Guide to Lean Collaborative Planning

Lean Collaborative Planning is a structured approach to planning, monitoring, controlling and improving work activities. It aims to improve task flow, foster collaboration and engagement, protect critical path activity and enable Continuous Improvement. The essential elements of the Lean Collaborative Planning approach are:

Collaborative Mapping

The development of High-level and detailed Lookahead Plans that align to the required project milestones. Developed and agreed by individuals from different teams and organisations; providing visibility and transparency of each disciplines work activities, constraints and drivers.

Production Control

Production Control is the means by which we manage inputs, controls and resources to achieve efficient delivery. Enabling improved productivity through better communication, resource management and information flow.

Continuous Improvement

Taking a step back at every opportunity to analyse reasons for incomplete commitments, understand root causes, develop improvement projects and innovate.

This Guide

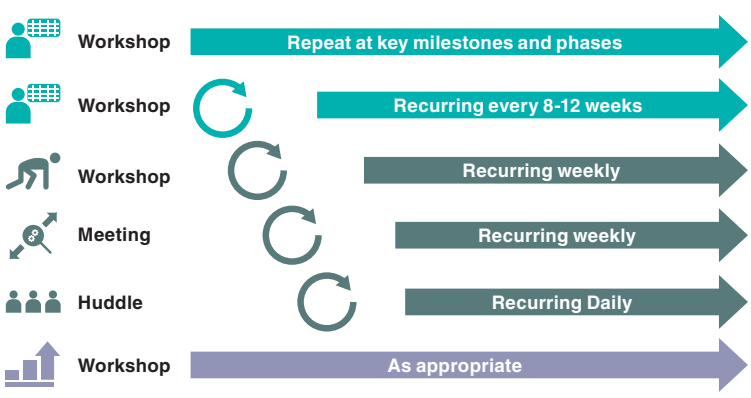
is full of **'how-to' hints & tips** for effective Collaborative Planning on your project. For further detail and templates check out the **Lean Collaborative Planning Minimum Standard.**

Set-up

1. Create a dedicated space for collaborative planning and production control. Set up planning, constraints and 3C boards
2. Identify required team members for each planning workshop
3. Identify facilitators/upskill team members to lead planning and production control
4. Establish a method to measure task completion and reasons for non completion
5. Establish visuals for performance data

Lean Collaborative Planning Timeline

1. **High-level Planning**
   "Working together to plan the overall job"
2. **Lookahead Planning**
   "Working together to plan the next 8-12week period"
3. **Make Ready**
   "Identify everything needed to complete the work"
4. **Production Review**
   "Record progress and adjust the plan"
5. **Daily Huddle**
   "Brief the people who will do the work and listen to their feedback"
6. **Continuous Improvement**
   "Simple steps that add up to Continuous Improvement"



Collaborative Mapping

Key steps to planning

- Confirm scope and timeline before starting
- Ensure each discipline, supplier and key stakeholder is represented
- Sequence activity using Pull Planning
- Challenge each other so outcomes are agreed
- Understand and agree critical path activities
- Capture concerns and develop actions
- Update contract programmes and plans

Using the Pull Planning technique

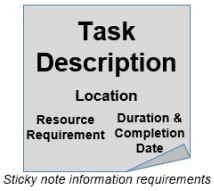
Aims to establish the shortest possible duration whilst protecting the critical path. It works by working from a target milestone backwards. Key steps:

- Define the order of work to meet the milestone
- Determine milestone completion dates
- Develop the series and sequence of activity working backwards from the milestone
- Apply durations to each activity with no contingency or float
- Review logic to try and shorten overall duration
- Decide which activities to add a buffer to (the most fragile/risky)

High-level Plan

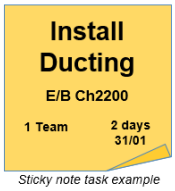
The start of the Lean Collaborative Planning process can populated with key activities from all workstreams to give a picture of all the work needed to achieve the desired milestones.

