



Project Controls Expo – 18th Nov 2014

Emirates Stadium, London

Project Controls – The Legal Perspective

About the Speaker

Rob Horne

Partner, Trowers & Hamlins

Rob Horne is a partner at an international law firm and has specialised in finding solutions to project based problems in the construction industry for some 20 years. He represents and advises clients on major projects in the UK and internationally, particularly in the Middle East, on projects as diverse as PFI hospitals, oil and gas pipelines, major new rail connections and large scale mixed use developments.

He sits as an adjudicator and arbitrator and is a recognised expert in the NEC form of construction contract. He is the author of the book "*The Expert Witness in Construction*" and a contributing author to the book "*Human Dynamics in Construction Risk Management*" as well as a regular speaker on a wide range of construction and project based topics

Structure

- 1. What are project controls**
- 2. Spheres of influence**
- 3. Controlling the spheres**
- 4. Project Molecule**

PROJECT CONTROLS

and they are...?

Defining Project Controls

- What is a project control
 - A control
 - Over the project
- Ok, so what then is a project
 - A set of tasks to be carried out
 - Generating an outcome
- And the control?
 - Mechanisms to track the tasks and outcomes
 - Requirements on how tasks are to be carried out
 - Obligations to achieve required outcomes
 - Some sort of enforceability

Defining Project Controls

- What ties all those involved in a project together?
 - Camaraderie
 - The joy of seeing a job well done
 - Being paid
 - Legally enforceable rights and obligations
- Methods of control
 - Reporting requirements
 - Programmes
 - Personal ethics
 - Limits on authority
 - Change control
 - Payment

Defining Project Controls

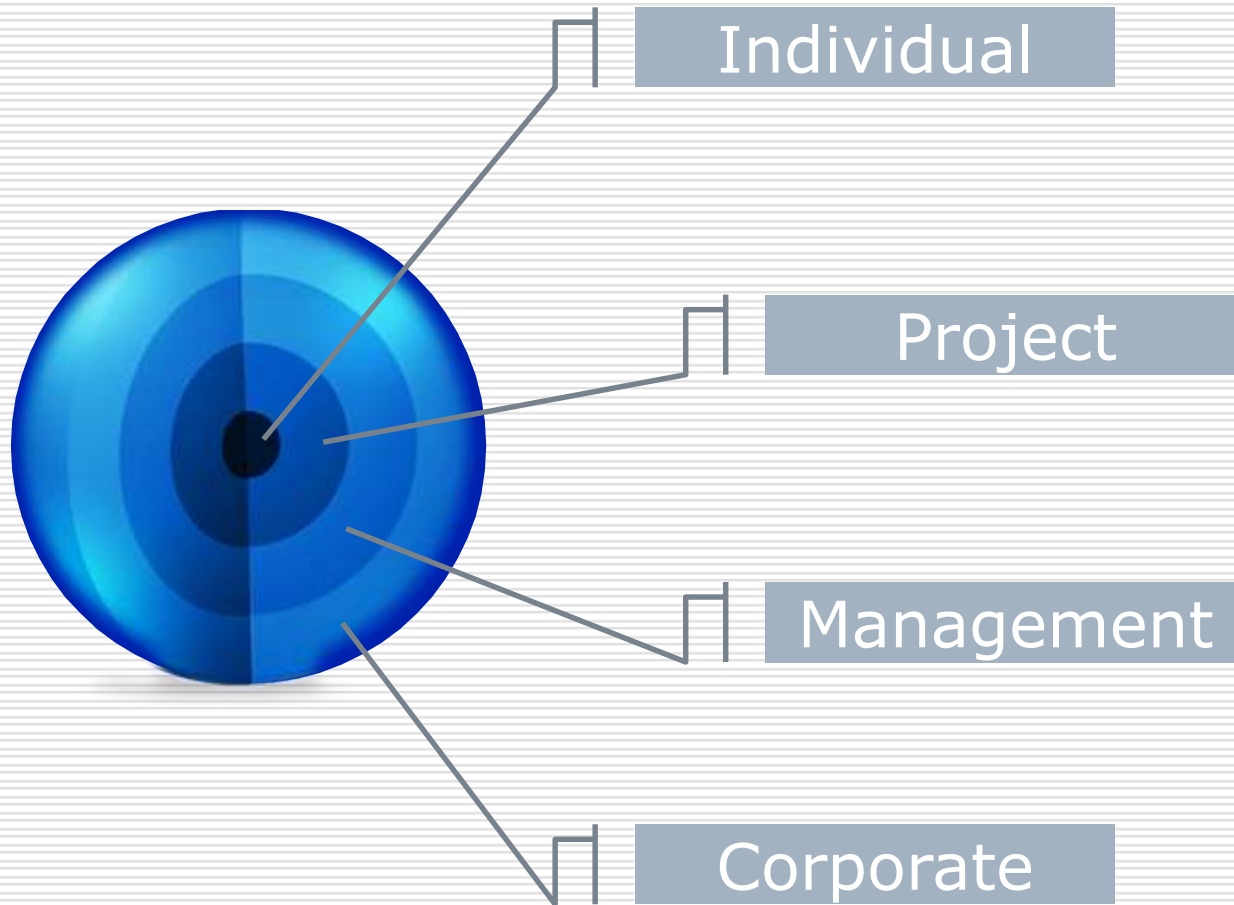
- Where is the legal part?
 - Supply networks based on contracts
 - Subcontracts
 - Supply contracts
 - Contracts of Employment
 - Design contracts
 - Supervisory contracts
 - Tortious obligations in relation to your “neighbours”
 - Society imposed requirements
- How can I see the legal controls?

SPHERES OF INFLUENCE

Circles, Spheres and Bonds

- “Sphere of influence” is often talked about
 - What does it mean
 - Start with two dimensions
- What are the circles of control?
 - Circle of personal control
 - Circle of Project Control
 - Circle of Management/Regional Control
 - Circle of Director/Corporate Control
 - Circle of Group Control
- Overlay those together and you have a sphere of influence

A Project Element



Circles, Spheres and Bonds

- Every party to, or element in, a project will have its own circles of control and spheres of influence
- Without links between the elements you have a gas
 - Very flexible
 - Very unpredictable
 - Easily Influenced
- The more bonds you add the more stable and predictable the structure
- Linking everything you have a solid
 - Very stable
 - Very predictable
 - Very difficult to change

Circles, Spheres and Bonds

- Get the bonding right and you have a liquid
 - Reasonably stable
 - Reasonably adaptable
 - Reasonably predictable
- Bonds were not all created equal
- A bit of chemistry but bear with me...
- Covalent (strong), Ionic (weak), Hydrogen (less tangible)
 - Some can be changed easily others less so
 - The types of bonds carry over to a project
- Why is this important?
 - Bonds are the means of introducing control
 - Understand the bonds and you understand the impact of control

CONTROLLING THE SPHERES

Focus on Bonds

- Strong bonds
 - Health and safety/CDM requirements
 - Equal opportunities legislation
 - EU procurement directive
- Weaker bonds
 - Contractual bonds in your circle of control
 - Contractual bonds in your sphere of influence
 - Contractual bonds you are aware of but cannot alter
- Less tangible bonds
 - Contractual bonds outside your sphere of influence
 - Duty of care
 - Best value requirements in public contracts

