

Highways England Lean Maturity Assessment (HELMA)





Contents

1.	Introduction	1
2.	Background and procedure for completing a self assessment.....	2
3.	Assessment framework	5
4.	Highways England Lean Maturity Assessment (HELMA).....	8
5.	HELMA self-assessment scoresheet	9
6.	HELMA topic area guidelines	11
7.	HELMA top tips	22
8.	Glossary of terms.....	24
9.	HELMA Improvement Plan template	29
10.	Worked example of a HELMA Improvement Plan template	30

1

Introduction



At Highways England we believe in a connected country. Our network makes these connections happen, 4 million a day, and we make them happen safely and reliably. We care about each customer's journey, and we aim to provide

all our customers with safe and reliable journeys through the way we operate, maintain and enhance the Strategic Road Network.

We engineer the future to keep people moving today and moving better tomorrow. We have a £15.2 billion programme of investment in the Strategic Road Network (SRN) within the period 2015-2020. This is a challenging programme of works to deliver, and we cannot do this without developing ourselves and our suppliers as continuous improvement organisations. This will help to elevate our performance in safety, customer satisfaction and efficiency.

Within this period Lean has a target contribution of £250m toward the £1.2bn efficiency target. Meeting this ambitious target relies on the increasing maturity of the supply chain in Lean. It is not enough to only use Lean tools and techniques on selected projects. Lean thinking must be applied across the whole of each key value stream. This means enhancing processes that deliver value from the supplier to the customer, for the optimisation of customer service.

The Highways England Lean Maturity Assessment (HELMA) aims to measure progress made by our supplier organisations in Lean, and to provide guidance on how to develop further. HELMA is based on a maturity model which has been used in aerospace, health care and other government organisations. The assessment recognises that Lean is not only about creating efficiencies and sharing knowledge. It is also about effective leadership and staff engagement so that the whole organisation is involved in the business of continuous improvement.

Beyond 2020 we need to ensure our network keeps working for our customers, with safety and customer service continuing to be at the heart of everything we do. We need to plan for a changing world, address the challenges and exploit the opportunities. Becoming Lean organisations will enable us and our suppliers to adapt quickly to changing customer needs, to find new solutions and develop increasingly better ways of working.

Sharon Banks

Head of Lean

2

Background and procedure for completing a self assessment

Background¹

The aim of the assessment tool is to help organisations to determine the extent to which they have transformed themselves to adopt Lean principles.

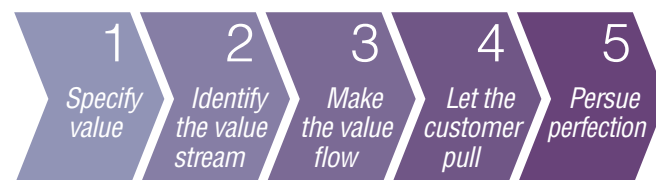
These instructions contain:

- 1 – a brief guide to Lean for those organisations not familiar with the term
- 2 – a glossary of terms used in discussing Lean
- 3 – a procedural best practice guide for completing the assessment

What is Lean?

Lean is a word used in an attempt to characterise the approach to manufacturing developed by the Toyota Motor Company in the 1950s, to enable the company to compete with the Western automotive industry with far fewer resources. At its heart it is a method of producing what a customer or client wants when he or she wants it with a minimum of waste and to a high level of quality. It was first applied to the automotive manufacturing environment but due to its success its principles are now being applied in many fields from construction to healthcare. A great advantage of the Lean approach is that, with a little help, people at all levels can contribute and find ways to work smarter rather than harder.

The principles of Lean and the series of steps for their application are summarised by the following flow diagram.



“Lean Thinking” Womack and Jones

The focus of these principles is on analysing processes in terms of customer or client value and eliminating waste. This is done by mapping processes and analysing them rigorously to determine what is value adding and what is not on the basis that value is defined as something a supplier considers a customer or client, internal or external, is prepared to pay for. The rest is waste, and processes are redesigned to try and eliminate this. In practice the analysis of processes normally show three categories: value added, non value added but essential, and non value added (or waste).

¹ Highways England has been measuring supply chain maturity since 2011. The HELMA model is based on a methodology called LESAT (Lean Enterprise Self Assessment Tool). The LESAT tool was developed and is copyright to the Massachusetts Institute of Technology and the University of Warwick. For the avoidance of doubt over the copyright and Intellectual Property Rights the University is keen for the HELMA tool to be used by Highways England to publish and use freely, as delivered, without fee or licence.

When undertaking Lean activity, Highways England identifies eight types of waste:

- Transportation
- Inventory (stock) excess
- Motion excess
- Waiting time
- Over production or over construction
- Over processing and extra process steps
- Defects or rejects
- Skills misapplication

The aim is to minimise these wastes and develop new processes to maximise the added value. The definition of these wastes will vary depending on the type of process being analysed. For example, when manufacturing doors it will be obvious if more are being produced than is being demanded. However, planning a project going through several iterations to ensure the best plan may look like over production or over construction but in fact reviewing the plans several times may well result in a better plan and therefore add value.

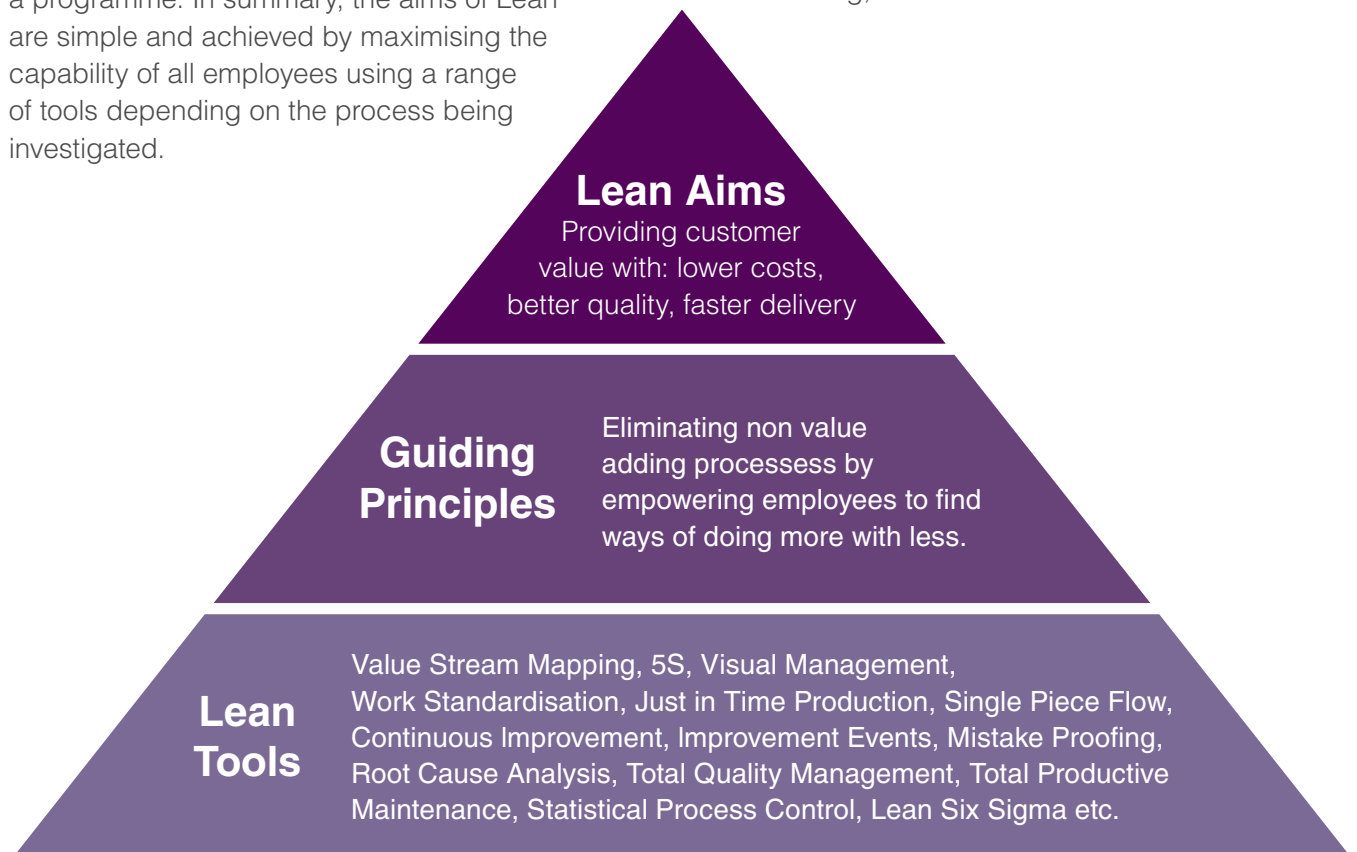
In addition, inventory (stock) in construction projects could be physical things eg materials or equipment etc. or could equally be “float” time in a programme. In summary, the aims of Lean are simple and achieved by maximising the capability of all employees using a range of tools depending on the process being investigated.

Successful implementation of Lean thinking has shown very significant results, improvements in excess of 25% in the areas of time, cost and quality often being demonstrated whilst improving employee satisfaction. In construction these tools will not be effective without strong Lean leadership and a sound system of project management in place.

In addition, there must be employee engagement created and a change culture nurtured and encouraged for success.