Completing activity cards

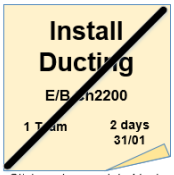


Sticky note information requirements

Sticky note milestone example



Sticky note task example



Sticky note completed task example

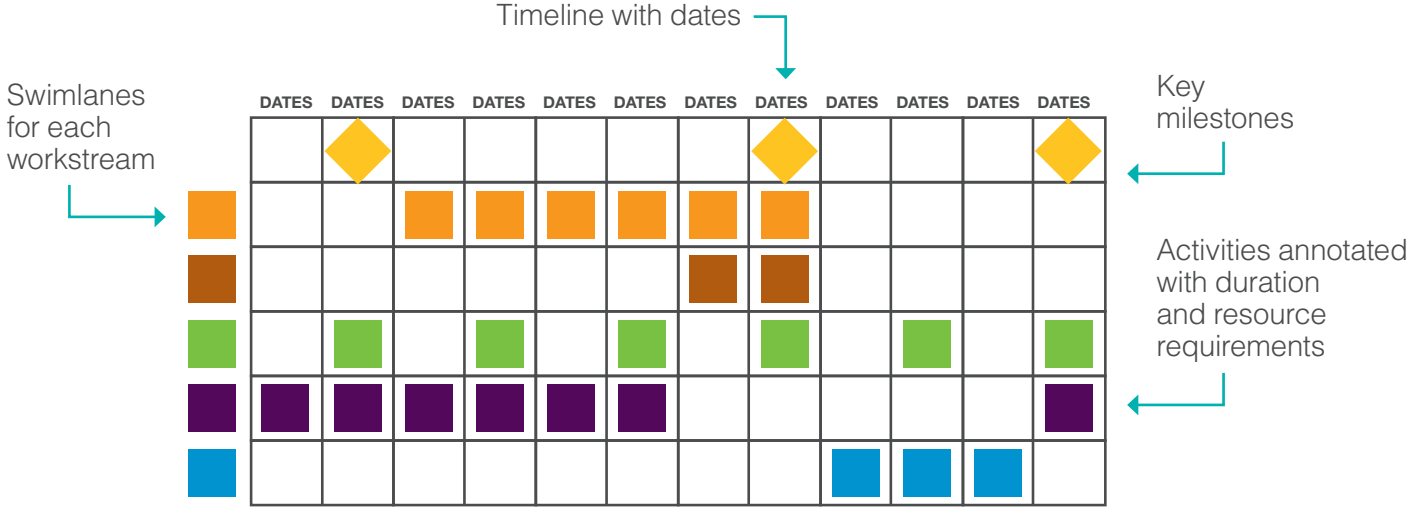
Equipment

- Project Programme
- Swimlane template (print out or a marked up board)
- Sticky notes/magnet cards, pens, wipes, tape (for critical path)
- Actions/3Cs board

Lookahead Plan

More detailed planning, looking out to the next 8-12 weeks. The timeline should be in days (construction) or in weeks (optioneering and design).

Collaborative Mapping Layout



Production Control

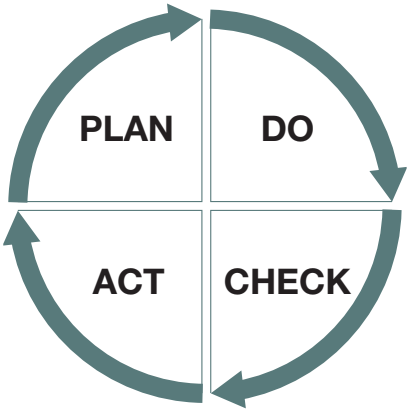
Production Control follows the work planning approach of Plan, Do, Check, Act (PDCA).
A focus on making and keeping reliable promises, measuring and learning as we go.

PDCA Cycle

- PLAN – The team first plans what they should, can, and will do
- DO – The team performs the work planned
- CHECK – The team reviews the reasons for non-completion and root causes of identified issues and explores opportunities for learning and improvement
- ACT – Team defines desirable outcomes and solutions to issues, as well as other suggestions striving towards Continuous Improvement, applies solutions in the next PLAN step of the PDCA cycle, and, if successful, transfers knowledge to other areas of the process, project, company (ACT)

Make Ready (Plan)

A detailed day-by-day Lookahead Plan (2-4 weeks), also known as Weekly Work Planning. Identifying and eliminating constraints and subsequently confirming what tasks can be done and committing to them.

