



सत्यमेव जयते

GOVERNMENT OF INDIA



Guidelines

For the Implementation of

Lean Manufacturing Competitiveness Scheme

Under

National Manufacturing Competitiveness Programme

Development Commissioner

(Micro Small and Medium Enterprises)

Ministry of Micro, Small and Medium Enterprises,

Government of India

Up-scaled: Revised 2013

(This Guideline is only for circulation purpose for initiating the activities of cluster formation)



GOVERNMENT OF INDIA

GUIDELINES

For the Implementation of
Lean Manufacturing Competitiveness Scheme

**A Component of
National Manufacturing Competitiveness Programme**



**Development Commissioner
Micro, Small & Medium Enterprises
Government of India
Nirman Bhavan, New Delhi-110 108
www.dcmsme.gov.in**

Up-scaled: Revised 2013

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ABBREVIATIONS

| | |
|-----------|--|
| DC (MSME) | Development Commissioner (MSME) |
| DPG | Distinct Product Group (DPG is a part of an Association or existing SPV, eligible for Scheme) |
| GDP | Gross Domestic Product |
| GOI | Government of India |
| IA | Implementing Agency |
| IFW | Integrated Finance Wing |
| LMC | Lean Manufacturing Consultant |
| LMCS | Lean Manufacturing Competitiveness Scheme |
| MBR | Milestone Based Report |
| MC | Mini-Cluster - A group of preferably 10 MSMEs (formed by new SPV or as Sub group/ DPG of an Association or Existing SPV) |
| MSME | Micro, Small & Medium Enterprises |
| MSME - DI | MSME-Development Institute |
| NMCC | National Manufacturing Competitiveness Council |
| NMCP | National Manufacturing Competitiveness Programme |
| NMIU | National Monitoring and Implementing Unit |
| SG | Sub Group (Sub Group is a part of an Association or existing SPV, eligible for the Scheme) |
| SPV | Special Purpose Vehicle |
| SSC | Screening and Steering Committee |
| T & C | Terms and Conditions |
| TAC | Technical Advisory Committee |
| QCI | Quality Council of India |

GUIDELINES FOR THE IMPLEMENTATION OF LEAN MANUFACTURING COMPETITIVENESS SCHEME (LMCS)

1.0 INTRODUCTION

1.1 The Development Commissioner, Ministry of Micro, Small & Medium Enterprises (DC-MSME), Govt. of India, will implement up-scaled 'Lean Manufacturing Competitiveness Scheme (LMCS)', for the benefit of Micro, Small & Medium Enterprises (MSMEs) during the 12ⁿ Five year plan, after successful completion of the Pilot Phase. The scheme will be implemented in 500 mini clusters during 12th Five Year Plan with the total Project Cost of Rs. 240.94 crores (Govt. of India Contribution amounting to Rs. 204.94 cr. and beneficiaries' contribution of Rs 36.00 cr.) including expenditure on remaining part of the pilot phase of the scheme for the year 2013-14.

1.2 The basic rationale of the Government support to MSMEs for undertaking lean manufacturing (LM) is to enhance their productivity and competitiveness by reduction of wastages in manufacturing processes, inventory management, space management, energy consumption, etc. The LM techniques also result in reduction in rejection, standardization of processes, better layout of machines resulting in reduced transportation of products during manufacturing, etc. The implementation of LM techniques leads to cost reduction for MSMEs. It also has lot of social benefits in terms of training of labour, creation of knowledge, increased labour productivity, lower input costs to other industries, and introduction of new production equipment / methods in manufacturing and development of work culture in society.

1.3 The implementation of lean manufacturing technologies in the enterprises will lead to increasing return to scale, i.e. (i) economy of scale that reduce per unit production cost and (ii) increased productivity of the enterprises (iii) enhanced competitiveness in domestic and overseas markets. Simultaneously it also leads to increased expertise in the firm in respect of better work culture, managerial competencies, etc. The scheme also leads to 'demonstration effect'.

1.4 While some organizations in the country have initiated lean manufacturing practices and have started to reap the benefits, these practices have not reached many MSMEs in the country. The concept and techniques of lean manufacturing is still novel to most of the micro and small enterprises in the country.

1.5 Manufacturing has been recognized as the main engine for growth of the economy. The share of manufacturing sector in Indian National GDP over the years has stagnated to 14-15% only. The National Manufacturing Policy of Government of India envisages share of manufacturing to reach target of 25% of the National GDP by 2022. To achieve a sustained rate of growth, the manufacturing sector needs to build and maintain competitiveness needed to face the challenges posed by globalization. Under the LM Scheme, MSMEs will be assisted in reducing their manufacturing costs, through proper personnel management, better space utilization, scientific inventory management, improved process flows, reduced engineering time and so on with the application of LM techniques.

1.6 The pilot phase of Lean Manufacturing Competitiveness Scheme (LMCS) was launched in July 2009 in 11th FYP for implementation of Lean Manufacturing Techniques in 100 Mini Clusters (each cluster consisting of 10 +/- 2 units) across the country.

1.7 The scheme has been up-scaled considering the recommendations of the evaluation report conducted by Quality Council of India (QCI). The evaluation report on Implementation of LMCS has recommended the continuation of the Scheme keeping in view benefits amounting to about 20% have accrued to the units.

1.8 Government of India has also institutionalized National award for excellence in the field of Lean Implementation from the year 2013 onwards. The MSMEs will be encouraged to come forward to participate in the National Award as well.

2.0 SCHEME CONCEPT

2.1 Need for Lean Manufacturing: Ever changing globalized environment has been posing challenges of competitiveness and survival to all the constituents of the economy. It has been more so for MSMEs in the manufacturing sector. It has been noticed that units are so engaged in their day-to-day management issues that they don't have time and resources to dedicate for a strategic understanding of the need and acquiring means of various techniques which would help them in enhancing their productivity and hence being competitive in the world markets. Lean Manufacturing is a set of techniques, which have evolved over a long period and are based on various minor to major breakthroughs that help in reducing cost and hence increase productivity and competitiveness. A list of main LM techniques with brief description of each is given below:

- 1. 5S System:** The 5S systems is a workplace management which helps in getting the "junk" out of the work area and set of procedures to keep it that way. 5S stands for Sort, Set in order, Shine, Standardize & Sustain.
- 2. Visual Control:** Visual controls such as cartoons, charts, light signals, Lane marking on floor. Safety instructions. Warning signs, Poka-Yoke instructions etc., can be displayed all over the work place.
- 3. Standard Operating Procedures (SOPs):** All verbal instructions should be converted to SOPs to remove dependency on skilled personnel in achieving required product quality level, consistency, effectiveness and efficiency.
- 4. Just in Time (JIT):** It's a Japanese manufacturing philosophy to make the right product in right quantity at the right time. This almost results in zero inventory and shortest possible cycle time.
- 5. KANBAN System:** In this, components are pulled by assembly or subsequent work centers and the containers are replenished with the right quantities by the previous work center, which reduces the inventory of unwanted components.
- 6. Cellular Layout:** In this improved manufacturing system, family wise component completion is aimed at within the smaller self contained cell, which is a part of a big factory, as compared to operation wise completion in traditional functional layout.
- 7. Value Stream Mapping:** It covers all activities, both value added and non-value added, and helps in arriving at best layout of all resources required for making the product.
- 8. Poka Yoke or Mistake Proofing:** It is again a Japanese technique used to prevent errors occurring at their source of origin, and it finally leads to a 'Zero Defect' situation.
- 9. Single Minutes Exchange of Dies or Quick Changeover (SMED):** Applying ingenious methods, set up time is minimized and brought to less than ten minutes; thereby smaller batches as required by the customer can be taken up for manufacturing.
- 10. TPM (Total Productive Maintenance):** TPM involves operators, maintenance staff and management working together to improve overall operation of any equipment. Operators, who

first identify noisy or vibrating motors, oil or air leaks, can be trained to make simple repairs to prevent major and costly break downs.

11. Kaizen Blitz or Rapid Improvement Process: It is an intense management programme, which results in immediate change and bottom line improvement. Both management staff and workers are involved in this.

3.0 OBJECTIVES OF LEAN MANUFACTURING SCHEME:

3.1 The objectives of the Scheme are to enhance the manufacturing competitiveness of MSMEs through the application of various Lean Manufacturing (LM) techniques by;

- ✓ Reducing waste;
- ✓ Increasing productivity;
- ✓ Introducing innovative practices for improving overall competitiveness;
- ✓ Inculcating good management systems; and
- ✓ Imbibing a culture of continuous improvement

3.2 The general approach involves engagement of Lean Manufacturing Consultants (LMC) to work with selected MSMEs in the chosen clusters with financial support by the Government. Under the Scheme. MSMEs will be assisted in reducing their manufacturing costs through proper personnel management, better space utilization, scientific inventory management, improved process flows, reduced engineering time and so on with the application of LM techniques. The Scheme is basically a business initiative to reduce "waste" in manufacturing.