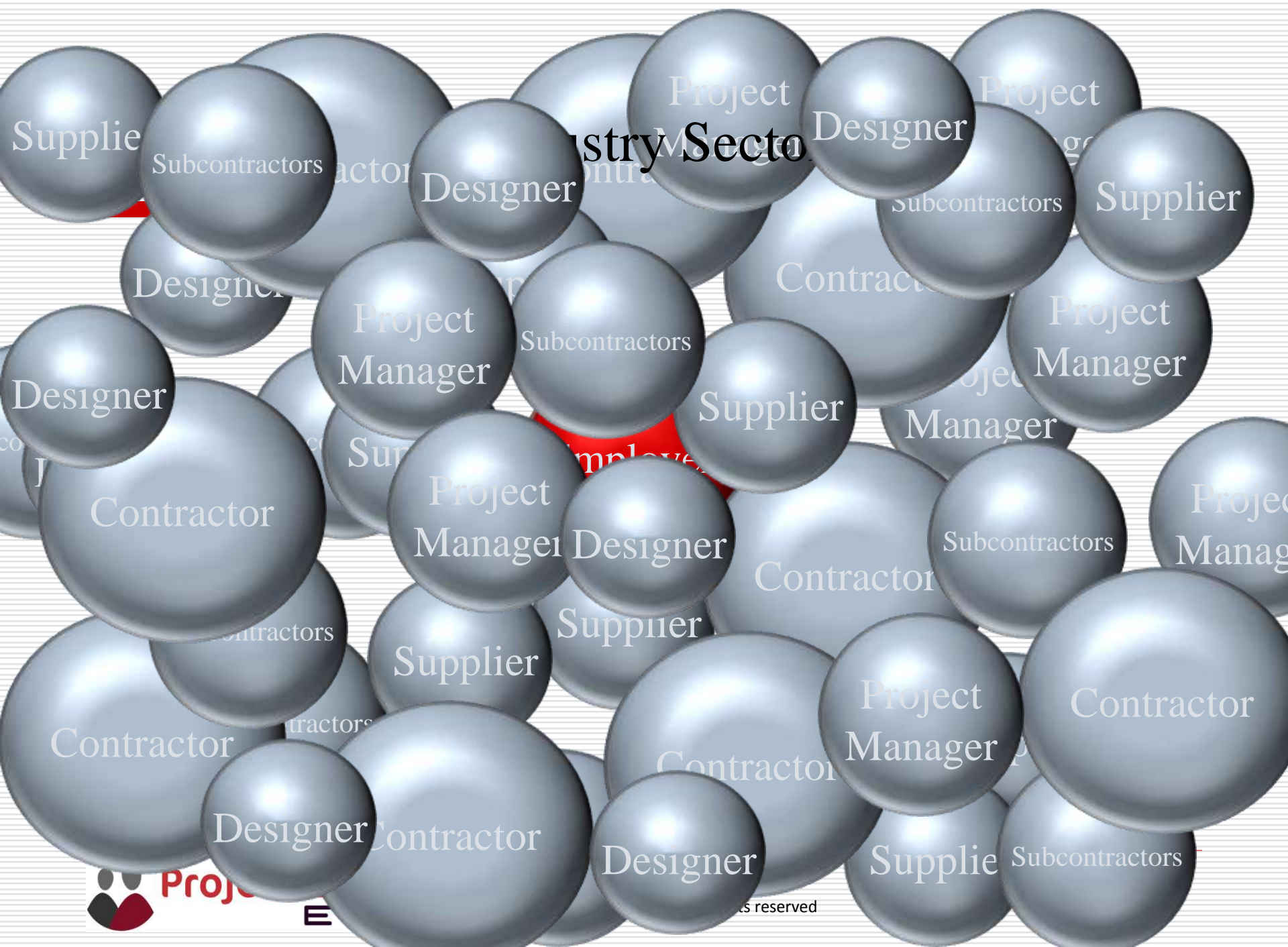
Bonds equal Project Controls?

- But project controls are all just practical matters...
 - Are they? Really?
 - Practical process usually have a deeper basis
 - Can be in circle of control or sphere of influence
- Classic project controls I – A programme
 - Clearly a project control
 - All about practical management
 - Almost always a contractual requirement
 - The more proactive the contract the tighter the bond
- Classic Project Controls II – A health and safety plan
 - Practical, project control
 - Statutory obligation

Project Molecule in Practice

- Summary
 - You can establish a lot of project controls in certain areas
 - In fact, the amount of project control is almost limitless
 - More control doesn't mean better control (Ewen will look at this)
 - Structuring the Project Molecule correctly at the outset is far easier than trying to change it




Industry Sector

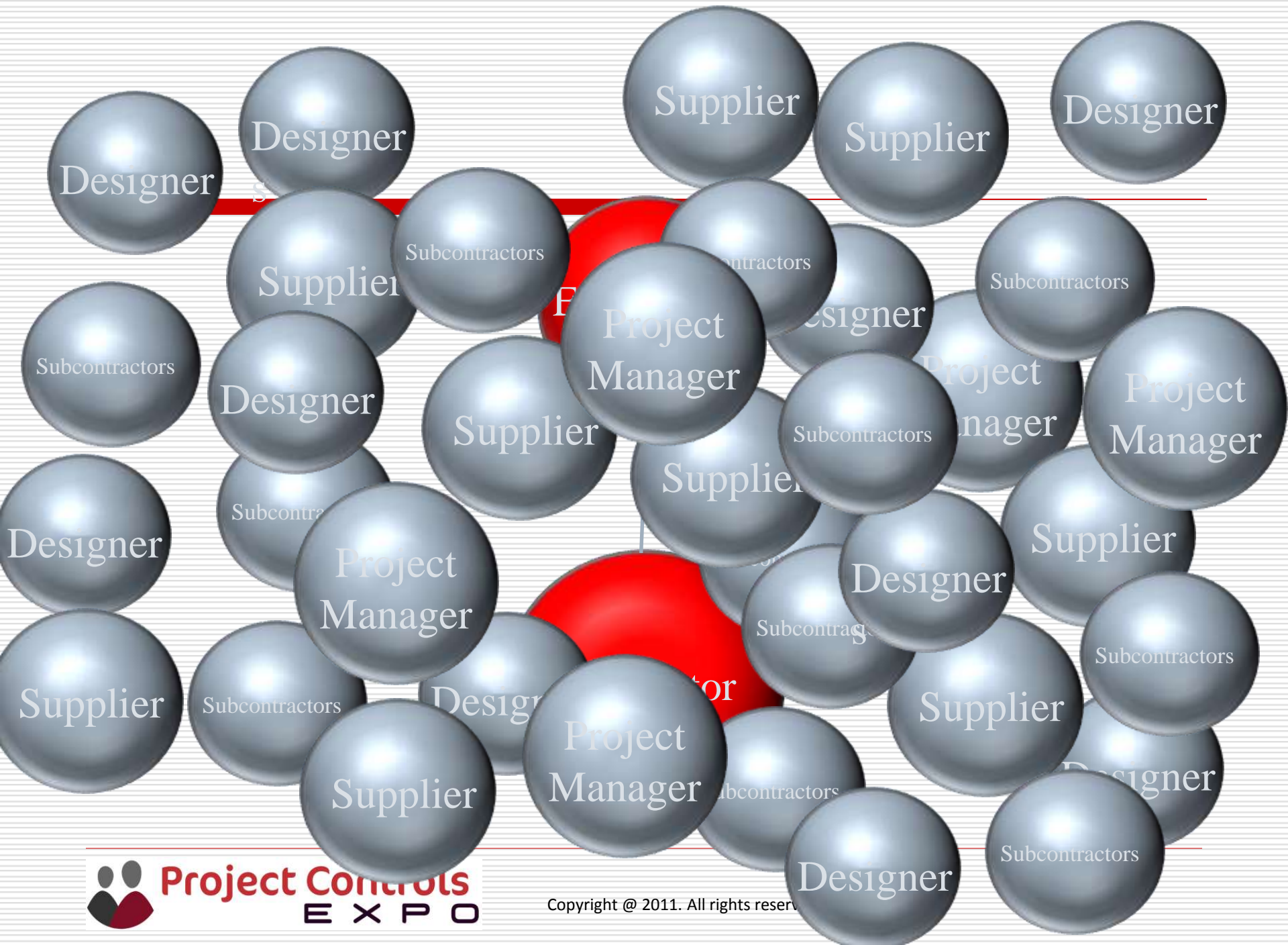


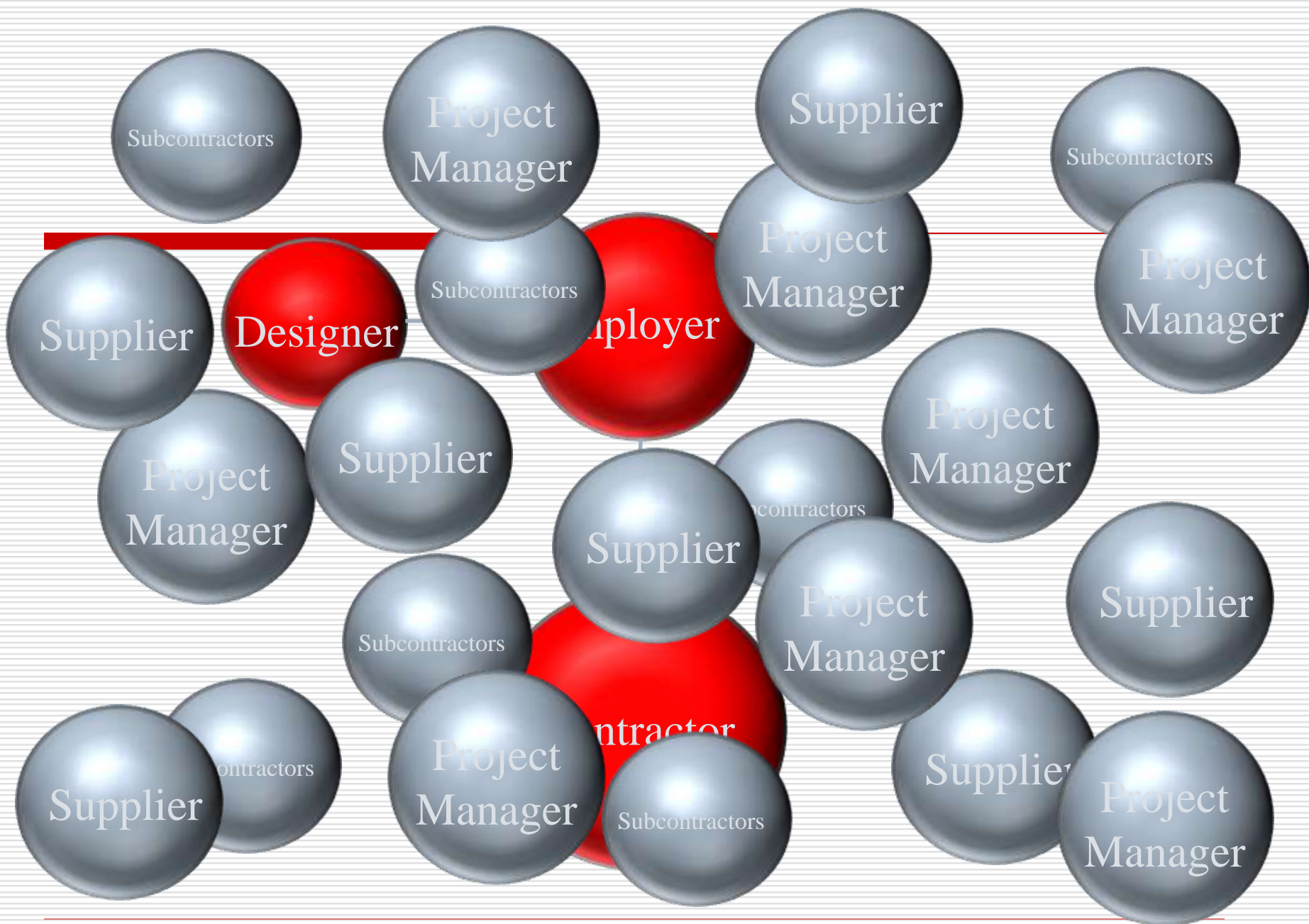
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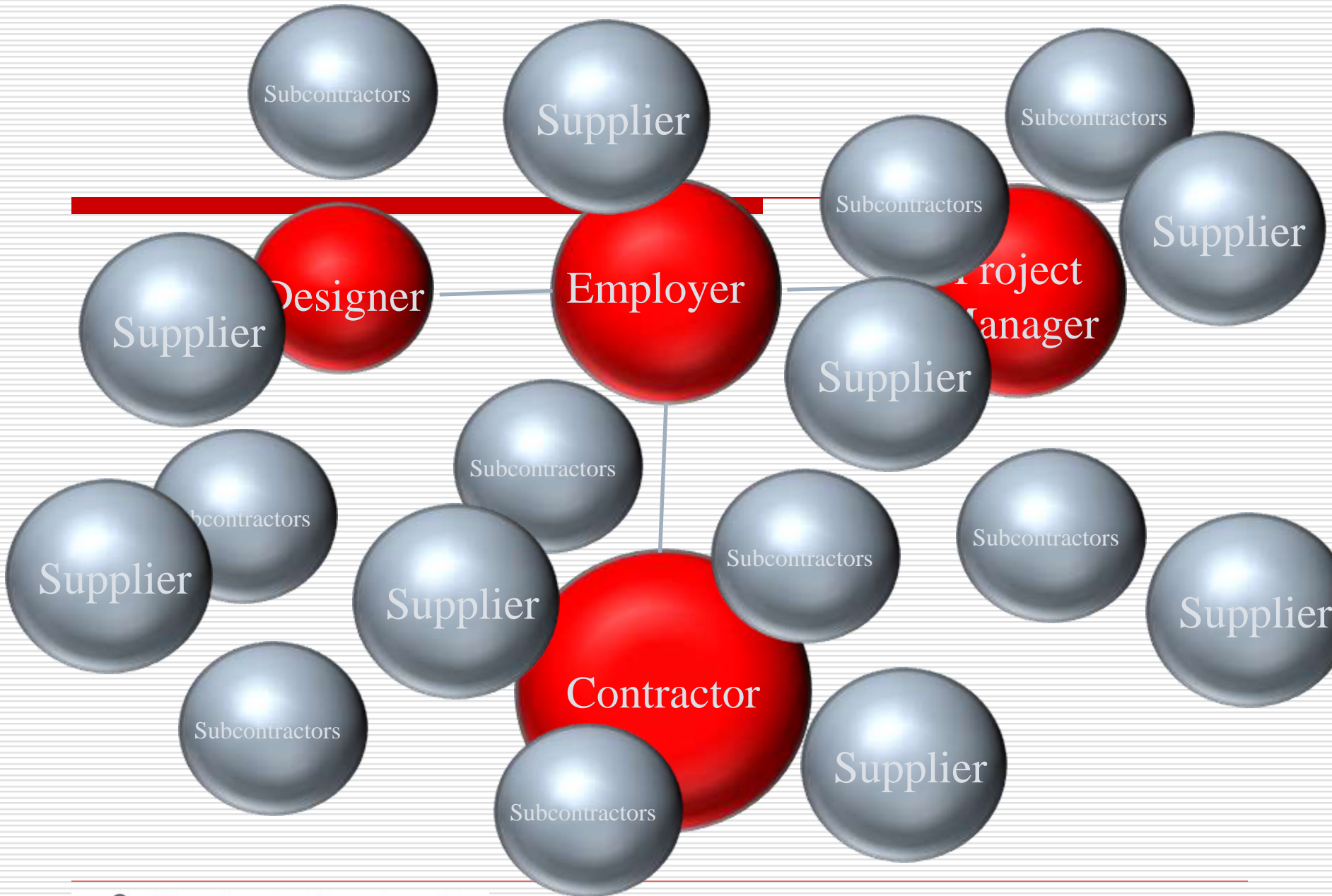
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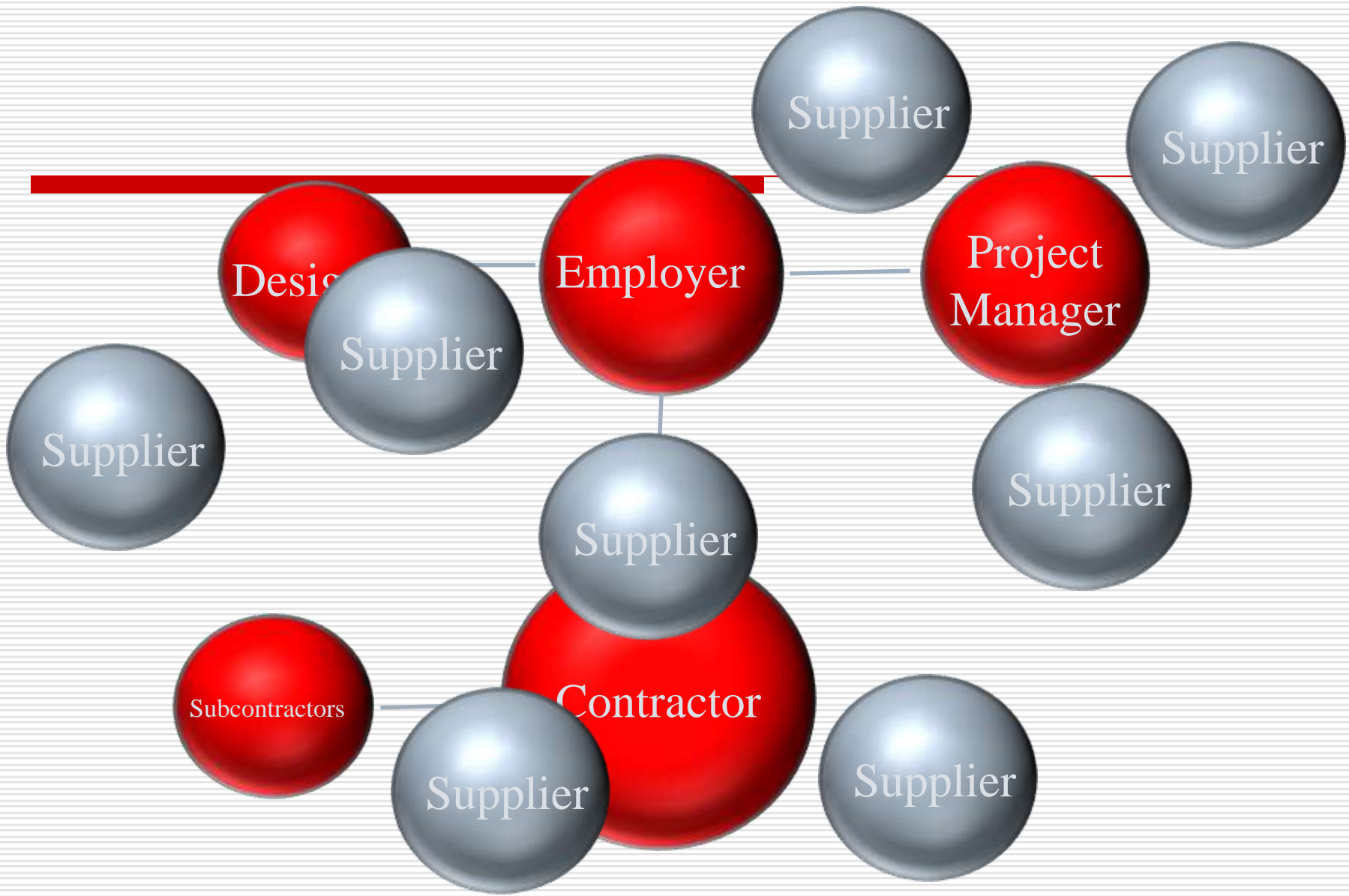
Project Element Bonds