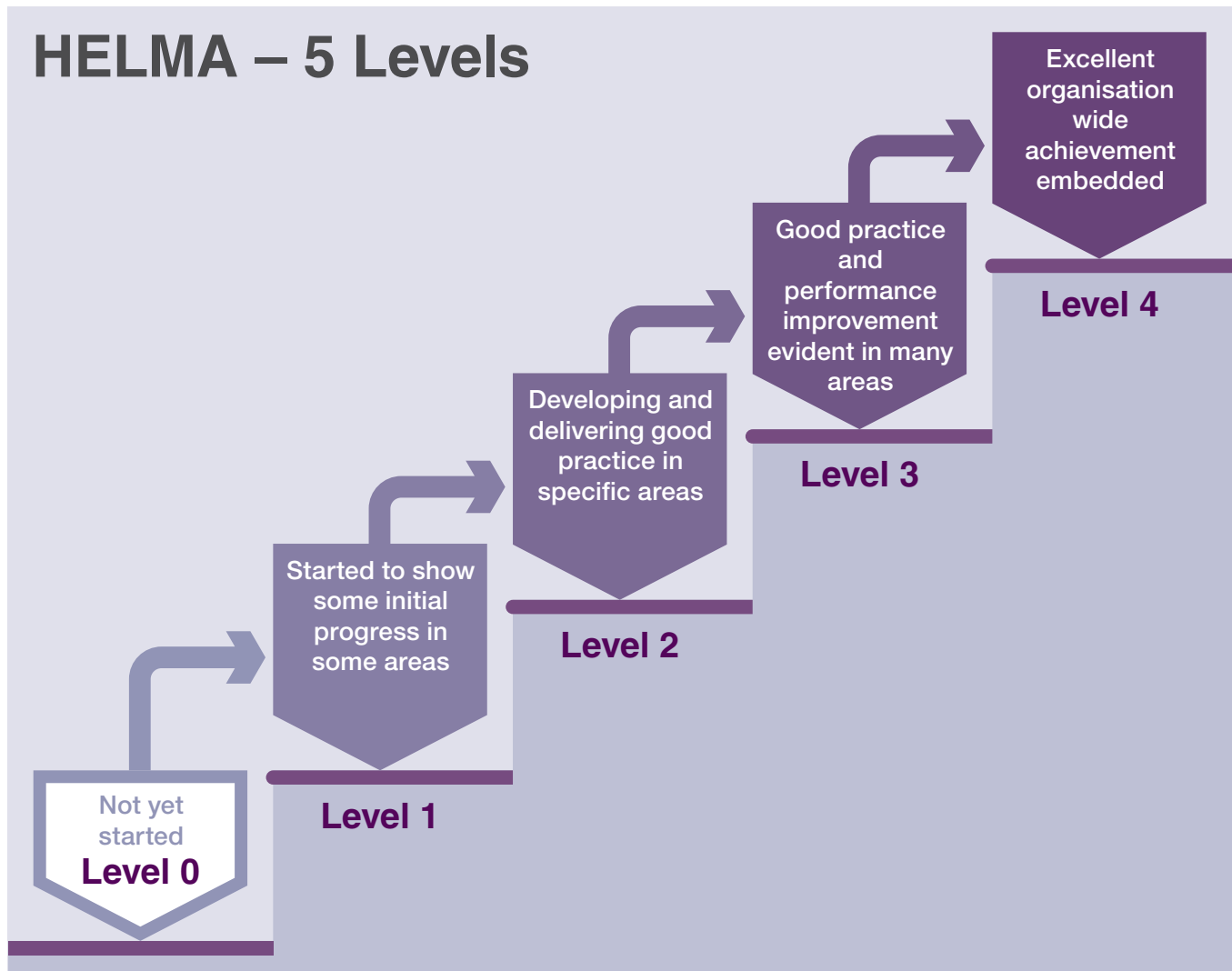
Lean transformation is the process by which organisations take these Lean principles and progressively, through a planned programme, ensure they are adopted to provide a more competitive capability. A simple summary of these principles and some of the tools by which they can be applied is shown below. There are many books on Lean; for an initial understanding the following may be useful:

- *Lean Thinking* - James P Womack and Daniel T Jones, Simon and Schuster, initial publication 1996
- *Learning to See* - Mike Rother and John Shook, the Lean Enterprise Institute, 2000
- *The Lean Toolbox* - John Bicheno and Matthias Holweg, Picsie Books 5th edition 2016



The 5 levels of Lean maturity

The following diagram shows how the different levels of maturity in Lean correspond to the HELMA scoring levels.



3

Assessment framework

The purpose of using the assessment framework is to provide an organisation with a structured means of assessing where it is in terms of implementing Lean in its organisation. In following the procedure therefore it is advisable that people involved understand Lean and give frank and open contribution.

Some interpretation of the validity of evidence presented is inevitable and therefore using this framework will require organisations to have access to at least one person who has knowledge of the principles and practices of Lean. The moderators will be looking for current evidence within the period since the last assessment – typically therefore within the last year.

The process itself is fairly straightforward and will require more or fewer working days to complete depending on the complexity and size of the organisation being assessed. The basic process is that individual group members of the assessment team carry out their own assessment and then as a group agree a consensus score. It is normal for there to be islands of excellence in most organisations; however this does not mean that the whole organisation is at that level. It is important therefore when assessing the organisation that each level be considered as a gateway. In other words, that an organisation must have passed the criteria for the gateway in all previous levels to gain the whole score.

Progress between whole scores may be demonstrated by scoring at intervals of 0.5. For example, if the organisation possesses all of the criteria necessary for a score of ‘1’ against one element, and is currently implementing half of the required activities necessary for a score of ‘2’; it may demonstrate this by scoring itself at 1.5.

The objective of the assessment process is to highlight areas for improvement and use this information to help drive the Lean deployment process. After each moderation an Improvement Plan is produced by the organisation being assessed. The standard Improvement Plan template is held on the Highways England public facing portal.

Taking a step by step route to completion it is recommended that the following steps are used (to be read in conjunction with the Guidance Notes for Moderators and Assessors):

Step 1 – Decide on the boundary of the assessment ie a whole organisation, a particular division of an organisation or a specific department.

Tip: Highways England are looking to undertake the assessment at the supplier’s highest organisational point that interfaces with them eg Highways Division, Major Infrastructure Division although evidence from other areas of your organisation will be taken into account.

Step 2 – Appoint a facilitator. This should be a person who has sufficient knowledge of Lean principles to be able to provide guidance within your organisation on interpretation. The facilitator should not be the head of the organisation being assessed as this could potentially influence the responses.

Step 3 – Select a group of people who can represent the key areas in the organisation being assessed. An agreement of the overall consensus score should be sought. It is recommended you resist any call to calculate and use an average score.

Step 4 – Have an initial meeting (allow 2 hours) to:

- ensure that the assessment is understood and how to use it. It is recommended that those involved refer to the Topic Guidelines and the Top Tips included within this document
- confirm that the boundaries for assessment are clearly understood
- agree the timetable for completion and collation of individual scores
- set a date for the assessment meeting

Step 5 – Individuals fill in the assessment, gathering any data or evidence to support their view. This normally requires 5-7 working days.

Step 6 – Facilitator collates results identifying areas where there is strong agreement and areas of wide disparity.

Step 7 – Carry out assessment meeting to agree consensus on your positioning on the maturity matrix. (Allow 4-8 hours depending on organisation size and complexity).

Tip: Please be realistic in this assessment and remember that the framework is designed to assess maturity not competence. The moderators will be experienced in Lean and will scrutinise evidence to support your scoring.

The facilitator will provide an analysis of the results.

For each area the degree of consensus will be shown and there will be discussion about significant differences of opinion, supported by any evidence gathered by participants. An agreement as to the overall consensus level will then be sought. It is advisable to tackle the areas of large disagreement first.

Step 8 – Facilitator collates scores for review and arranges date for the moderation.

Step 9 – Moderation visit.

This will take place on an annual basis at a mutually agreed date with the Highways England Lean team. The moderation visit is important in that your self assessment score will not be formally recognised until it has been moderated by the Highways England team. The visit itself has proved to be of great benefit both to client and supply chain as it provides a dedicated forum to discuss your progress on the Lean journey and to share, face to face, experiences and future direction. Moderation visits typically require two days to complete allowing for travel and feedback.

Before the visit

Please prepare your self assessment carefully and draw together all the evidence to support your assessment scores. In addition, the following information should be provided to the Highways England Lean team:

- self assessment scoresheet
- agenda for the visit including any site activity – especially if travel is required
- list of attendees and their position in your organisation
- location and directions
- local hotels
- any security and safety arrangements

The Highways England HELMA coordinator will notify you of the moderation team and where possible continuity will be provided so the moderators gain an understanding of your Lean progress over time.

During the visit

Highways England welcome the opportunity to meet with your senior team, at least for the initial part of the visit. It is also useful to have the feedback session with the senior team.