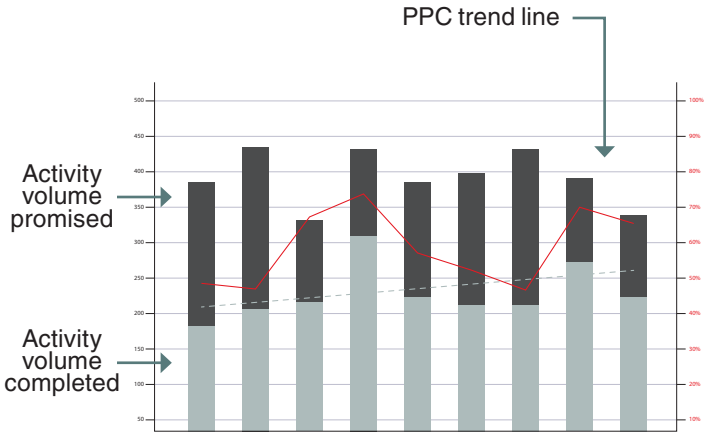


Reasons for non completion
Lack of client/information input
Incomplete information/data
Lack of resources
Priority change
Insufficient Planning or Production Control
Waiting for internal approval
Waiting for client approval
Insufficient resource
Scope change
Quality Issue
Misalignment of expectations/scope
Weather (Construction)
Unanticipated issue (Construction)
Conflicting/clashing activities (Construction)
Delays due to Traffic Incident (Construction)
Traffic Management (Construction)
Incomplete Enabling Actions (Construction)

Production Review (Check & Act)

A weekly review meeting to review progress made that week using activity data such as PPC to highlight progress. Then confirm the plan for next week's activities. The meeting should last no-longer than one hour.

Percent Plan Complete (PPC)



PPC = (No. of planned tasks completed/No. of planned tasks) x 100

This is a binary measure, either individual tasks are complete or incomplete.

Daily Huddle (Do)

A project daily briefing implemented to manage work activities and effect short term control. Usually occur weekly for projects in optioneering and design phases.

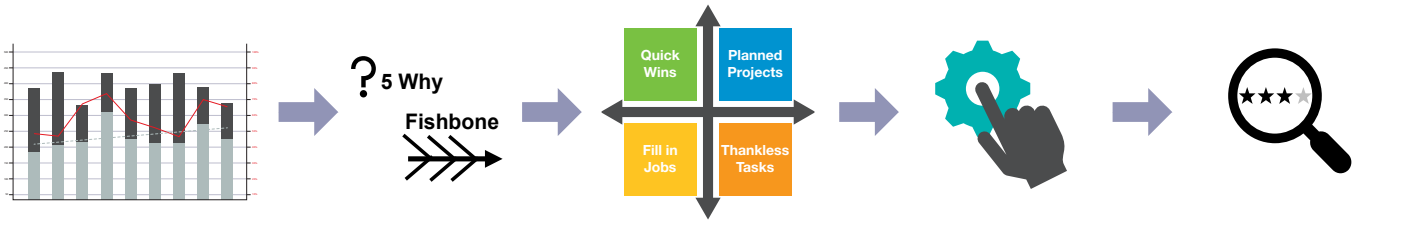
Continuous Improvement

Taking a step back at every opportunity to analyse reasons for incomplete commitments, understand root causes, develop improvement projects and innovate.

Continuous Improvement

Actions taken to improve existing processes & performance using data measured from team activity. Conducted in a structured way within a culture that recognises proactive improvement behaviours.

Approach to Improvement



Find problems – analyse trends, review countermeasures

Understand root cause

Identify potential solutions – understand ease vs benefit

Implement improvement ideas

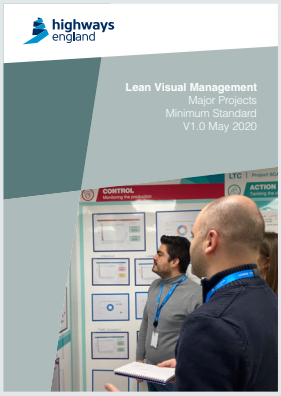
Review progress, standardise & repeat!

Don't forget!

Lean Visual Management and Lean Collaborative Planning go hand-in-hand. High-level and Lookahead Plans are visual displays often found within Mission Rooms. Production Control can be achieved through Stand-up Meetings.

Check out the Lean Visual Management Minimum Standard for guidance on effective:

- Visual Displays & Visual Controls
- Stand-up Meetings
- Performance Improvement



Top tips for successful Collaborative Planning

- Hold collaborative mapping at key stages in the project e.g. start-up, beginning of phase etc.
- Train your team members and suppliers in planning and problem solving
- Provide leadership support and commitment
- Conduct look ahead planning every 8-12 weeks
- Focus on outcomes – use the Pull Planning technique
- Update the Programme from collaborative mapping
- Identify, communicate and protect the Critical Path
- Enable all relevant team members to contribute
- Ensure experienced supplier members attend and contribute
- Assess behaviour, collaboration and engagement
- Follow an agenda in Production Control
- Ensure Visual Displays show PPC, trend analysis and reasons for incomplete activities
- Use 3Cs. Ensure actions owners are assigned and close out dates indicated
- Analyse causes of incomplete activities
- Communicate improvements and capture the benefits