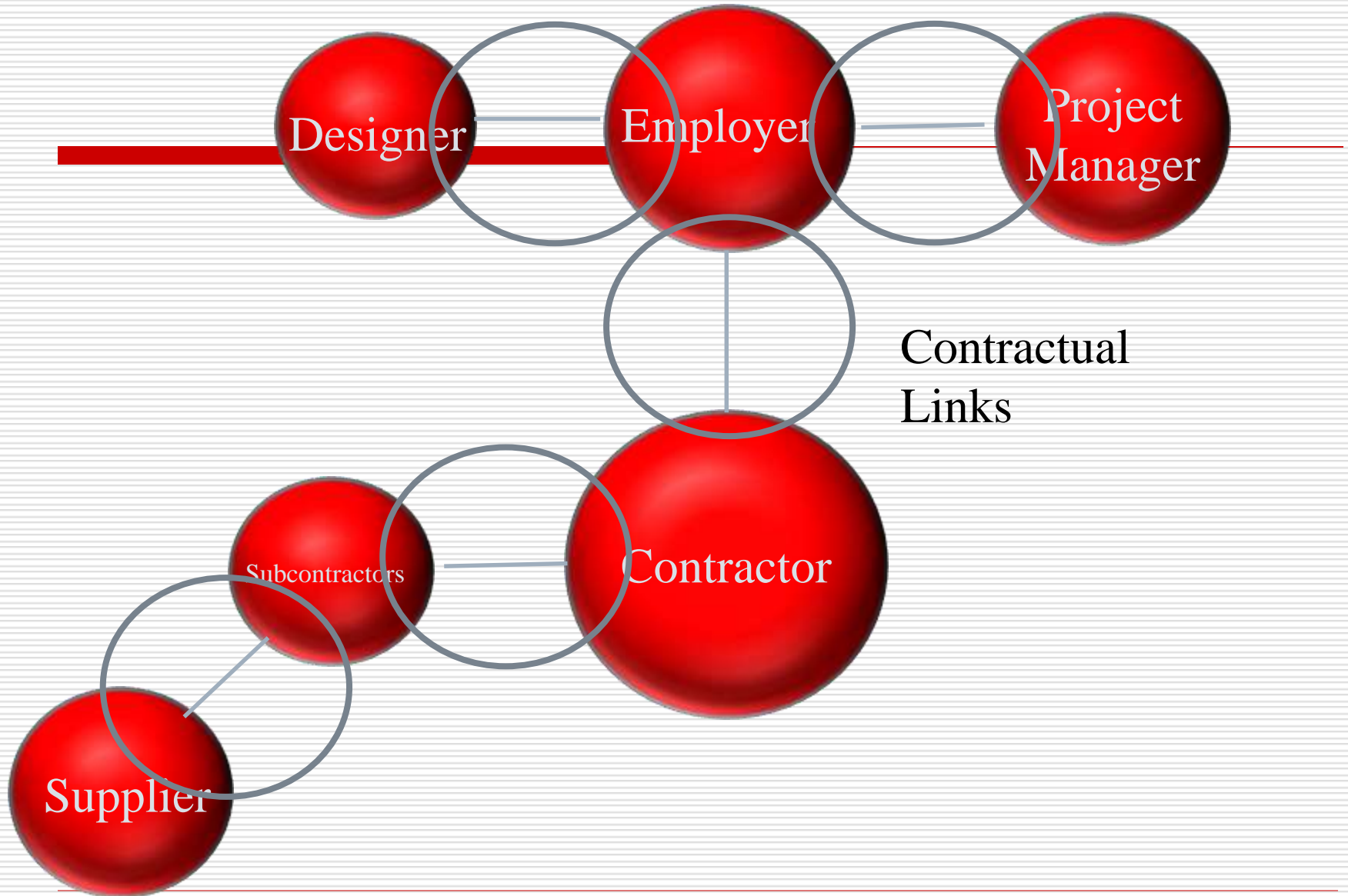
-  Statutory Bonds (Strong)
-  Contractual Bonds (Weak)
-  Common Law Bonds (Less tangible)

