

This appendix is based on a presentation given by Tim Brick on Project Management.

The main parties to the contract are:

- The Government of Ireland (exchequer funding) – Sole Financier
- Department of Transport – Sponsoring Ministry
- National Roads Authority – Funding Agency
- Dublin City Council – Employer & Contacting Party
- Nishimatsu Mowlem Irishenco – Contractor & Contracting Party
- Kellogg Brown & Root Limited – Construction Supervisor

Construction Supervision

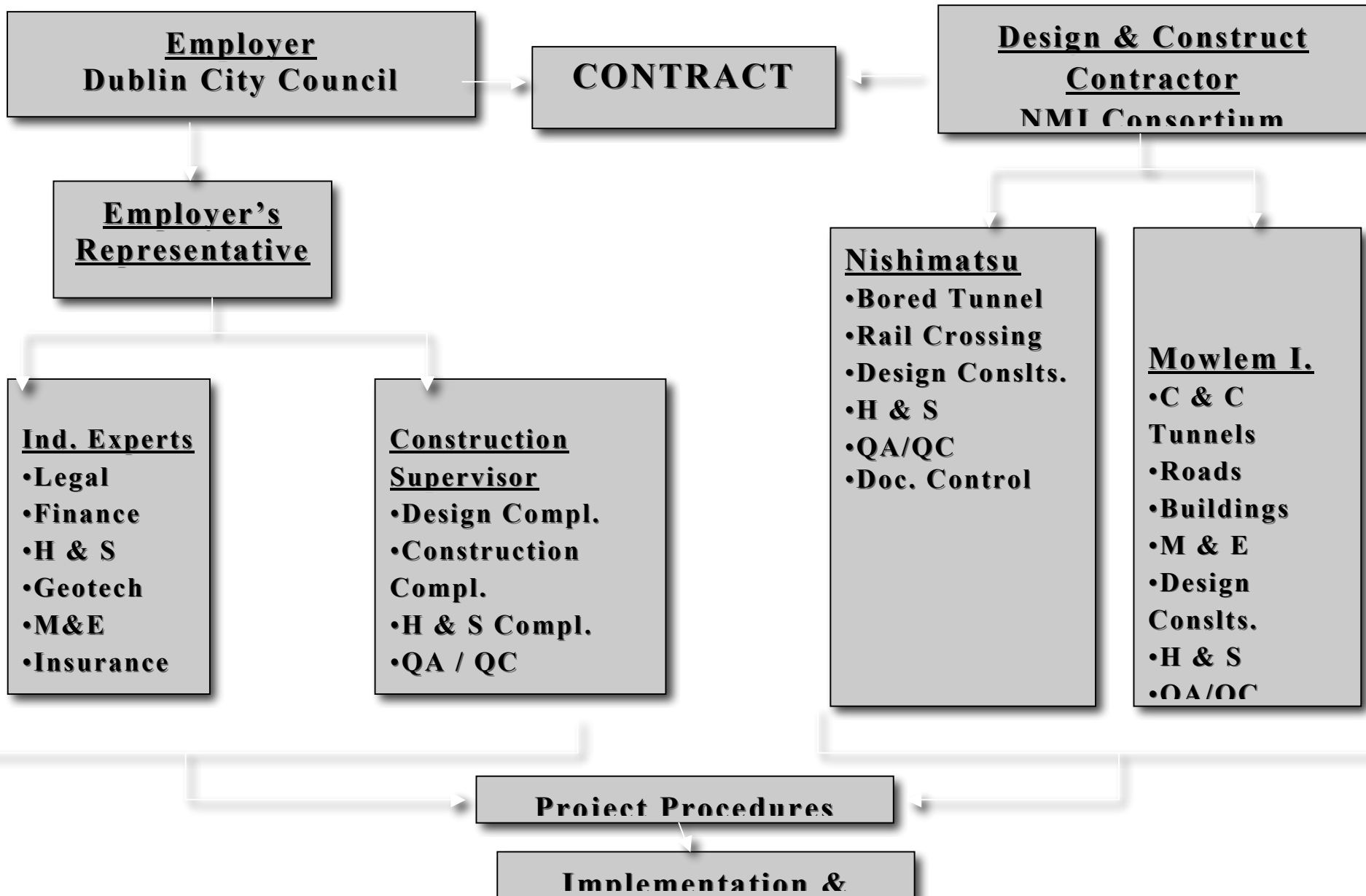
The Construction Supervisor

Ensures Design Compliance with Employer's Requirements.

Ensures Construction Compliance with Employer's Requirements

Discharges those duties and functions of Employer's Representative as may be delegated to them by the Employer's Representative.

PROJECT CONTROL STRUCTURES (Simplified)



Project Management Practices

Scope Management	Communication Mgt.
Time	Risks & Insurances Mgt.
Cost	Procurement
Quality	Integration
Health & Safety	Community Relations
Human Resources	P.R. / Media

Scope Management

- Under design and Build – minimise change- expensive
- All changes must be economically and technically justified
- All changes require a NRA authorised Variation Order
- All changes/ modifications require a Change Order record of who / why/ when/ where and how much before implementation.

Time Management

- Basic Primavera/ P3 Clause 14 programme
- Review requires Employer's Representative approval
- Weekly and monthly monitoring
- Clause 66 decision required on claimed E.O.T entitlement
- Critical path runs through tunnels' bores and the M & E

Cost Management

- Schedule of Milestone Payments in Contract
- Contractor's Cash Draw Down Curves required up front
- Cash Flow Problems – required Milestones to be disaggregated to 1020 No.
- Monthly reporting and multi-annual expenditure and overall budget profiles/ tabulations required by the NRA (via electronic systems)
- No expenditure possible unless a City Manager's Order in place
- Project subject to regular audits by A.G., L.G.A., N.R.A., & I.A. of Dublin City Council (Professional Accountant full time on site team)
- Project's Multi Annual Plan (M.A.P.) must comply with NRA's National M.A.P., as agreed with the Dept. of Finance.

Quality Management

- Contractual Requirements for Contractor to submit QA Plan.
- Contractor's (& Designer's) QA /QC Plans subject to Employer's approval (includes for full traceability and process audits)
- Construction Supervisor monitors compliance
- Sanction – non-conformance record raised
- Persistent failures jeopardises final acceptance by Employer
- Plans subject to continuous update
- Liability post construction – NMI 15 yr. Maintenance Contract

Human Resources

- Over 500 persons engaged
- Employer's Representative, required to approve all parties' Senior Managers
- Maintaining calibre a constant concern
- Joint teams established to work on specific problems
- High staff turnovers combated by contract and shift completion bonuses- not fully successful- long hours and constant deadline pressures contributory.
- Problems encountered by intense fragmentation and sheer number of sub-contractors
- Common Mission Statement agreed
- Partnering approach failed (early breakdown)

Communication & Document Control

Formal	- Monthly & Quarterly Progress Meeting - Weekly Construction, Programming, Commercial, Health & Safety, Quality and Site area meetings
Informal	- Daily face-to-face meetings with all senior Management arising from shared offices.
Document Control	- Parallel and similar systems deployed (i.e. MS Access type) - Average of 40,000 No./ year documents, letters, reports, drawings, etc.

D.C.C. Customer Charter governing what is acceptable rigidly applied.

Risk Management

- Both Contractor and Construction Supervisor specially charged with establishing the Project Risk Register.
- Risk Register reviewed and updated monthly
- Risk Management and mitigation measures actively monitored
- All works activities governed by a Method Statement prior approval process which
- Requires risk assessments and safety plans as inputs.
- All party Risk Assessment & Management Workshops held regularly

Insurances Management

Employer's controlled Insurance under Clauses 21/25 of Conditions of Contract applies

All parties to the contract covered and premiums paid for by the Employer

Contractor's All Risks, Public Liability and Professional Indemnity cover provided by Employer's Insurances

Insurances placed and managed by broker (Willis), selected via public procurement process, prior to award of main contract

DCC responsible for all liaison and co-ordination of claims, etc. via insurance broker

DCC manage property guarantee issued to resident's overhead TBM bores and processing of claims and property surveys.

Procurement

- All the contracts and retention of Service Provider / Consultants subject to EU
- Procurement Directives governing Public Tendering.
- Main Contracts employed Pre-qualification Processes
- Full debriefing to unsuccessful applicants expeditiously provided
- A clear, transparent and defensible award criteria and marking system is provided to
- bidders prior to bid submission dates.
- Independent Assessment and Interviews Boards used
- No legal challenges to procurement processes encountered to date

Project Integration

- Process required to co-ordinate plans for project development, execution and overall change control
- DCC are responsible for the strategic management of these processes
- Since inception (1995) a dedicated project team has been in place to do so
- That team (with HQ support) have steered the project through the statutory, legal, financial, legislative, tender, design, construction, political and P.R.
- At the 90% completion of the execution stage that full time attendance and commitment remains vital

Health & Safety Plans

- Governing legislation- 2001 Regulations
- One integrated H & S plan required by Contractor
- Each discipline (i.e. bored tunnel, cut & cover, M &E etc.) requires a Health & Safety Plan
- PSDS & PSCS Positions – initially with Contractor, now with Employer
- Four Co-ordinators from Contractor organisations
- H & S Plans must achieve H.S.A. approval
- Employer retains “ Independent Advisor” (Dr. John Anderson)
- H.S.A. Inspectorate’s presence on site extremely active
- Fragmentation of sub-contracts causing some difficulties.

Community Relations/ Media Management

- A common PR/Media strategy has been agreed by all parties, under DCC’s PR advisors.
- Target audiences and appropriate media outlets or channels identified
- Pro-active, purpose driven plans drafted at all party weekly meetings
- A common, unified approach is agreed before any press or media announcements made.
- The Employer’s Representative designated as official project spokesman

Media training provided for all parties’ Senior Management.