

Construction Logistics



CIOB's Construction Manager journal argues that:

- 'The construction logistics manager is responsible for all aspects of the logistics supply chain, stores management, development and optimisation of site logistics solutions to meet the needs of the project.
- The logistics manager will be required to manage the movement of people, goods and equipment at the construction site and control site facilities management'.
- (Source: <http://www.construction-manager.co.uk/management/roles-and-responsibilities-construction-logistics->**August 2013**)

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- A group of construction logistics professionals from companies such as Mace, Laing O'Rourke and Skanska came together to create an agreed standard for the role of a construction logistics manager. Meeting at the Chartered Institute of Logistics, the group has worked to standardise expectations. These R&Rs were approved by logistics professionals who have worked within major programmes such as Crossrail and the Olympics Logistics

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- Key interfaces that the logistics manager must ensure early engagement with are: the project planner; the commercial managers procuring the works and the senior construction manager on the site. The construction logistics manager should ensure that the construction team is fully aware of logistics activities in support of the build program.

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- The construction logistic manager's role can be described under the following headings:
- Plan site set-up to move labour, plant, and materials around site efficiently (eg hoarding, gates, site accommodation, cranes, hoists, security, temporary services, material delivery and waste management strategy, catering).
- Plan internal and external logistics routes through the project phases focusing on separation of vehicles, machinery and people. Lay down areas and offloading points.
- Pre-plan the usage of key assets such as hoists to ensure planned assets meet the needs of the program.

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- Create a secure site
- Responsible for all traffic management internally and externally, weighbridges and road network cleanliness.
- Manage installation of site accommodation and manage these facilities
- Create operational procedures and method statements
- Organise site inductions, ensure induction records are securely stored.
- Create a schedule of logistics meetings and ensure logistics is represented at site meetings.

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- Describe the characteristics of the site, including site access /egress, storage capacity and arrangement by programme, labour, hoists, cranes etc
- Use the description to produce daily, weekly and long term movements plans
- Understand procurement arrangements
- Control materials in and out of site.
- Plan and integrate with key contractors to meet the needs of the planned programme and de-confliction of on site space and time where appropriate.
- Assist in the evaluation of potential logistic suppliers and appropriate delivery management booking systems.
- Be capable of managing sub-contractors to deliver their package of goods or services
- Variation control and early communication of foreseeable change
- Commercial/contract basic understanding

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- Utilise business management system procedures.
- Record keeping and key performance indicator (KPI) production.
- Embrace a delivery-focussed culture.
- Organise resources to enable contract deadlines to be achieved.
- Organise resources to work additional hours as required to meet project deadlines (eg extended site hours if required by client).
- Responsible for ensuring logistics activities are not a constraining factor on the program, where deemed unavoidable ensuring the issues are communicated in order that de-confliction can occur.

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- Ensuring the organisation's safety policies are followed
- Creating of site-specific safety manual, ensure first aid cover and equipment is present
- Responsible for ensuring that material movement to and from the workplace does not cause damage to the works, the workforce or the public.
- Complete safety inspections to company and client standards
- Ensure team has safety training to the company and client's standard programme.
- Create appropriate logistics awareness training and deliver to site workforce via presentation/TBTs as required.
- Manage and maintain visitor PPE stocks to an agreed number.
- Produce method statements, risk assessments ensure lifting plans are produced.
- Safeguard vulnerable road users from traffic and transport created by the site.

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- Create, maintain and update the Site Emergency Plan (including the Site Fire Plan) reporting to the appointed site fire officer.
- Maintain fire points and all common life saving equipment.
- Create a system to communicate information around the site eg noticeboards, email distribution lists, monitor displays, web pages.
- Update site safety performance and key project indicators to pre-agreed frequency.
- Ensure local hospital data is regularly updated, communicated and routes are checked.
- Manage the 'near miss' returns and project suggestion box. Collate and issue to management team.