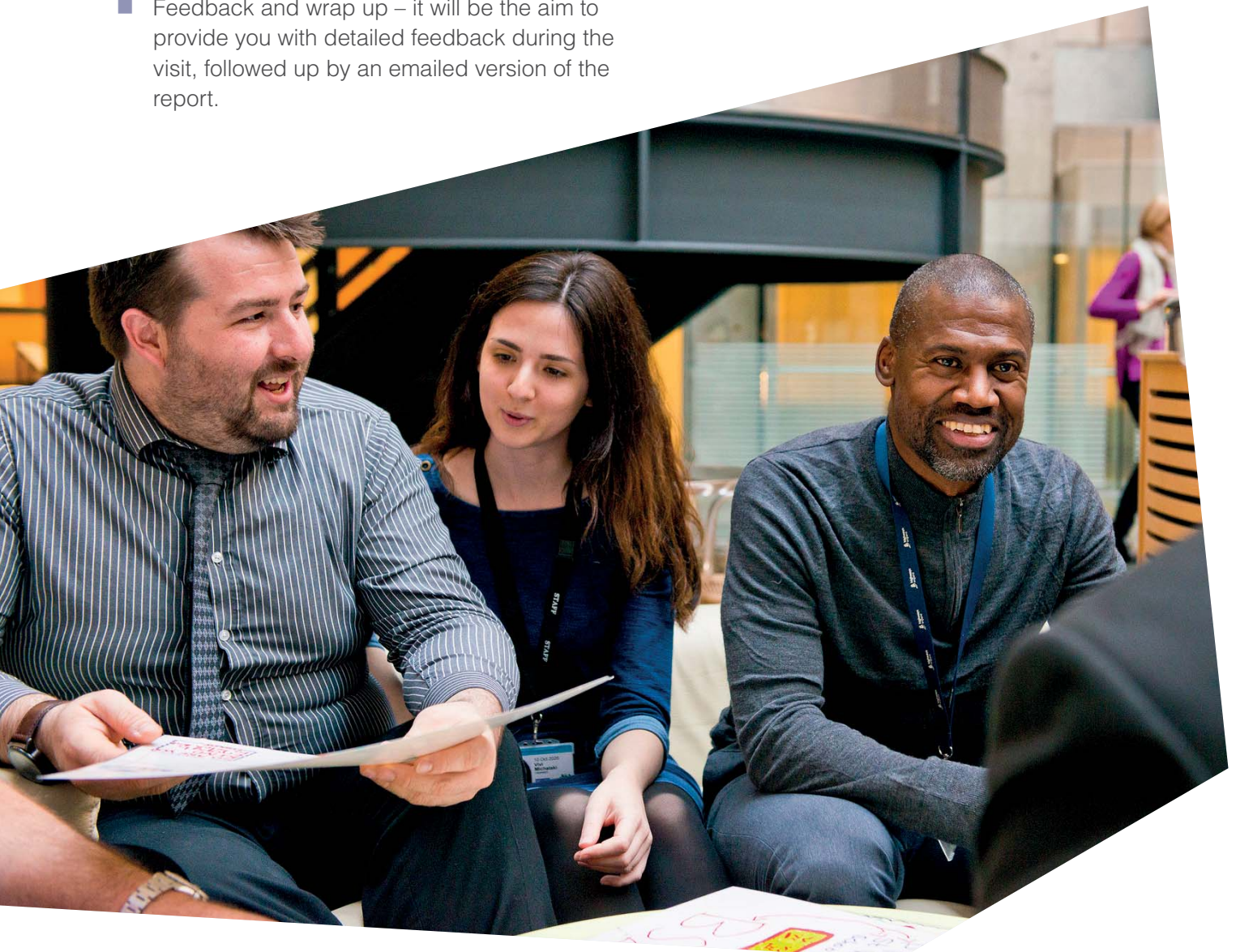
A typical agenda will include:

- Introductions
- Review of the assessment – section by section run through of all the scoring and evidence
- Go see – Highways England team welcome the opportunity to see evidence from Lean in action rather than just having presentations. This may involve visits to a construction site, other offices and depots.
- Moderator feedback report writing – please leave around two hours in the agenda for the Highways England team to prepare your feedback report.
- Feedback and wrap up – it will be the aim to provide you with detailed feedback during the visit, followed up by an emailed version of the report.

After the visit

Shortly after the moderation you will receive your copy of the feedback report discussed during the visit. This should provide the basis for your HELMA Improvement Plan which should be provided to the Highways England Lean Team within three months of the visit and which will be used at follow-up meetings and the next assessment to monitor progress.

Scores for HELMAs which have been moderated by Highways England will be published at the end of the financial year.



4

Highways England Lean Maturity Assessment (HELMA)

It is the aim of Highways England to encourage its supply chain partners to adopt Lean principles to help foster a culture of continuous improvement for mutual advantage.

The purpose of this Lean Assessment framework is to assist in this process.

It has two main aims:

- To enable organisations to assess for themselves, using a series of topic areas and maturity statements, where your organisation, or the part of it which provides products and services to Highways England, stands in terms of Lean maturity.
- To provide a structured method for Highways England to carry out moderation of self assessments. Moderation, in itself has proved valuable in that:
 - scoring is made more consistent across the supply chain
 - areas of best practice can be identified
 - exchange of ideas and moderator feedback can assist with developing action plans

The assessment framework

Topic areas within the assessment framework:

1. Integration of Lean in Business Strategy
2. Lean Leadership and Engagement
3. Deployment Management / Lean Infrastructure
4. Understanding customer value
5. Understanding of processes and value streams
6. Use of methodologies and tools
7. Organisational coverage, activity and capability
8. Performance improvement / benefit realisation and delivery
9. Lean collaboration, climate and culture
10. Supplier maturity

5

HELMA self-assessment
scoresheet

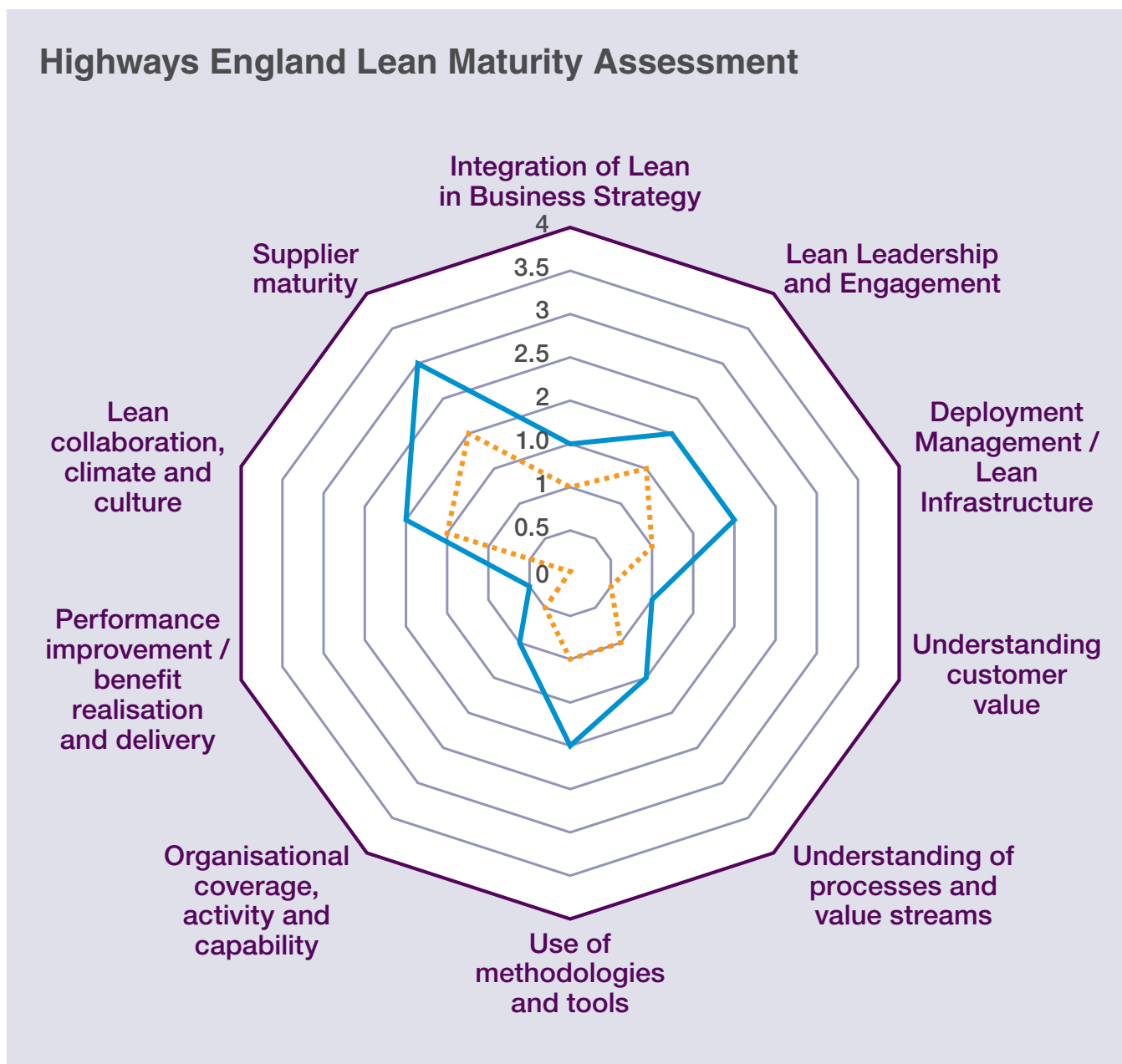
Note: all areas carry equal weighting for the purpose of overall scoring

HELMA Area		Key questions
1.0	Integration of Lean in Business Strategy	How explicitly is Lean integrated within the overall business strategy?
2.0	Lean Leadership and Engagement	How engaged are senior management with the Lean journey? How are leaders demonstrating commitment and leadership?
3.0	Deployment Management / Lean Infrastructure	How are you driving Lean within the business from strategy to implementation? How do you undertake Lean deployment, governance, planning and review? How do you measure progress?
4.0	Understanding customer value	How do you understand internal and external customer value? What measures do you have in place? How do you link customer value back into your delivery processes?
5.0	Understanding of processes and value streams	How widely are processes and value streams understood? How do you undertake in-process measurement? How do you establish pull and flow? How do you identify and eliminate waste?
6.0	Use of methodologies and tools	What is the range of Lean methodologies and tools that you use? How widely are they understood and practised?
7.0	Organisational coverage, activity and capability	What is the depth and breadth of Lean within the organisation? How many of your people are involved in Lean activity? Which organisational areas are delivering improvement? How are you developing Lean capability within the business? What training has been delivered, to what level and with what coverage?
8.0	Performance improvement / benefit realisation and delivery	How do you measure, capture and report Lean benefits? What improvements have you delivered within the last 12 months? How have you recorded and logged these benefits on the Highways England tracker and are they now on a Highways England efficiency register?
9.0	Lean collaboration, climate and culture	How would you describe your existing culture? What is your understanding of your desired Lean culture and climate? How do your people work together, with clients, suppliers and partners? How are you planning and managing cultural change?
10.0	Supplier maturity	How do you engage with your suppliers and partners on Lean? What is their level of maturity? What benefits can you achieve by greater Lean collaboration?

The detailed maturity statements can be found in the framework matrix spreadsheet.

HELMA score graph

(with example assessment scores)



This graph typically appears in the feedback report received by the supply chain assessors from the Highways England moderators.

6

HELMA topic area guidelines

General guidelines

The HELMA matrix is the tool used by Highways England supply partners to self-assess their Lean maturity on a scale from 0 to 4. This tool is also used by the Highways England moderator team to review the evidence for each assessment and provide a moderated score based on the evidence provided and the general comparison against peer organisations already reviewed.

The five stages of maturity are as follows:

- 0** not yet started
- 1** started to show some initial progress in some areas
- 2** developing and delivering good practice in specific areas
- 3** good practice and performance evident in many areas
- 4** excellent organisation-wide achievement embedded

The matrix consists of ten topic areas against which maturity is assessed. Each topic area is covered in more detail within this document.

The main objective when undertaking the assessment is to find the set of statements against each topic area that best describes your organisation as far as Lean is concerned.

Scoring is done to the nearest 0.5 to allow for partial achievement of a stage of maturity.

When all ten topic areas are complete a simple average score for the overall HELMA can be derived: this will be your HELMA score for the year.

Guidelines for each topic area**1) Integration of Lean in business strategy**

Key questions - How explicitly is Lean integrated within the overall business strategy?

Objective of this topic – to assess the strength of adoption of and commitment to a Lean approach at business level and by senior management.

The moderators are looking for evidence that shows the business's buy-in to Lean and explicit commitment to using Lean as the preferred approach for business and process improvement.

We expect to see examples of how your business integrates Lean into its strategic planning and how this is communicated throughout the business. We understand that many organisations have a global footprint covering many sectors and clients. Even if your business cannot commit to Lean at this global level (which would be very welcome) then we expect to see it incorporated at a level closer to that which interfaces with Highways England – say UK transport, infrastructure or highways. Some organisations operating as Joint Ventures, specifically to construct or operate areas of the Highways England network, should be able to refer directly to Lean in their business plan.

Evidence supporting this topic area may include examples of CEO communications to employees, strategy documents, communications posters and brochures, web content, intranet content etc. We prefer to see live, communicated evidence rather than PowerPoint presentations prepared for the HELMA which do not carry the same weight!

The content of the commitment and message will vary depending on the specific business under review, however, good practice in this topic would be to provide:

- a statement of current performance – where you are today
- a statement of target performance – a future state requirement
- the gap to be closed – the level of improvement required over a specific timescale
- an assessment of the contribution Lean will play in closing this gap
- quantified customer focused metrics that fit with the concept of Lean – eg cost (£), quality (specific service levels), delivery (time based)
- a simple reference to 'how' Lean will be deployed within the business (not the full detailed Lean Deployment Strategy which will be covered in topic area 3) eg the degree of employee engagement planned, the intentions regarding Lean capability, the focus of approach within the business eg policy deployment (Hoshin), continuous improvement culture, standard working, process improvement, collaborative planning, visual management etc.

The moderators respect the fact that much of this information may be confidential.

2) Lean leadership and engagement

Key questions - How engaged are senior management with the Lean journey?

How are leaders demonstrating commitment and leadership?

Objective of this topic – to assess the commitment and Lean leadership behaviours within the business at senior level and other Lean leader roles throughout the business.

Leadership is the single most important determinant of success or failure for any Lean programme. It is not enough for leaders to pay lip service to Lean by nominating an internal Lean sponsor and then obviating any further responsibility.

There are two aspects that the moderators expect to see evidence of in this topic:

1) How are senior management engaging?

- What is their commitment to self-education in Lean? This is not only about receiving Lean training, but reading some of the seminal texts on the subject (eg “Lean Thinking” by Womack and Jones, “The Lean Toolbox” by Bicheno).
- Do they have the ability to mentor others in terms of Lean? So, by the work that they undertake, through education when they walk the shop floor and visit the various work group communications cells, they will be an active participant and offer Lean guidance and direction.
- How do they drive a Continuous Improvement Culture? This will be by being a visible Lean leader, attending workgroup performance cell meetings, promoting the importance of a performance culture, undertaking gemba walks (leadership waste walks) in all aspects of the business, introducing a Senior Manager's performance cell board and meeting culture. This will ultimately move towards leader standard work and work group standard work.
- They will be an active participant in setting the Lean vision for their organisation.
- Are they increasing their own capability in Lean – through self-education, understanding and actions eg the use of Lean tools in their own management activity?

- Are they investing their time and effort in driving the programme through management and governance activity?
- Are they providing the necessary resources and time for their people to engage in Lean?
- Are the leader's behaviours supporting Lean by providing focus, structure, discipline and ownership?
- Are leaders acting as champions, coaches and role models for Lean?

2) How are other leadership roles performing?

- Is the drive for Lean coming from the internal Lean team or more widely from other team and functional leadership roles?
- How do team leaders operate in their day to day role to deliver continuous improvement through Lean?
- What is the level of Lean capability at team leader level?

Typical examples of Lean leadership behaviours are:

- managers and supervisors are seen as mentors and coaches
- employees are empowered and recognised for signalling problems or defects that occur in their area
- on-the-job coaching in Lean practices is a daily part of the culture
- a recognition system focuses on performance that encourages ideal Lean behaviour
- sense of trust among leaders, managers, and staff
- managers and supervisors are seen on a regular basis in the work area engaging with the workforce to better understand their reality

The moderators expect to see senior leadership engage knowledgeably with the HELMA process and to meet several team leaders who can explain their role and how their team operate in a Lean way.



3) Deployment management / Lean infrastructure

Key questions – How are you driving Lean within the business, from strategy to implementation? How do you undertake Lean deployment, governance, planning and review? How do you measure progress?

Objective of this topic – to understand how the business is introducing and deploying Lean within the business, what the plans are and how you are progressing.

Deploying Lean without a strategy or plan of action is likely to result in confusion and failure. The moderators are looking for several elements under this topic area and, in particular, a clear and sustainable approach to building Lean within the organisation.

Firstly, the moderators expect to meet the person with the day to day accountability for the Lean deployment. This role (the Deployment Champion), where it exists, is likely to be heavily involved in the HELMA assessment and review.

The Deployment Champion should be able to develop a Lean deployment strategy and plan so that you can agree and set the Lean direction for the business.

This work will cause you to think about such matters as:

- how Lean will fit into your business plan and what it will deliver for the business
- what is your vision for Lean – a philosophy and culture change for the business or a set of problem solving tools
- how you will build the internal capability to implement Lean / continuous improvement and have a clear plan of what you will do once your staff have been trained to ensure it becomes part of their daily work habits
- what Lean roles will exist and what competence each will deliver
- which Lean tools and methodologies will bring you the biggest benefit
- where you should focus within the business to prioritise improvement effort

- how improvement activity will be selected, scoped and prioritised (ease / benefit through the problem hopper) as part of your governance process
- who will lead and support the deployment activity
- when key milestones in your maturity will be achieved
- how you will engage with your supply chain, on which schemes and using which tools
- how you will set up the governance of the programme
- how you will measure and capture benefits

The moderators will expect to see a clearly articulated strategy document and plan addressing all ten areas of HELMA together with contemporary management and governance reviews.

4) Understanding customer value

Key questions – How do you understand internal and external customer value? What measures do you have in place? How do you link customer value back into your delivery processes?

The customer should be at the heart of all Lean improvement activity and providing value to the customer is one of the fundamental Lean principles.

Who is the customer?

Here we are using the Lean meaning of customer as being the recipient of the output of a process. Thus, within any business there will be a hierarchy of customers (or stakeholders) ranging from clients and end users, through internal teams, functions and individuals and including partner organisations and even suppliers. Indeed, anyone to whom we supply a product, service or information is a customer in Lean terms. Even customer's customers will form part of the value chain and should also be considered. To complicate things further, a client may include several customer stakeholders each with differing or conflicting requirements.

What is value?

The customer is the arbiter of value in Lean terms ie not all activities within an organisation provide value in the eyes of the customer. Put simply, if the customer could see every activity within your business they would only be willing to pay for some of them – this is what they value. Other activities may be seen as necessary (enablers) to deliver value (often called 'essential non-value add') or are simply obvious waste (as often categorised by TIMWOODS – Transportation, Inventory, Motion, Waiting, Over production, Over processing, Defects, Skills misapplication). It is, therefore, fundamental to understand what customers value in order to begin the elimination of waste through Lean.