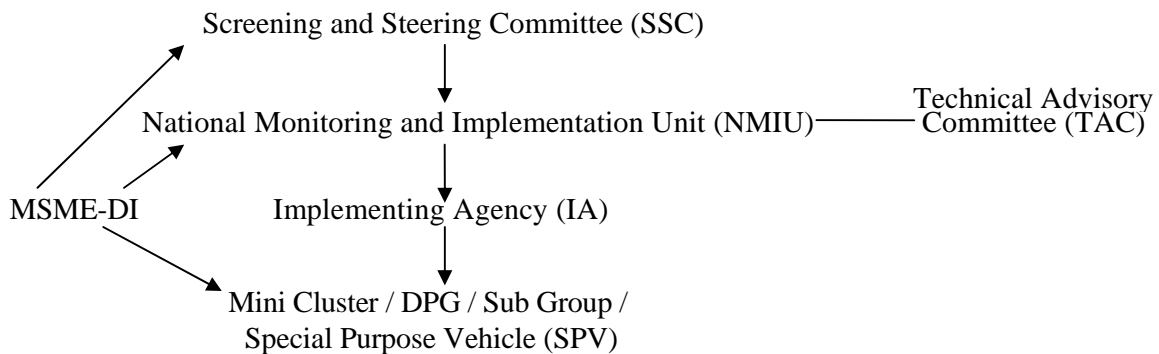
3.3 The interventions lead to increase in competitiveness of the individual units i.e. They can manufacture better quality products with less cost by improvement in process flow, standardization of process, reduction in waste, processing time, etc. The extent of tangible benefits depends upon the scope of improvement, benchmarking, involvement of the entrepreneurs/units. All these aspects are studied and included in the Diagnostic Study Report which is prepared by the LM Consultant at the start of the interventions at the field level. Incremental improvements are verified by the NMIU and DC, MSME office.

4.0 Implementation Arrangements:

4.1 The scheme will be implemented in mini clusters spread all over the country for all manufacturing sectors. The Scheme will be implemented by National Monitoring and Implementing Units (NMIUs), under the overall directions of DC (MSME). It is expected that once MSMEs are introduced to the benefits and savings that accrue from LM techniques, they would themselves continue the Scheme at their own expense. The Scheme will be implemented in 500 clusters spread all over the country during the 12th Plan period. To ensure effective and successful implementation of LMCS, need based awareness program(s) will be organized so that the potential participants may assimilate the scheme provisions and only likeminded entrepreneurs join together for effective implementation of the scheme. However for organizing more than 2 awareness programmes in a cluster, approval of SSC will be required.

4.2 A three tier structure has been proposed in the Scheme. A Mini Cluster (MC) would be formed at the lowest tier. The units of the MC would work with the assigned LMC to implement the specific LM Techniques. The next higher level tier. National Monitoring and Implementing Units (NMIUs) will be

responsible for facilitating, implementation and monitoring of the scheme. At the highest level, SSC will provide overall direction to the Scheme and will be headed by the Development Commissioner (MSME). The implementation framework of the scheme is given below:



5.0 Mini Cluster (MC) - Mini-Cluster is a group of preferably 10 MSMEs located within an identifiable and as far as practicable, contiguous area and manufacturing same/similar products. A mini cluster may be formed by new SPV or as a Sub group/ DPG of an Association or Existing SPV. MSMEs will be motivated to avail the scheme through awareness programmes. MSMEs are expected to assess the suitability of forming a Mini Cluster by exploiting the benefits of synergy, collective bargaining and economies of scale. The scheme may be availed by existing Special Purpose Vehicle (SPV) by bringing in suitable changes in the mandate of the SPV. In case SPV is not available in the cluster, the scheme may be availed through another legal entity i.e. concerned association by grouping the MSMEs in the form of Distinct Product Groups (DPGs) or Sub Groups. DPG and SG will be small groups within the Association or existing SPVs. formed with the approval of Management of SPV or Association as the case may be. More than one DPG / SG may be formed within one association or cluster. A MC will consist of ideally 10 MSMEs (minimum 6 units). All the units of the MC would work with the assigned LMC to implement the specific LM techniques. In case the scheme is being availed by SPV (existing or new), a separate joint Bank Account will be opened in a National Bank for receiving the funds from NMIU. In case DPG / SG is formed for taking benefit of the scheme, the project specific account will be operated jointly by Head of the SPV or Association and the Nodal Officer of the DPG / SG. The units which have availed benefits in the pilot phase will not be allowed to take benefit in the up-scaled scheme.

5.1 Special Purpose Vehicle (SPV): SPV may be:

- "Trust" as per the Indian Trust Act. 1882 or any similar Trust Act or
- A private limited company incorporated as per Indian Companies Act. 1956 or
- A "society" under The Societies Registration Act. 1860 (including any of state equivalent) or
- Any similar entity as approved by SSC from time to time.

5.2 The MSMEs would be required to sign a MoU among themselves (**Annexure 1**). MoU should inter alia, cover the following points:

- (a) Collective and joint responsibility of units;
- (b) Details of SPV or any other legal entity for receiving Government of India funds/ grant from the NMIU;
- (c) Undertaking to adhere to Terms and Conditions of the Scheme;
- (d) Undertaking to co-operate and work in collaboration with LMC;
- (e) Undertaking to continue to implement LM Techniques after the completion of project under the scheme;

- (f) Undertaking for periodic reporting on progress to NMIU; and
- (g) Appointment of a nodal officer to be the authorized signatory and single point of contact.

5.3 Mini Cluster would be assisted by the field /branch/local office of NMIU and MSME-DI concerned to submit the application to avail the scheme.

5.4 A nodal officer (from beneficiary side) would be identified to be a point of contact for all requirements of the Scheme. He would also be authorized signatory on behalf of the Mini Cluster and a Power of Attorney would be signed to that effect, as per the format given at **Annexure 2**.

5.5 National Monitoring and Implementing Unit (NMIU) - National Monitoring and Implementing Unit (NMIU) will be responsible for facilitating, implementation and monitoring of the scheme. NMIU will be a competent National Level organization, with experience and competence in Quality Management and/ or Lean manufacturing programmes and will function as the MSMEs outsourced project 'Control Room'. It will monitor every stage of the programme on behalf of the Development Commissioner (MSME). The field level office/ project offices of the NMIU will function as **Implementing Agency (IA)** for implementation of the projects. These IAs will discharge day to day activities for smooth and effective implementation of the project. IAs will coordinate with LMC, cluster units, concerned associations. NMIU, MSME-DI etc. LMCs and IAs will submit progress report to NMIU which in turn will send consolidated report to the office of DC, MSME. The end of the project reports may be prepared to show the tangible results obtained during the implementation of the LM interventions. The indicative parameters for tangible benefits may be Growth in Profit margin, Growth in Turnover/ exports, increase in Turnover Ratio, benefits of specific projects undertaken during LM implementation, change in Inventory - Turnover Ratio, reduction in rejection rate, saving in space utilization, etc.

5.6 The NMIU may outsource the implementation of Lean Manufacturing Scheme to competent organizations.

5.7 Suggested Role of NMIU

- a) NMIU will function as Monitoring and Implementation Unit of DC - MSME, through its regional offices all over the country as well as local offices near the clusters.
- b) Receive applications for the scheme, examine through TAC and put up for the consideration of the SSC along with its recommendations.
- c) Invite proposals from LMCs, assess them and submit an Empanelled list of LMCs for the approval of SSC. Maintain a panel of LM Consultants.
- d) Maintain a separate account of funds of the Scheme.
- e) Release the funds directly to the beneficiaries against the reports on the basis of progress of implementation and on the satisfactory performance of respective LMCs.
- f) Submit necessary Utilization Certificates (UC) in prescribed format.
- g) Submit weekly progress reports to the nodal officer in the Office of DC, MSME as per agreed formats. Raise exception reports, if any, as regards to any non-responsive behaviour or non-satisfactory performance of any of the beneficiaries or LMCs.
- h) Undertake awareness generation programmes for the Units and encourage them to participate in the Scheme, organise orientation programmes for LM Consultants/ other need based training programmes.
- i) Co-opt industry experts on NMIU's appraising team.
- j) Matching LMCs and Mini Clusters in consultation with Implementing Agency (IA) and MSME-DI.

- k) Creating Bench Mark Action Plans.
- l) Monthly Reviews and Trouble Shooting.
- m) Mini Cluster wise/LMC wise National Report.
- n) Carry out specific activities like publication of newsletter, preparation of book of knowledge, success stores, case studies, etc.
- o) Submit the diagnostic study reports, completion report or any other report regarding implementation of the project to the Office of DC MSME.
- p) Maintain interactive dynamic website for the implementation of the scheme.

5.8 Selection of NMIU: NPC and QCI - two national level organizations having domain knowledge of lean manufacturing, quality assurance, etc will be considered as National Monitoring and Implementing Units (NMIUs) on nomination basis by the O/o DC (MSME). Other Competent National Level organizations and Industries Associations (registered as legal entities) with experience and competence in Quality Management and/ or Lean manufacturing programmes may also be selected as NMIU. Payment for NMIU Headquarter charges, monitoring and implementation will be made on pro-rata basis i.e., on number of Mini Cluster undertaken subject to the condition that each NMIU will implement Lean Manufacturing Scheme in minimum 50 Mini Clusters.