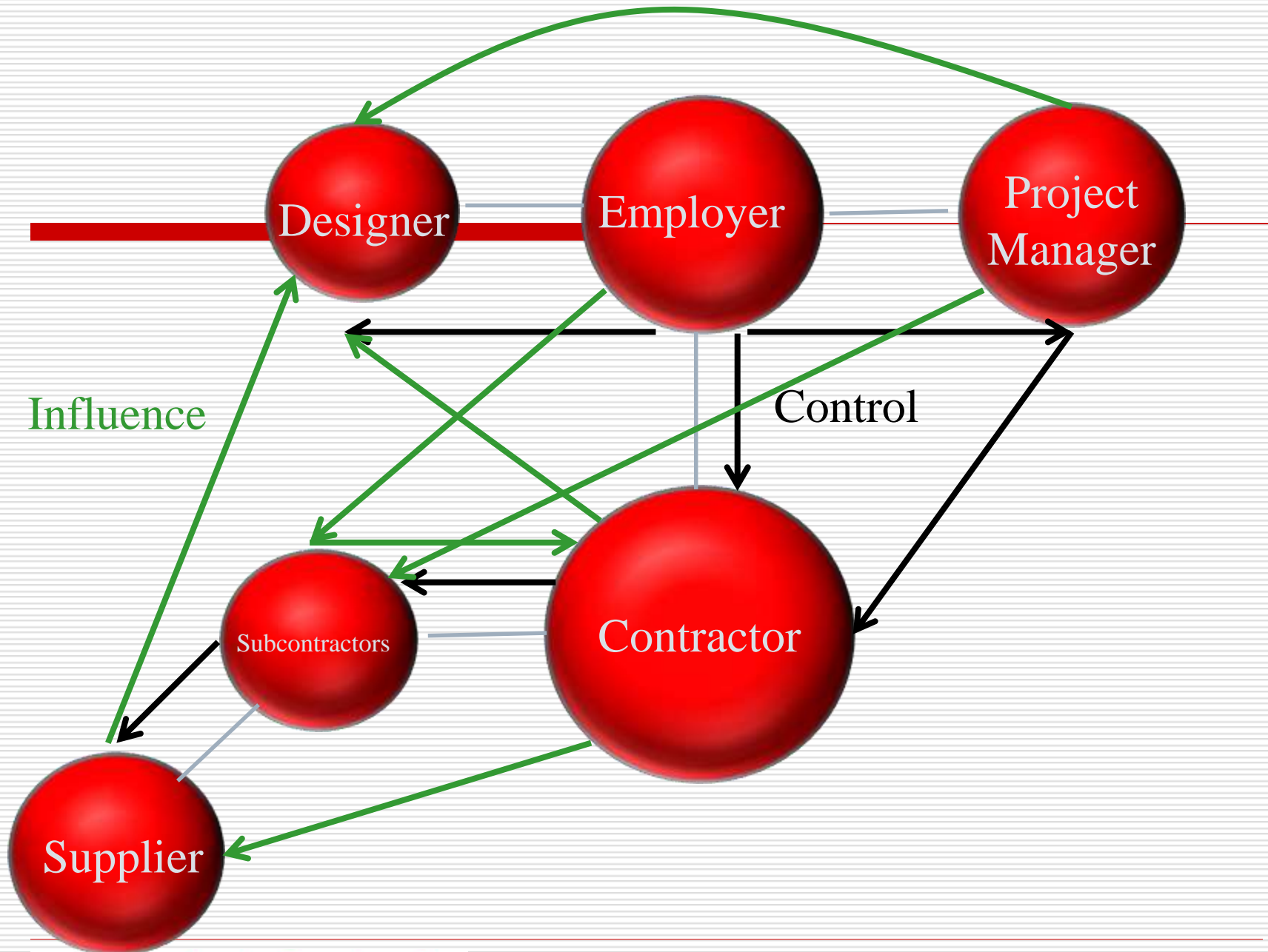


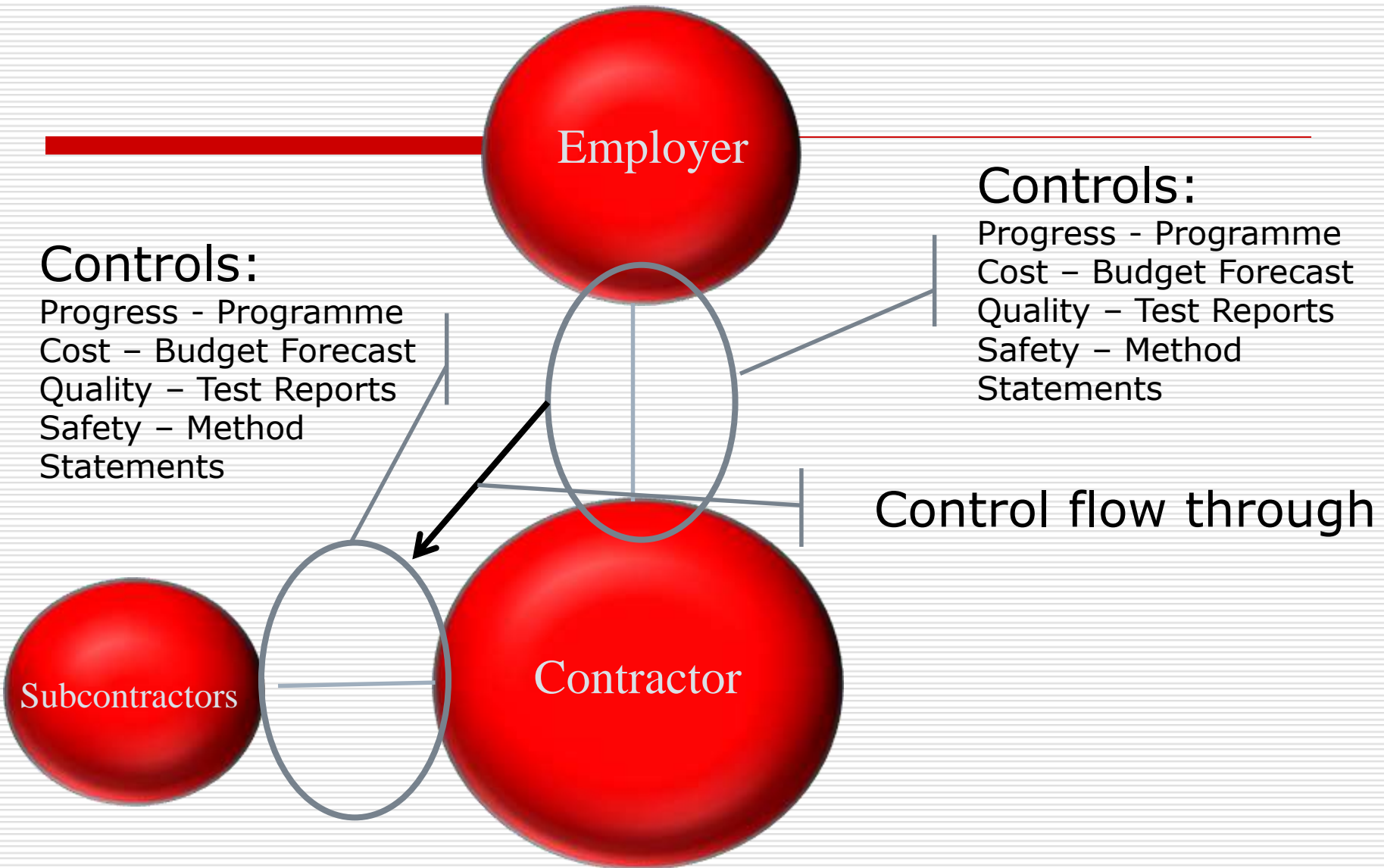


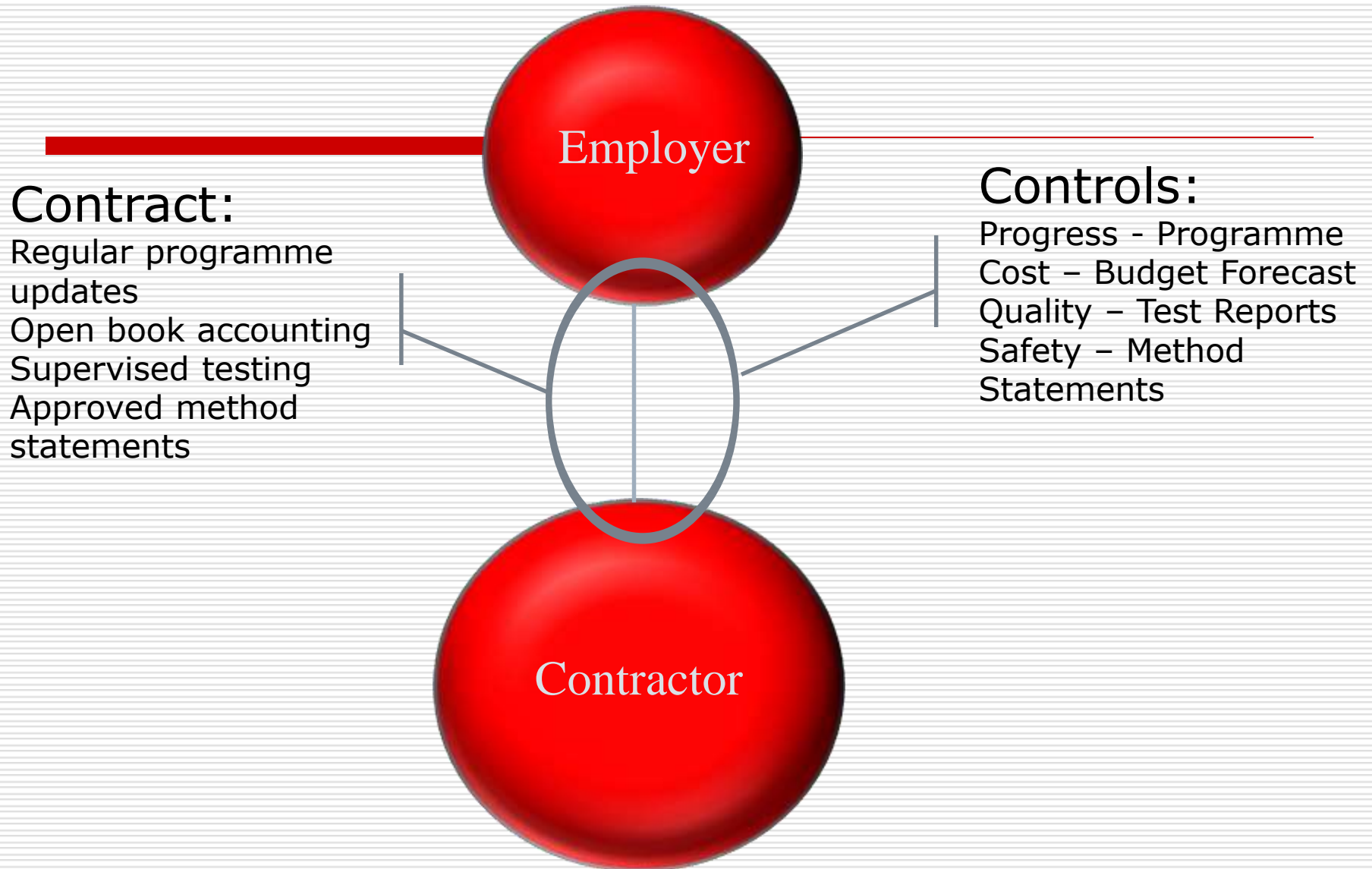












Project Molecule

- ❑ Different types of projects can add additional elements
- ❑ Different methods of procurement change the bonds
- ❑ Different contract forms generate different shapes of molecule
- ❑ Different legal systems impact the strength of the bonds
- ❑ All of the bonds serve one purpose, project control
- ❑ The control can be direct
 - Right and obligation to carry out work
- ❑ The control can be indirect
 - Payment is conditional on application
- ❑ “[Horror fiction [or the law]] shows us that the control we believe we have is purely illusory, and that every moment we teeter on chaos and oblivion.” — [Clive Barker](#)

About the Speaker

**Ewen Maclean, Eur Ing MEng (Hons) MSc (Const. Law & Arb) CEng FICE FCI Arb
Principal, Berkeley Research Group**

Ewen is an experienced expert in the field of programming; delay and disruption; and associated prolongation costs in relation to construction and engineering projects. In particular, he has worked for both international consultants and contractors and has first-hand experience of assisting and representing clients in litigation, arbitration, mediation and adjudication, both for the claimant and respondent. He has prepared numerous expert witness reports; drafted standard forms of contract and lectured on various commercial and contractual subjects within the construction industry. Ewen has also acted in commercial negotiations and settlements, resolving potential disputes as well as providing advice on contract procurement.

Ewen is well versed in many of the standard forms of construction contract including the NEC, JCT, ICE, FIDIC, GC Works Conditions as well as bespoke forms of contracts including PFI contracts and has worked on contracts that span, inter alia, major building, civil engineering, oil and gas, energy, mechanical and electrical, pharmaceutical, infrastructure including highways and rail as well as fit-out works.

Structure

- 1. Introduction**
- 2. Procurement and Contracting**
- 3. The Project Controls Toolbox**
- 4. The Scales of Justice**
- 5. Can You Have Too Much Project Control?**
- 6. Summary**

Introduction

	PROJECT LIFE CYCLE					
	Planning	Design	Implementation	Testing	Turn-Over	O&M
Business & Regulatory Environment	Project Purpose Funding & Approval	Business Needs Assessment	Executive Oversight & Support and Regulatory Relations		Continuous Improvement and Reasonableness Reviews	
Scope & Change Control	Definition of Project Elements and Benefits	Design Project Components	Change Control Process		User Acceptance Process	Operations Acceptance Process
Time Management (Schedule)	Project Schedule Requirements	Baseline Project Schedule	Detailed Schedule Management		Schedule Completion Check List	Ongoing Maintenance Schedule
Quality & Inspection	Project Concept & Performance Requirements	Design Review & Approval	Quality Assurance Process	Conduct Inspections & Quality Review	Close Out Check List	Quality Assurance Process
Cost Management	Capital Budgeting and Ratemaking Approach	Cost & Schedule Forecast	Cost Control		Final Payment / Retention Release	O&M Budget Process
HR Management	Project Management Plan and Staffing			Staff Reductions / Transfers	Operations Staff Planning	Ongoing Requirements / Skills Review
Communication & Reporting	Project Reporting Requirements	Project Status and Regulatory Filings	Project Cost, Schedule & Budget Variance	Project Quality Performance	Project Close-out Performance	Financial Reporting
Procurement & Contracts	External Contracting Options	Vendor Qualification / RFP Process	Vendor Selection / Contracting	Contract Compliance Review	Trouble-shoot & Punch List	Vendor Qualification / Selection
Risk and Issue Management	Project Risk Management Planning	Risk and Issue Tracking & Resolution			Confirm Issue Resolution	Ongoing Issue Mgt Process

Reference: PricewaterhouseCoopers

The Risks - Contractual

- Pr
- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.



Time /
Cost



Orleans Parish Sheriff's Office
Inmate Booking Information



Folder: 2319191
 Last Name: BRAND
 First Name: RUSSELL
 Middle Initial:
 Race: W
 Sex: M
 Date of Birth: 06/04/1975
 Book Date: 03/15/2012 at 16:12:16

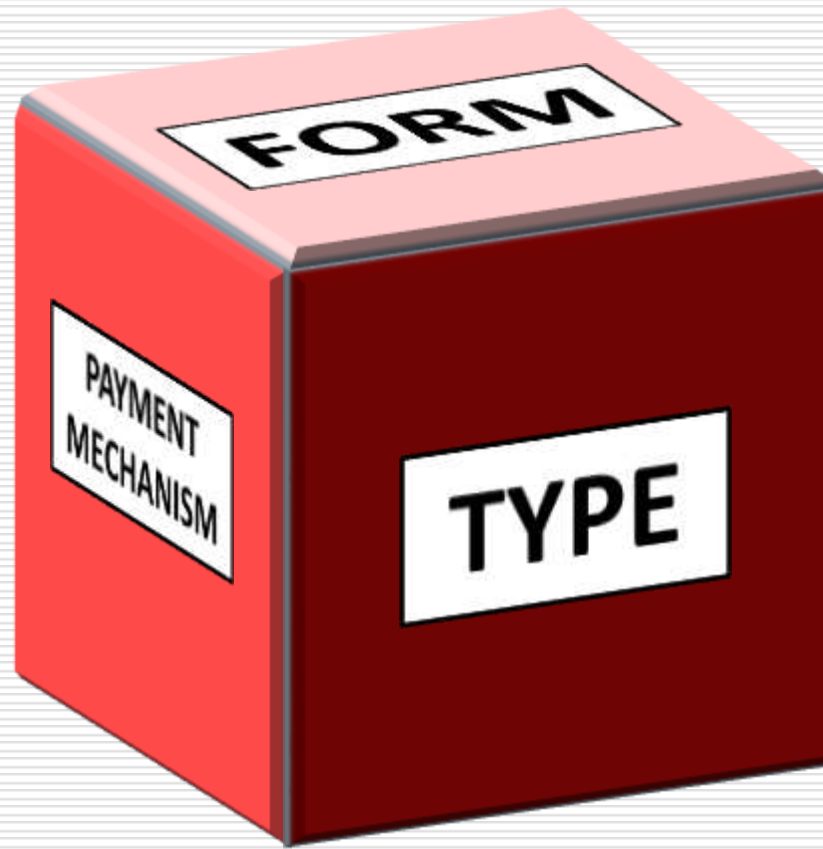
LAVNS Please click on the LAVNS Logo to register and be notified when this offender's custody status changes.

Charge (Sta/Yrs/Sub) B0 1406(A)(1)	Charge Text	SIMPLE CRIMINAL DAMAGE TO PROPERTY
Arrest Date 03/15/2012	Disposition	HOLD-CT
Arrest Number 0	Disposition Date	03/15/2012
Court Type M	Bond Amount	3000.00
Magistrate Number		

Risk?