In this topic area, the moderators are looking for an understanding of these fundamental Lean concepts together with a systematic and documented approach to delivering customer value through continuous Lean improvement activity. Too often, in HELMA moderation reviews, organisations focus on traditional customer satisfaction and account management activity and tools which, while important, are to the exclusion of a basic focus on value as defined within Lean.

The moderators would like to see an understanding of customer value at business and work team level with some quantification and measurement of that value. Using some of the Lean tools to determine the voice of the customer (VoC) will help with this.

- How can we quantify value? Typically, customers are looking for value in terms of some combination of cost / price, quality and delivery. In construction we also value safety (but this can be a subset of quality).
- How can we measure value? Measures should be appropriate and timely so that the supplier knows how they are performing, hence the focus on visual management at the work face. Often, we refer to key measures as Critical to Quality or CTQ – measuring those critical few outputs that the customer must receive. CTQ trees are a way of understanding multiple level customer requirements.
- Do work teams understand their place in the value stream? A simple tool such as SIPOC (suppliers, inputs, process, outputs, customer) can be essential in clarifying who the customers are and what they value.
- The Kano model can be used as a way of understanding and categorising customer requirements.

The moderators expect to see clear statements of customers and value at all levels in the business with meaningful measures in place that guide people's day to day activity and generate continuous improvement interventions to better serve the requirements of the customer.



5) Understanding of processes and value streams

Key questions – How widely are processes and value streams understood? How do you undertake in-process measurement? How do you establish pull and flow? How do you identify and eliminate waste?

Processes and value streams are the way we deliver value to customers through our day to day activity within the business.

Process improvement through Lean is how all our work can deliver more value, less waste, lower cost, quicker timescales, better quality, more safely and in a more predictable way. Lean offers the principles, methodologies and tools to systematically and continuously improve the way processes work within the organisation and in delivering improvement across 'end to end' value streams that cross organisational boundaries.

Understanding how processes and value streams work is a fundamental prerequisite to making Lean improvements, which is why the moderators are looking for strong evidence in the area.

- Processes are often nested within hierarchical levels. Does the business understand the core process building blocks that exist?
 - Are they captured and available for all staff review?
 - Are process owners in place and visible?
 - Are KPIs in place to measure important points in the process?
 - What is the process governance?
 - Are operational processes clearly identified?
 - Does the documentation reflect the reality of how people work?
 - Is there a clear picture of the process steps, inputs and outputs, suppliers and customers?
 - Is the flow of products, services and information understood and measured, so that action can be taken?
- Are people able to see where they sit in the process and how their work impacts upstream and downstream?
- Are people able to relate problems they encounter, in their day to day work, to process causes?
- Can staff predict, throughout the day, and take immediate action to adjust, fix and improve the process?
- Are process improvement tools routinely used?
 - Do work teams collaboratively maintain and improve process maps and SIPOCs?
 - Is waste routinely removed – TIMWOODS?
 - Is flow of work measured and under control?
 - Is the process error-proofed?

6) Use of methodologies and tools

Key questions – What is the range of Lean methodologies and tools that you use? How widely are they understood and practised?

The methodologies and tools of Lean offer a systematic and proven way to engage people in solving problems and improving processes. The tools can be used during problem solving 'events' in the continuous improvement journey or as part of the day to day work practices of people and teams. An understanding of the available tools, how and where they should be used, provides a common language and structured approach that can be adopted across the business.

The moderators are looking for an appropriate level of understanding and usage of Lean tools and methodologies for the stage in your Lean journey. Simple problems require the use of simple tools that can be applied by many people, while difficult and recurring problems may require more sophisticated tools that are used by teams led by more experienced and knowledgeable practitioners of Lean. Innovations, improvement ideas, technical solutions and process problems resolved without using a structured and systematic Lean approach (methodologies and tools) risk failure to succeed and provide a sustainable solution.

What is a Lean methodology?

There are several methodologies used depending on the nature of the problem. Essentially a methodology is a step by step way of working through the problem, using specific tools along the way, to deliver and implement the best solution available at the time.

Some examples of typical Lean methodologies are:

- **The Deming Cycle** – This is based on Plan, Do, Check and Act with the overall aim of process improvement. In some instances, the Check phase is replaced by Study. The concept behind this approach is that problem solving and process improvement is a continuous process.

- **The Eight Discipline Methodology (8D)** – This system is a team based approach to solving product and process problems. It is used to correct and identify recurrent problems by using statistical methods to initiate data collection, root cause analysis, and problem resolution.
- **Kaizen** – This is a team based method of problem solving oriented to continuous and incremental improvement at all levels of the organisation.
- **Lean Six Sigma** – This methodology uses the approach of Define, Measure, Analyse, Improve and Control and focuses on the use of data, root cause analysis, implementing improvement actions and implementing system actions to sustain improvements. Lean Six Sigma emphasises the use of data, project selection and project management.

What are Lean tools?

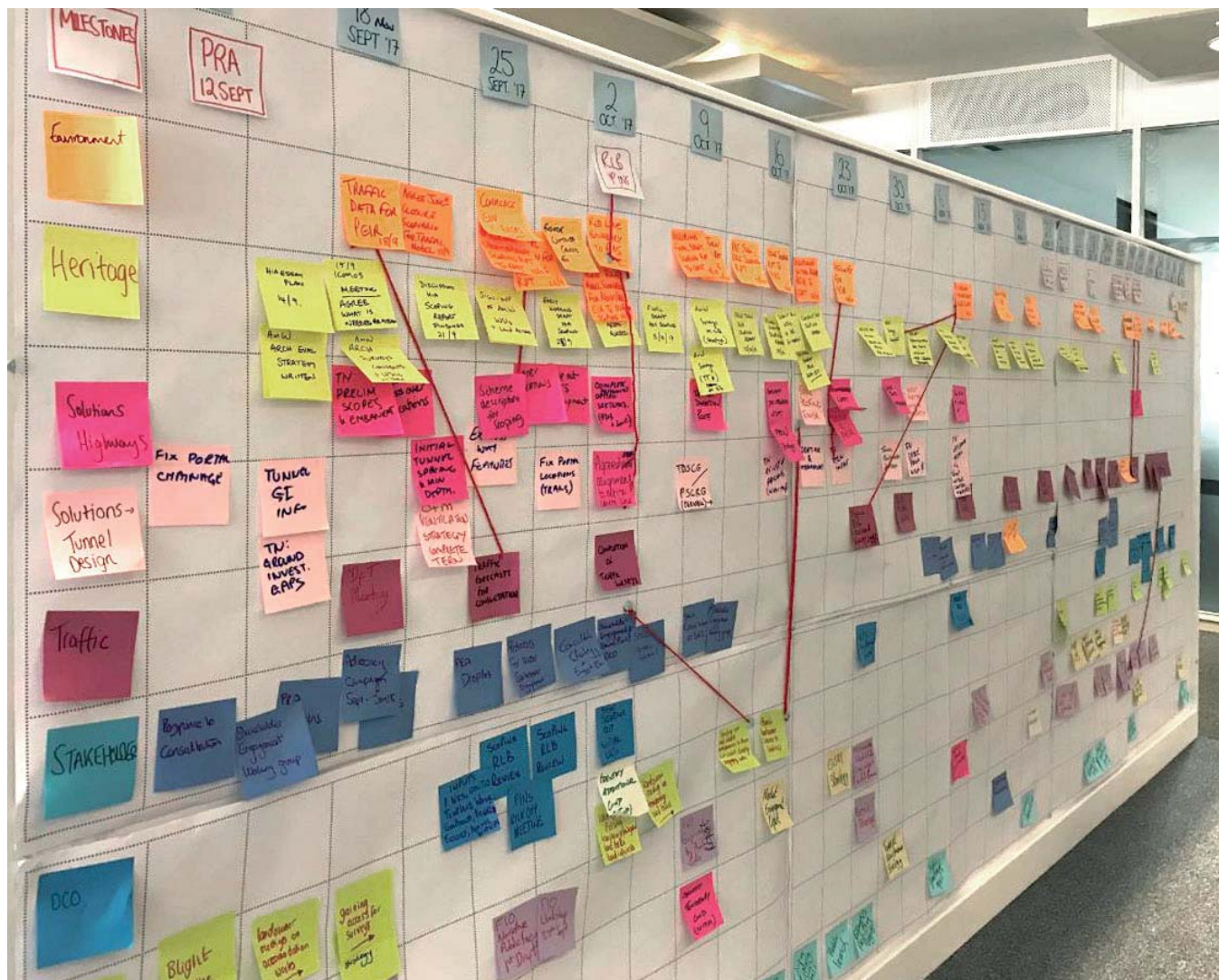
There are many Lean tools available (at least 100!) however, what is important is that you are using the right Lean tool for the problem you are trying to solve, which comes with experience.

Typically, Lean tools help with specific Lean activity and stages in the methodologies:

- forming and managing Lean teams – at the work place or cross-functional project teams eg charters, visual management, RACI, daily review meetings etc.
- Lean Collaborative Planning - Project and programme planning through collaborative mapping and plans, production control, problem solving and continuous improvement
- managing Lean interventions / projects eg quad of aims, stage gate reviews, project plans etc.
- process analysis eg process mapping, waste analysis, bottleneck analysis, 5 whys, error proofing, 3Cs (Concern, Cause & Countermeasure) etc.
- data analysis eg tally charts, run charts, variation analysis, control charts etc.