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- Define and organise all site signage to the agreed corporate standard.
- Ensure that signage and signage symbols used are internationally recognised.
- Ensure additional languages are used in signage to ensure messages are understood.
- Select a delivery management technique, process and system.
- Provide logistics instruction to all project suppliers.
- Manage all movements to and from site and keeping associated records.
- Enforce the full use of the organisation's delivery management system.
- Plan to and maximise load capacity on all vehicles arriving at site where possible, ensure suppliers use appropriate vehicles for delivery.
- Ensure that drivers and vehicles meet the required standards before being accepted to site.

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- Specifying and managing plant and equipment.
- Maintain an asset register of all equipment.
- Ensure vehicles and plant are operated safely by trained personnel and in a legally compliant manner
- Ensure all equipment is inspected, maintained and tested to agreed frequencies
- Have a knowledge of hoists and cranes, and create and agree booking system to manage their capacity.
- Manage guarding resource including rotas and contingency.
- Ensure compliance with the Private Security Industry Act (2001).
- Ensure adequate training has been provided and certification is valid.
- Actively police compliance with site rules.

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- Be capable of managing a team of operatives, including taking any necessary disciplinary action.
- Ensure supervisors provide and record 'Tool Box Talks' to workforce.
- Understand the roles of standard logistics operatives: labourer, waste operative, carpenter, hoist driver, handyman, traffic marshal, SIA guard.
- Ensure operatives are assured of their roles and responsibilities.
- Ensure competencies of own team are demonstrable.
- Recruitment of operatives.
- Complete environmental risk assessment.
- Create, maintain and regularly update the Site Waste Management Plan to ensure the safe and efficient removal of waste from the project.
- Update environmental reporting on site communications boards and other media.
- Ensure duty of care certificates from all contractors are kept as required by project director.
- Ensure Safety, Health and Environmental monitoring is completed.
- Conduct at least one CSR activity per month (monthly).
- Produce a project newsletter

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- A track record of delivery within a construction management or logistics function (over the past 3 years) that has led to performance improvement e.g. cost reduction, process/service enhancements, innovation, winning work etc.
- Personal commitment to promoting a sustainable approach to logistic procurement and supply chain development.
- Excellent communication skills that build empathy and support, engage with individuals at all levels, influence, promote.
- Intellectual capacity to deal with complex logistics issues, and to implement logistics and supply chain vision, strategy and priorities. A driver of performance improvement.
- IT skills (eg Powerpoint, Visio, Word, Excel)
- An inspirational manager that can get the best out of individuals and teams. Can build consensus, work in a matrix structure, deliver performance and outcomes, and drive the professional and personal development of team members.
- Manage suppliers: scaffolding, temporary electrics, plumbing, welfare and office accommodation.

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- Professional/lead by example.
- Passion/can do attitude/constructive challenge.
- To hold a proven track record of integrity and ethical behaviours.
- Open to change/new ideas.
- Share information.
- Supportive.
- Customer focused.

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- CSCS
- SMSTS / SSSTS
- Current full UK driving licence
- Recognised safety programme, qualified and up to date
- First Aid
- Lifting Supervisor Certification
- A suitable qualification in traffic management (eg Chapter 8 awareness)
- Institutional membership

Logistics case study: Central St Giles

- (Source: <http://www.wrap.org.uk/content/logistics-case-study-central-st-giles>)
- A material logistics case study focussing on the use of a Construction Consolidation Centre (CCC) during the fit out phase.
- Reducing waste and carbon emissions through the use of a Construction Consolidation Centre, on site logistics specialist and reverse logistics
- **Key points**
- 956 fewer delivery vehicle journeys into central London between January 2009 and July 2009 as a result of consolidation, leading to a 75% reduction in carbon emissions.
- A delivery accuracy averaging over 97% measured as vehicles arriving within ± 15 minutes of required time and with the correct load - thereby avoiding congestion and waiting time. Studies have shown that typically in the industry only 40% of deliveries arrive within ± 30 min of the scheduled slot.
- Plasterboard waste, using CCC, running at 6.4%. This compares extremely favourably with the industry average of 22.5% and exceeds by a wide margin the 15% target set in the Contractors and Developers Voluntary Agreement in 2008.

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- Notes: