording and monitoring progress during the life of a project it is possible to track the impact of changes to the scope of work, the basis of cost and the utilisation of resources. An as-built record of works is therefore generated.

Turner & Townsend Korea’s planning engineer will develop a Project Progress Measurement Plan that covers:

- Physical progress of key deliverables within each phase (design to handover)
- The method to show progress
- Overall project percentage complete
- Earned value analysis

To avoid subjective opinion, measurement of project progress is based on physical deliverables through each gateway stage of the different activities such as design, procurement, off-site fabrication and construction. Typical measurement of progress examines and measures:

- Progress of drawings and specifications production and approval
- Development of bid documentation and placement of orders
- Design, manufacture and delivery of off-site components
- Quantities of works installed on site

**Earned Value Analysis**

Earned value analysis (EVA) provides a single measure for the overall progress across the different activities of a project. It shows how much of the budget should have been spent in view of the amount of work done at the current time and the baseline budget cost assigned for the activities or resource. Activities for a project are shown in a Work Breakdown Structure and are weighted to show their value against the overall project budget. Then physical progress is measured in order to calculate the overall earned value.

EVA also provides a measurement of the efficiency or productivity of a project and an objective measurement of the work achieved. This measurement allows the client and project team to take any necessary corrective action and project decisions.
**Development Monitoring**

The Development Monitoring role is a process whereby a documentation review and monitoring exercise is carried out on behalf of Funders (Clients) prior to lending, during construction and on completion of a development. Turner & Townsend Korea’s approach to Development Monitoring acknowledges the need to work with parties in the development team whilst recognizing the need to balance this with our commitment to safeguard our Client’s interests and provide independent advice.

We have advised every stage of the major project lifecycle, from both the procurer and the deliverer’s perspective, leading our Clients successfully from concept to completion. In addition we have given specialist advice to investors and purchasers of project based transactions and have advised insurers on bespoke project risks.

The key issues to consider in relation to this service are:

- Understand the Client’s requirements and objectives.
- Identify and mitigate construction risk.
- Safeguard the Client’s interests.

**Key Activities**

Our approach is tailored according to the Client’s requirements and the stage of our appointment becoming effective, but will generally involve:

- An initial review of the development appraisal.
- Review and report on robustness of cost plan and proposals.
- Review and report upon procurement proposals, construction methodology and programme.
- Check compliance with statutory obligations.
- During the construction phase, attend progress meetings, review valuations, monitor variations, and comment on any project related issues.
- On completion, review and comment on the final account, obtain copies of completion certificates and close any outstanding issues.