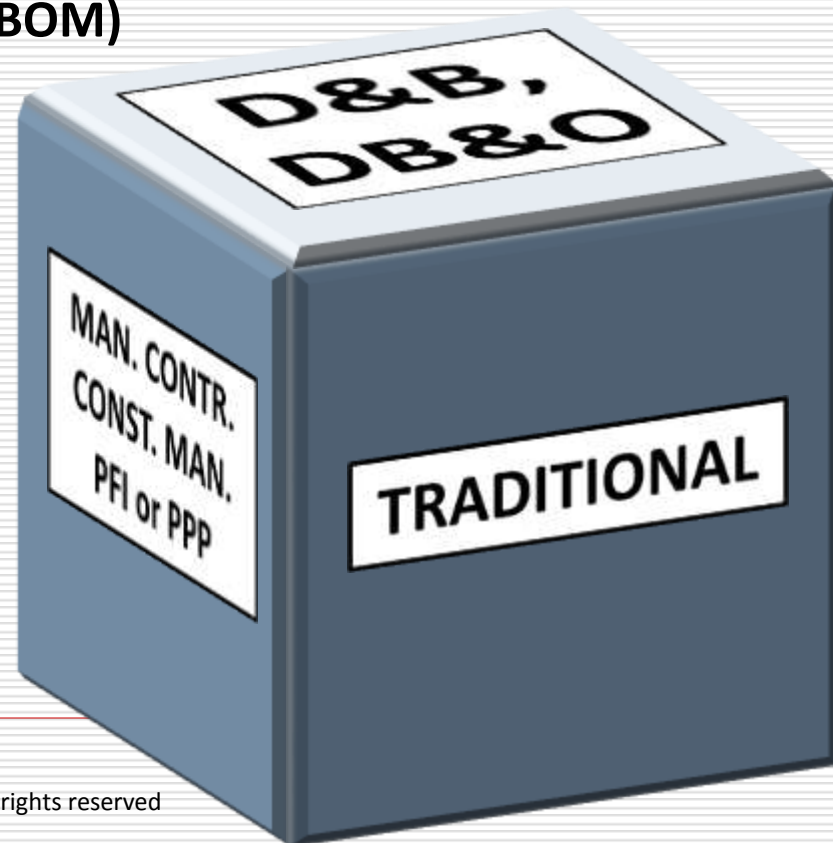


Procurement and Contracting



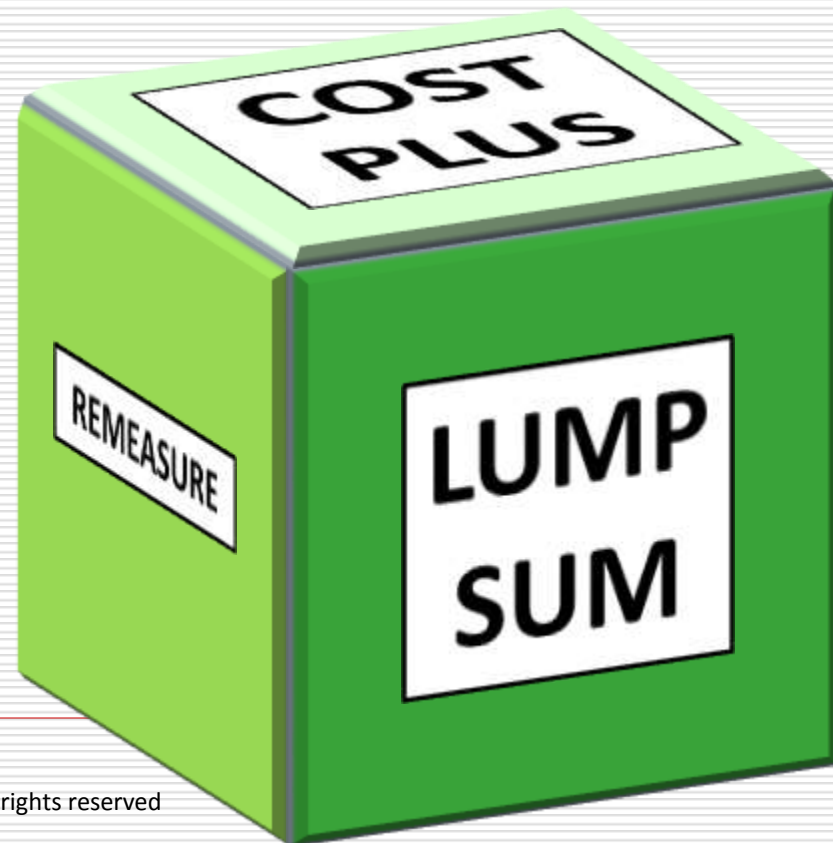
Types of Contract

1. Traditional
2. Design & Build (D&B, DB&O and DBOM)
3. Management Contracting
4. Construction Management
5. PFI or PPP



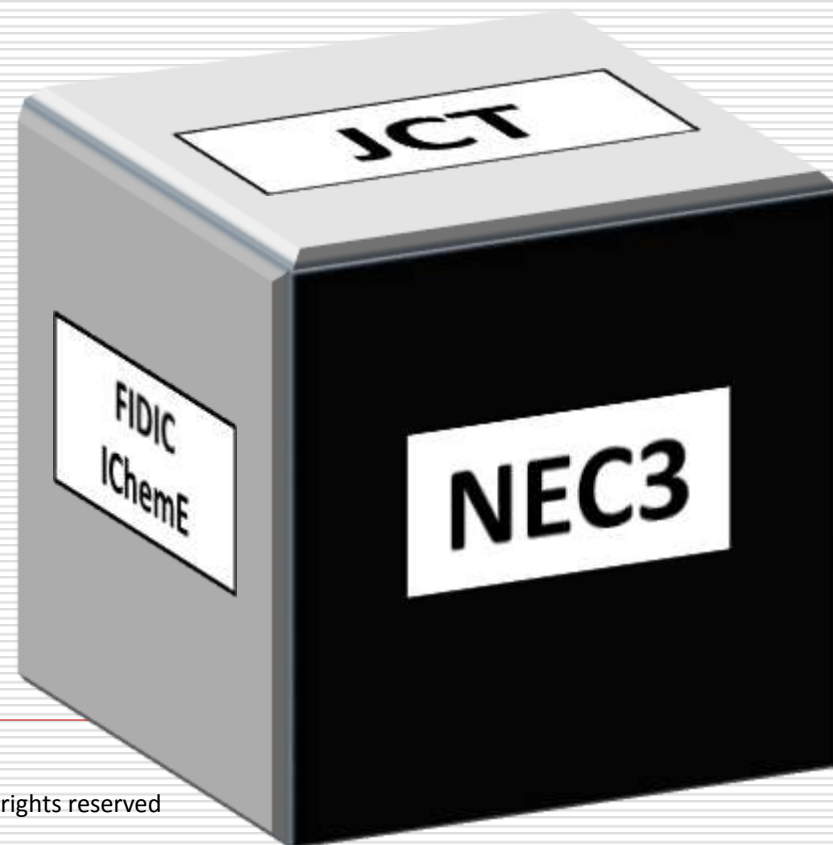
Payment Mechanisms

1. Lump Sum
2. Re-measurement or Unit Price
3. Cost Reimbursement or Cost Plus



Forms of Contract

1. NEC
2. JCT
3. FIDIC
4. Plus more (IChemE, GC Works etc)



Project Controls Toolbox



So what should be in the toolbox to balance the risk from a legal or contractual perspective?

Project Controls Toolbox



Early Warnings



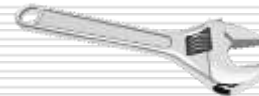
Notices



Communications



Risks



Programme



Payment



Change



Records



Dispute Resolution

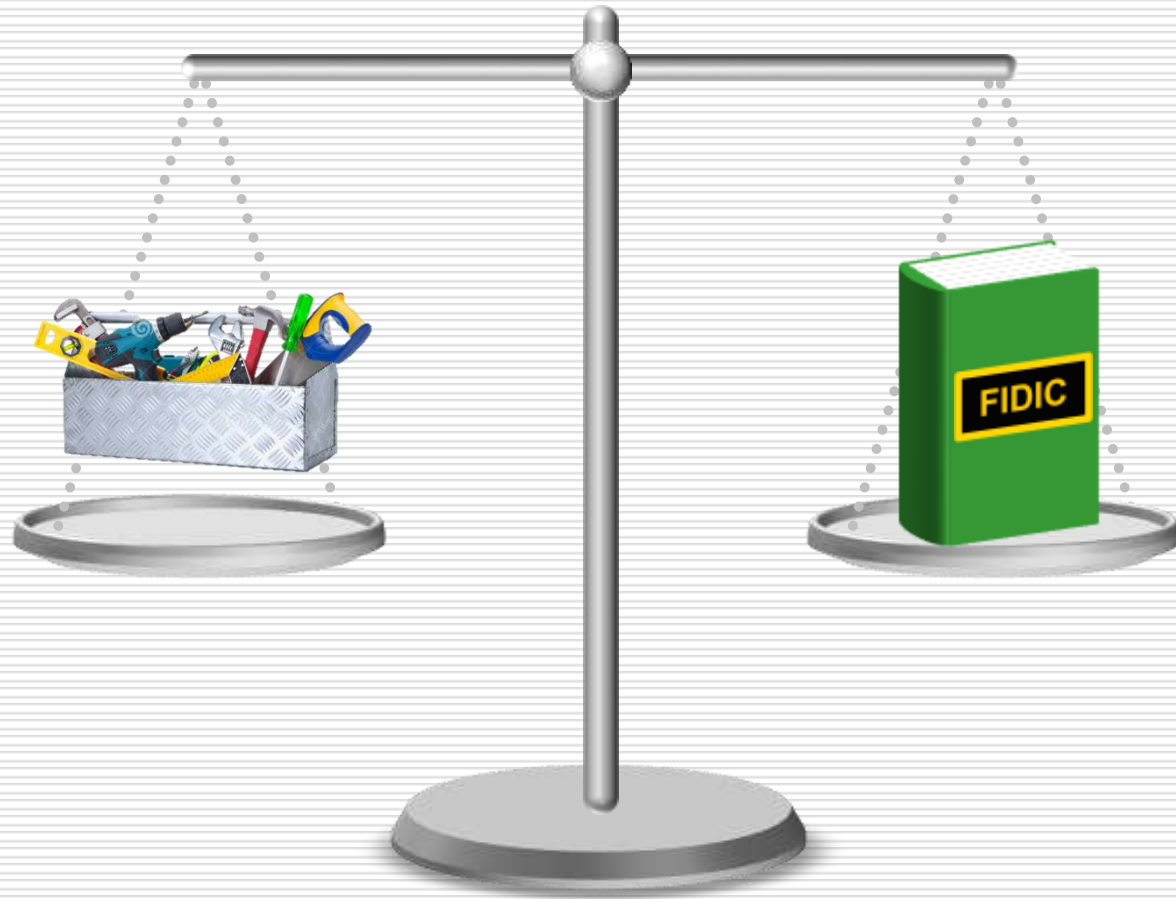
The Balance of Risk & Project Controls



The Balance of Risk & Project Controls



The Balance of Risk & Project Controls



Commercial Tipping Point of Introducing Too Much Project Control



Commercial Tipping Point of Introducing Too Much Project Control



Summary

- 1. The project controls function should be flexible to deal with individual projects and contracts**
- 2. The project controls function would benefit from a better integration and understanding of each of its specialisms**
- 3. The method of procurement and contracting is highly influential and special attention should be paid to this at the outset of a project**
- 4. The project controls toolbox should have specific tools to deal with onerous requirements of particular forms of contracts**
- 5. There is an optimum amount of project control**
- 6. Dashboards should be scrutinised and interrogated**
- 7. Thankyou and Questions?**