The moderators are not prescriptive about which methodologies and tools you should use, as long as:

- your deployment strategy sets out which ones you use and how they will address the business improvement objective
- your chosen methodology and tools are clearly communicated to staff eg by having a kitbag of tools on your web portal
- your people have been made aware of, trained in and have access to the standard tools and templates you have decided upon
- there is evidence that the tools are being used and we can see examples in action
- there is case study evidence that business improvement has resulted from a structured approach (rather than ad hoc ideas and solutions)



7) Organisational coverage, activity and capability

Key questions – What is the depth and breadth of Lean within the organisation? How many of your people are involved in Lean activity? Which organisational areas are delivering improvement? How are you developing Lean capability within the business? What training has been delivered, to what level and with what coverage?

The degree to which Lean is really happening in a structured and systematic way within the organisation is a true measure of Lean maturity. The moderators are keen to undertake walks around the organisation to meet your people and visit work sites to touch and feel the Lean activity that is happening.

Specifically, you should be able to demonstrate:

- the total number of people in the organisation (or the number working in that part of your organisation within the scope of the HELMA)
- the number of people trained to each Lean level – eg awareness, foundation, practitioner etc., with evidence from your training register / training matrix, together with the areas of the business they are in

- the progress against plan as set out in your deployment strategy
- the areas in the business where Lean has taken root and those that are lagging behind
- the improvement work that has been undertaken and that is in progress and where it sits within the business – case studies developed etc.
- your training suite – syllabus, course materials, competency framework etc.
- performance cells in place with evidence of visual management
- the extensive use of Lean tools, techniques and methodologies
- the leadership involvement in Lean – championing activity, gemba walks etc.

Moderators expect that your Lean team will have extensive capability and are looking beyond that to the wider employee base where the true Lean culture will be evident.



8) Performance improvement / benefit realisation and delivery

How do you measure, capture and report Lean benefits? What improvements have you delivered within the last 12 months? How have you recorded and logged these benefits on the Highways England tracker and are they now on a Highways England efficiency register?

The moderators are looking for evidence of two elements relating to this topic area:

- performance improvement in the day to day way that people and processes work within your organisation and how that good practice has been shared and transferred within the sector
- the quantification of benefits identified, realised and delivered – that benefit your organisation and Highways England in its drive to demonstrate tangible efficiency savings through Lean

Continuous improvement best sits within the context of measured performance over time. Only through knowledge of the baseline state (also called the current state) can progress be measured, improvement established and quantified. All too often the moderators are shown Lean improvements with no evidence of performance before or after the intervention at work team level or as a cross functional improvement project. This is not only poor Lean practice, resulting from the lack of a structured approach, but it removes the ability to demonstrate efficiency savings to Highways England and to recognise the excellent work of your people engaged in improvement activity. Deciding what to measure comes with Lean experience and is often tied into the deployment of visual management at work team level. All teams should at least be able to see 'are we on track?' and be able to make the timely intervention to correct things.

In addition to evidencing performance improvement within your business processes, the moderators will want to see how you record and track Lean benefits and will have reviewed your inputs to the Highways England Efficiency Registers and Lean tracker, and the Knowledge Transfer Packs developed. The Knowledge Transfer Packs lodged on the Highways England Lean tracker form the key basis of evidence required by the Office of Rail and Road regulation for the efficiencies that we are claiming.

9) Lean collaboration, climate and culture

Key questions – How would you describe your existing culture? What is your understanding of your desired Lean culture and climate? How do your people work together, with clients, suppliers and partners? How are you planning and managing cultural change?

The delivery of the full impact and benefits of Lean arises from developing a truly collaborative continuous improvement culture. The climate for Lean that is formed by the leadership and workplace environment is a key enabler to allow Lean ways to become part of business as usual.

Many organisations have dedicated, enthusiastic and intelligent people who work hard to provide what customers want. This is the fertile ground within which Lean can develop and grow.

The moderators are looking for evidence that shows that Lean is maturing and starting to create a continuous improvement culture, specifically through examples such as:

- managers and supervisors are seen as mentors and coaches
- employees are empowered and recognised for signalling problems or defects that occur in their area
- on-the-job coaching in Lean practices is a daily part of the culture
- recognition system focuses on performance that encourages ideal behaviour
- sense of trust among leaders, managers, and staff
- managers and supervisors are seen on a regular basis in the work area engaging with the workforce to better understand their reality
- immediate action is taken when the work area is ahead or behind schedule
- the flow of service or product is simple and direct, creating continuous flow
- the current state and future state are an ongoing continuous cycle – actively pursued with a visual and detailed improvement action plan and timeline

- Standard Work Instructions (SWI) in work-areas, are highly visual, simple and used (routinely being updated as improvements are made)
- there is a sense that 'continuous improvement' is just part of the job
- improvement activities are directly linked back to the organisation's strategic focus and primary objectives
- improvement ideas are routinely and openly shared throughout the organisation, across multiple value streams and functions
- employees can describe what the mission and vision of the organisation is and how they personally impact upon it
- there is a structured process for aligning goals and strategic priorities that is simple and visible at all levels of the organisation
- the voice of the customer directs focus of continuous improvement and future development of the organisation
- open communication exists across value streams, support and administrative functions
- leaders and managers follow standard work and are routinely seen out of the offices and in the work areas
- visual management boards are used daily for open discussion and feedback so that adjustments can be made quickly
- metrics and goals are simple and clearly aligned, driving the right behaviour to achieve the organisation's vision

10) Supplier maturity

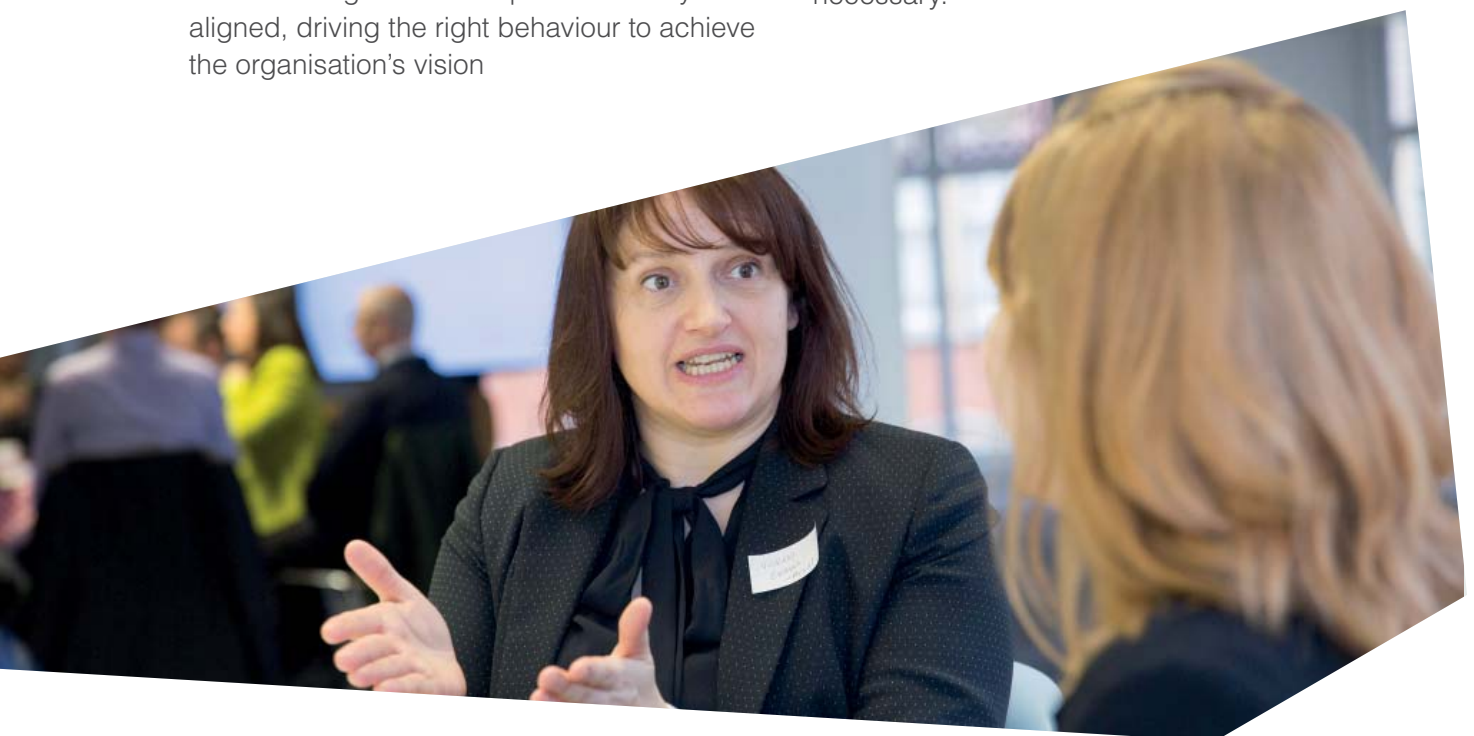
Key questions – How do you engage with your suppliers and partners on Lean? What is their level of maturity? What benefits can you achieve by greater Lean collaboration?

Supply networks within highways infrastructure are complex and operate on multiple tiers, often involving formal joint ventures and collaborative arrangements. Value streams cross organisational barriers from the client to the deeper supply partners. Improving the fundamental value streams in the sector can only succeed if organisations in all positions in the supply chain share in a collaborative Lean approach.

The moderators are looking for evidence that Lean is being deployed across the highways sector with your supply chain through such mechanisms as:

- shared training and development
- shared Lean language, methodologies and tools
- joint working on improvement activity that crosses contractual borders
- collaborative sharing of best practice
- 360° Lean maturity assessments
- joint delivery of efficiency savings

Where barriers are identified to Lean working, for the mutual benefit of all parties it is expected that these are resolved, with the help of Highways England if necessary.



7

HELMA top tips

Planning the assessment visit

- The visit dates will be agreed with you by the Highways England HELMA coordinator
- Use the HELMA guide to help you
- If you require clarification about the visit please contact one of the moderators
- To help make your moderation visit a success please send to the moderators in advance:
 - the HELMA assessment spreadsheet scores
 - an agenda with start times and list of attendees with their position in your organisation
 - directions to the location
 - local hotels you would recommend

Before your assessment

- Look through the maturity statements to decide which box best describes your maturity position on the matrix
- Use the Topic Area Guidelines to help you
- Find evidence that supports your decision – if you have to create evidence then you probably are over-estimating your maturity
- Be realistic about your position – over scoring is not helpful either to your own business or Highways England who want to help you by providing the right advice
- Make sure you put together an agenda for the visit that shows what you are doing on the ground – we do not want to see PowerPoint presentations created for the event
- Involve senior management – we want to assess their leadership and buy-in to Lean

During your assessment

- Be prepared to provide evidence from within your 'business as usual' systems – we are happy to see your working documents and material rather than specially prepared charts
- Show us how you *do* Lean within your business – we do not need to follow the structure of the matrix to the letter as we can distil our moderation scores from what you show us and many of the topic areas overlap
- Try to separate content from process eg we want to see how you have undertaken Lean activity but not spend too much time on the actual issue you have tackled. We would rather see a few Lean interventions in summary rather than one in great depth
- Involve your people in telling us about Lean. We want to assess their understanding and the breadth and depth within the business

The moderation feedback

- We try to be as fair as possible in giving the feedback – however, there is no point giving false feedback as we are trying to help guide you towards real improvement in your maturity not just better scores
- Your moderated score is not a measure of how well or badly your business is managed! It is purely a view of your maturity in Lean based on the evidence we have seen and compared with our knowledge of your peer organisations
- Our feedback will always aim to be positive in that it will suggest what actions you need to focus on in the short term to deliver improvement

After the moderation

- We will issue you with a formal Feedback Report – this will not contain any surprises as we will have discussed these with you during the visit
- If you need any further clarification or assistance please contact your Highways England Lean Team representative who will be able to help
- Review the feedback report and start to implement its actions – better to do this early rather than just before the next HELMA as we can spot Sunday night homework!



8

Glossary of terms

Activity – A unit of work that has a beginning and an end, occurs over a period of time, and consumes input(s) and produces output(s).

Backflow – A condition in which a part, product/project or design is returned to a previous stage due to a defective condition.

Balanced scorecard – An analysis technique and management instrument that translates an enterprise's mission and strategy into a comprehensive set of performance measures to provide a framework for strategic action. The scorecard may gauge organisational performance measures across several perspectives such as: financial, customer/clients, internal business processes, learning and growth.

Business strategy – The overall strategy and plan for the business. Typically this will cover markets, competitors, products and service areas, key customers, investment, financial implications, performance targets and strategies for growth and improvement.

Collaborative planning – The collaborative planning system is about enabling teams to deliver the same amount of work but with less resource. It involves doing three things: Production control - Enabling better productivity through effective resource and information management. Collaborative mapping - Enabling better planning through the creation of process-based look ahead programmes. Seeking continuous process improvement - through the implementation and adoption of continuous improvement tools.

Consensus – A state where group members support an action or decision, even if some do not fully agree with it. A consensus decision is made after aspects of an issue, both positive and negative, have been reviewed or discussed to the extent that everyone openly understands, supports, and participates in the decision.

Continuous flow production / construction – Items or information are produced and moved from one processing step to the next one unit-at-a-time. Each process makes only the one piece that the next process needs, and the transfer batch is one. Also called single-piece flow or one-piece flow. Contrast with batch-and-queue.

Cross functional management – A process designed to encourage and support interdepartmental communication and cooperation throughout an organisation, as opposed to command and control through narrow departments or divisions. The purpose is to achieve organisation targets, such as quality, cost, and delivery of product/projects and services by optimising the sharing of work.

Climate – The Lean environment in which people work. This is driven by such things as culture, behaviours, leadership, organisation structure, rewards and recognition, attitude to risk and performance measurement.

Culture – Shared characteristics such as values, behaviours and beliefs that distinguish the members of one group from those of another. Organisational culture includes the common set of beliefs, sentiments, priorities, attitudes, perceptions, operating principles and accepted norms shared by individuals within an organisation. Cultural change is a major shift in these organisational characteristics.

Customer/client – A stakeholder who is a recipient of a product/project or service produced by an organisation. Customer/clients may be internal or external to the organisation. External customer/clients, those in the marketplace, are the reason an organisation exists. Internal customer/clients are the reason a functional area or department exists – an interdependent department, or a downstream user in the value chain. When services rather than product/projects are provided, customer/clients are often called clients.

Customer/client value – Essentially customer/client value is something a customer/client is prepared to pay for, a product/project (which might be a road) or service, which will provide the means to satisfy the outcome that the customer/client wishes.

Cycle time – The time required to complete one cycle of an operation. If cycle time for every operation in a complete process can be reduced to equal the demand (takt) time, product/projects can be made in single-piece flow.

Deployment Champion – The Lean expert who is responsible for managing the day to day delivery of Lean within the organisation.

Deployment of Lean – The overall management of the Lean programme.

Employees – All of the individuals employed by the organisation including full time, part time, temporary and contract employees. This does not include sub contracted labour from other organisations.

Enterprise – Any corporate or business-unit organisation with a distinct mission, market segment, suite of product/projects or services, customer/client base, profit/loss responsibility and set of competitors. The purpose for the organisation's existence is to perform its mission and achieve associated goals.

Supply chain – All businesses along the value stream that contribute to providing value to a customer/client – this **specifically** includes the organisation's suppliers involved in providing value to the customer/client.

Five S (5S) or Five C (5C) – This is a five step process developed by the Japanese as an essential step in organising a workplace to enable standard processes to be introduced to enable sustainable continuous improvement. The English interpretation of the original Japanese 5S words for the five steps are Sort, Set in Order, Shine, Standardise and Sustain. The 5C's are an alternative English version the five steps being Clear out, Configure, Clean and check, Conformity, and Custom and practice.

Flow – The progressive achievement of tasks along a value stream so that a product/project or service proceeds from design to delivery providing materials or information into the hands of the customer/client with no stoppages, rejects or backflows.

Governance – The review and control mechanisms that are put in place to ensure that the deployment of Lean is managed. Typically this oversight is provided by a steering group.

Improvement event/intervention – Part of the Lean toolkit and provides a mechanism for making radical and incremental changes to current processes and activities. They are often carried out within very short timescales focused on a particular problem or process. They are structured events carried out off the job where a small group of employees with relevant knowledge of the process or problem collect data and analyse it to determine an improved process or method and implement it. The events are often assisted by a trained facilitator.

Integrated product/project team – Construction requires design and manufacturing process design. An integrated product/project team carries out these processes as far as possible in a concurrent way. An integrated team therefore will consist of personnel from a range of functions designers, architects, project managers, purchasing experts, manufacturing engineers, key suppliers etc. jointly working together to achieve the desired outcome minimising waste and maximising value by ensuring that all factors are considered at the earliest possible stage and issues resolved.

Innovation – The practical transition of ideas into new product/projects, services, processes, systems and social interactions. This would include for example on site value engineering etc.

Just-in-time – Conveying only the items or information that are needed by the next process when they are needed and in the quantity needed.

Lead-time – The total time a customer/client must wait to receive a product/project or service after placing an order. If a manufacturing or construction system is running at or below capacity, lead-time and throughput time are the same. When demand exceeds the capacity of a system, there is additional waiting time before the start of production/construction or the next stage of say a design process, lead-time exceeds throughput time.

Lean change agents – People who have a good knowledge of Lean principles and their application. These people also have the capability to guide and instruct employees to develop their own capabilities in their own situation to apply appropriate Lean techniques to improve their processes.

Lean daily meeting – A term used in construction to describe a routine daily or weekly meeting of a group or cell of employees in order to communicate information and to track safety, programme progress, quality, cost, discuss problems and identify issues and resolve using problem solving techniques.

Mistake proofing – People are human and cannot be expected to do everything like a machine, exactly the same each time. It is also not necessarily their fault, as poorly-designed processes that require a great deal of attention can contribute severely to problems. The basic principles of mistake proofing (Poka yoke) advocate designing or developing tools, techniques and processes such that it is impossible or very difficult for people to make mistakes. It is a simple principle that can lead to massive savings.

Thus, for example, a plate that must be screwed down in one orientation only could have the screw holes in non-symmetrical positions so that it can only be screwed in the right orientation; or a petrol filler on a car not being able to receive a diesel nozzle. The principle can also be used in non-manual situations such as project management.

Non-value added – Any product/project, process or service that does not add value to the ultimate customer/client. (It is important to know that non-value added is not the same as not necessary, since some activities are required by law or are necessary for process control, such as inspection. These may not add value but are used to assess processes for control and improvement.

Overall equipment effectiveness (OEE) – is a measure of the quality and availability of an organisation's equipment. It is not restricted to operations alone as it can measure any facility such as an IT system. The measure is Equipment Availability x Performance Efficiency x Output Quality and is used to measure the effectiveness of TPM.

Partnerships – A working relationship between two or more parties. Partners can include suppliers, distributors, joint ventures and alliances.

Performance measure – A dimension of an activity or process – quality, cost, cycle time, or other characteristic – that can be used to judge the effectiveness and efficiency of the process against a target or standard value.

Planning – The operational timing plan that underpins the delivery of the Lean Deployment Strategy. This typically shows details on when and how activities will be completed.

Process – A sequence of activities which results in a product/project or service by producing required outputs from a variety of inputs.

Process variation – Every process has variation. Some variation may be the result of causes which are not normally present in the process. This is special cause variation. Some variation is simply the result of numerous, ever-present differences in the process. This is common cause variation.

Process stability – Process stability is defined as a state in which a process has displayed a certain degree of consistency in the past and is expected to continue to do so in the future. This consistency is characterised by a stream of data falling within control limits which are set specifically for the process being monitored, using statistical techniques to measure data to ensure that processes are maintained within those limits.

Productivity – An overall measure of the ability to produce goods or service. It is the actual output of production/construction compared to the actual input of resources. Productivity is a relative measure across time or against common entities. In economics, the ratio of output in terms of dollars of sales to an input such as direct labour in terms of total wages.

Pull system – A planning system based on communication of actual real-time needs from downstream operations – ultimately final construction or the equivalent – as opposed to a push system.

Push system – A planning system that schedules upstream operations according to theoretical downstream needs based on a plan, which may not be current – as opposed to a pull system.

QCD – Quality, Cost and Delivery.

Review – The ongoing process of periodic oversight for the Lean programme. Typically this will form part of the Steering and Governance activity.

Root cause – Underneath the (apparent) cause of a problem, the real cause is often hidden. In every case we must dig up the real cause by asking why sufficient times to find the root cause. Otherwise countermeasures cannot be taken and problems will not truly be solved. Eg my car won't start, cause is a flat battery, why? Faulty alternator, why? Poorly adjusted fan belt etc.

Single-piece flow – A situation in which units proceed, one at a time, through operations in design, order-taking and production/construction, without interruptions, backflows or scrap.

Stakeholders – All those who have an interest in an organisation, its activities and its achievements. These may include customer/clients, partners, employees, shareholders, owners, government and regulators.

Strategic plan – This is a comprehensive statement of an organisation's overall mission, objectives and strategy. A detailed road map of the direction the organisation intends to follow in conducting its activities. Provides direction, concentration of effort, consistency of purpose, and flexibility as a business moves to maintain and improve its competitive position.

Strategic planning – The top-level management decision process that focuses on the overarching, long-range direction of the organisation and establishes the means by which that direction is reached. Includes defining top-level and subordinate missions, goals and supporting objectives, ie, how the enterprise sees its purpose and where it wants to go. Provides the big picture along with a description of how goals and objectives are to be achieved and the indicators that will be used to measure performance and outcomes.

Statistical process control (SPC) – an optimisation philosophy concerned with continuous process improvements, using a collection of (statistical) tools for data and process analysis and making inferences about process behaviour in order to take action to maintain process stability. It is used, for example, in the concrete industry to ensure consistency of mix. SPC does not refer to a particular technique, algorithm or procedure.

Supply chain partners – A general term to cover the working relationships between organisations up, down and across the supply network.

Takt time – The available production or construction time divided by the rate of customer/client demand. For example, if a customer/client demands 40 soil nails per day, and a contractor operates 8 hours per day, takt time is twelve minutes; if customer/client wants two new projects designed per year, takt time is six months. Takt time sets the pace of production/construction to match the rate of customer/client demand and becomes the heartbeat of any Lean system.

Total product/productive maintenance (TPM) – Based on the experience that equipment and process problems are the root cause of many of the unplanned events that reinforce a reactive management style. Delivering reliable equipment alone, however, is not enough to deliver world-class organisation performance. TPM encompasses monitoring and improving the total integrity of the organisation's facilities by delegating as much maintenance work down through the people who add value - production/construction and maintenance personnel alike. Its effectiveness can be measured by overall equipment effectiveness (OEE) see above.

Value – A product/project or service's capability provided to a customer/client at the right time, at an appropriate price, as defined in each case by the customer/client.

Value-added activity – An activity or step in a process that adds value to an output product/project or service. Such an activity merits the cost of the resources it consumes. These are the activities that customer/clients would view as important and necessary. A value-added activity contributes directly to the performance of a mission, and could not be eliminated without impairing the mission.

Value-added time – Time for those work elements that transform information, product/project or service into value the customer/client is willing to pay for.

Value stream – The specific activities required to design, order and provide a specific product/project, structure or service from concept to delivery (end to end) into the hands of the customer/client.

Value stream mapping/analysis – Involves defining a product/project family's/business processes' material and information flows from beginning to end utilising a visual representation of every process identifying value adding and non value adding processes. This facilitates understanding of the current state and the development of the proposed future state. The difference between the two states becomes the basis for the Lean transformation plan.

Visual management – is about communication and enabling teams to deliver performance improvement over time. It involves doing three things: Using primary visual displays, having stand-up meetings and seeking continuous performance improvement; by measuring, monitoring and reviewing team performance.

Waste – Any product/project, process or service which does not add value to the ultimate customer/client. In Lean applications, Highways England identifies eight types of waste:

- Transportation (eg moving aggregate from depot to site)
- Inventory (stock) excess (eg raw material, work in progress including design work and finished work not yet required and float in the programme, unused plant)
- Motion excess (eg excessive haulage roads on site)
- Waiting time (eg excavating plant waiting for spoil removal vehicles to become available)
- Over production/construction (eg making more than the customer/client wants)
- Over processing and extra process steps (eg unnecessarily high quality paint finish)
- Defects/rejects (eg fixing defects or scrap)
- Skills misapplication (eg appointing inappropriate people to business improvement roles)


[illegible]

10

Worked example of a HELMA Improvement Plan template


[illegible]


[illegible]

HIGHWAYS ENGLAND LEAN MATURITY ASSESSMENT (HELMA) Improvement Plan (12 Month Journey)							
Organisation:		Assessment date:					
Assessor(s):		Moderation date:					
HE Moderator:		Feedback date:					
HELMA Areas for Improvement				Planned "Improvement Events" to support HELMA improvement			
HELMA Ref.	Current Maturity	Target Maturity	HELMA Moderation Feedback Comments	Improvement Project	Champion	Deliverables	Timeline from date of Moderation Project Programme (month)
HELMA topic area							

[illegible]

[illegible]

HIGHWAYS ENGLAND LEAN MATURITY ASSESSMENT (HELMA) Improvement Plan (12 Month Journey)																							
Organisation:			Assessment date:																				
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HELMA Areas for Improvement			Planned "Improvement Events" to support HELMA Improvement																				
HELMA topic area	HELMA Ref.	Current Maturity	Target Maturity	HELMA Moderation Feedback Comments	Improvement Project	Champion	Deliverables	Timeline from date of Moderation Project Programme (month)															
5 – Understanding of Processes and Value Streams		0.0	2.0	<p>This HELMA area is driving companies to understand the Value Streams and Processes they use to deliver goods and services to a customer. It should be remembered that a company's product is ANY interaction the customer has with that company. Before we can undertake any form of process measurement a company must define its processes, having once got the actual process mapped and standardised, then the team which uses the process can analyse it and remove waste, whilst still meeting the customer's needs.</p> <p>The moderator suggests that AS discuss this topic with both the main contractor and the Highways England Lean team to help them get started in this area.</p>	Collate all process information from the SMT	All																	
					Processes for business management to be developed, rolled out and reviewed. Within these processes concentrate on what generates value for the customer – remove waste.																		
					Formal programme for meetings on a weekly basis to jointly involve both planning and surfacing businesses	AA / DD																	
					Challenge each site manager to review each other's programmes and methodologies and seek improvements	AA / All																	

HIGHWAYS ENGLAND LEAN MATURITY ASSESSMENT (HELMA) Improvement Plan (12 Month Journey)												
Organisation:		Assessment date:										
Assessor(s):		Moderation date:										
HE Moderator:		Feedback date:										
HELMA Areas for Improvement				HELMA Moderation Feedback Comments		Planned "Improvement Events" to support HELMA Improvement		Timeline from date of Moderation				
HELMA topic area	HELMA Ref.	Current Maturity	Target Maturity			Improvement Project	Champion	Deliverables		Project Programme (month)		
6 – Use of Methodologies and Tools		0.0	2.0	<p>The moderator concluded that in the first instance it would be useful to identify what Lean tools are available and where they could be deployed. It was agreed at the HELMA moderation that the main contractor would provide this information to John Smith.</p> <p>The lean tools will be applicable to all workers within the AS organisation.</p> <p>For instance, during the post HELMA works walk-about the moderators visited the plant maintenance garage. Whilst the maintenance manager took pride in his operation, lean tool application of techniques such as 5S would greatly help his working area and visual management boards covering plant maintenance in the garage could identify when plant came in and when it was scheduled to leave. If the required leave date was not achieved, say due to late delivery of spares, then this concern, if a regular occurrence, could be escalated for resolution.</p> <p>John Smith believed that again this was another area that would be picked up in the AS Lean Strategy and he would work closely with the main contractor to define what the most appropriate lean tools to initially deploy are. The moderator noted that to achieve a score of 1.5 in this HELMA area some form of Lean Collaborative Planning will be required.</p>		Lean Training to be undertaken by SMT.	JS	SMT understand the principles of Lean and how they can implement it into their daily activities				
						As part of the office, yard and workshop review ensure a full 5S review is undertaken. Remove waste and enable process to flow unhindered.	GG					

[illegible][illegible]

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