5.9 Technical Advisory Committee (TAC) within NMIU: NMIU would be required to deal with a number of Mini Clusters and their technical issues, take decisions on the matters of productivity, preparation of reports, recommendations of clusters for approvals, progress etc. To this end, a Technical Advisory Committee (TAC) would be constituted, within NMIU, which would be empowered to take the decisions on productivity related issues. The TAC would comprise of at least 3-4 productivity consultants having multi-sector experience covering all relevant sectors identified as amenable for cluster development through LM interventions. There would also be a representative from office of DC (MSME). NMIU including its TAC would be empowered to take decisions on the following matters:

- (a) Appraisal of the applications received from MCs and giving recommendations on the same to SSC;
- (b) Cross-checking implementation of the LM milestones at the unit level, against the LMC's periodic report and accordingly approving acceptance of claims of units;
- (c) Conducting field visits along with representatives of SPVs at units participating in the Scheme;
- (d) Conducting Orientation/Meets for LMCs at periodic intervals;
- (e) Maintaining a central data base and reference library for participating units and LMCs;
- (f) Conducting periodic workshops and meets for participating units.
- (g) Appraising the decisions of TAC to Office of DC MSME through NMIU.

5.10 Lean Manufacturing Consultants:

- a) An Individual or a Consultancy Firm (National or International) duly registered with or certified by a reputed certification agency in the field of manufacturing technology, quality control etc., would be an eligible entity to participate in the Scheme as a LMC. NMIU will obtain the approval of the SSC for the criteria for empanelling the LM Consultants.
- b) NMIU will maintain a panel of LM Consultants duly approved by SSC.
- c) LMCs may be required to undergo Orientation Programme/Meet organized by NMIU. NMIU would organize the Orientation Programme for the benefit of empanelled LMCs. The list of LMCs so trained shall be circulated to prospective MCs which shall identify a suitable LMC so empanelled by NMIU to undertake the Scheme at a specific MC.
- d) Mini Cluster in consultation with Implementing Agency will short list/ recommend the names of suitable LM Consultants for particular MC, out of the list of empanelled consultants.
- e) Selected LMCs will submit financial bids to NMIU.

- f) NMIU in consultation with Office of DC, MSME would give approval for LMC on the basis of suitability of consultants for the respective MCs and the fees demanded.
- g) LMCs would be required to sign a tripartite agreement with NMIU and MCs.
- h) The payment (as per financial bid) to consultant is given in 5 equal installments on the basis of completion of specific milestones (incremental improvements of selected parameters) described in the Diagnostic Study Report. The payment to LM consultant will be max Rs 36 lakh (inclusive of service taxes) for a mini cluster of 10 MSMEs. For smaller cluster or because of drop outs, the payments to consultant will be made on pro-rata basis.
- i) In case the beneficiary MSMEs or NMIU is not satisfied with the progress of lean implementation, the tripartite agreement with the LMC will become null and void and the beneficiary MC may select a new LMC, with the approval of SSC.

5.11 Responsibilities of LMC:

- (a) Assess the existing system at each member unit of the concerned MC;
- (b) Diagnostic Study Report for each cluster shall be prepared by assigned LM Consultant. The report includes measurable targets with respect to baseline data. The baseline data and monitorable incremental improvements may be different for each unit.
- (c) Stipulate detailed step by step procedures and schedules for implementation of the LM techniques (pre-defined milestones);
- (d) Identify the end targets in quantified parameters to be achieved by each unit at the end of the Scheme;
- (e) Work in close co-operation with each of the units to assess and then achieve the LM techniques implementation;
- (f) Respond to specific queries raised by SPV or NMIU on its performance.
- (g) To attend orientation/meet /re-orientation programme organised by NMIU/ office of DC (MSME) so as to clarify scheme implementation related doubts, if any and to share their experiences with peers and also to update LMCs with the developments in the field. LMCs would be required to attend these workshops at their own cost. The cost of conducting workshops would be borne under the scheme.

5.12 International Consultant: The services of reputed international consultant(s) or organizations having experience in the field of Lean Manufacturing Techniques (from organizations like Asian Productivity organization) may also be hired to train LMCs for upgrading the skill of LMCs and sharing global experience of international consultant with LMCs in selected mini clusters. The selection of International consultant will be approved by SSC on nomination basis with the approval of Secretary MSME.

5.13 Role of Micro, Small and Medium Enterprises - Development Institutes (MSME-DI): The MSME-DIs, its branches being the field offices of the Development Commissioner, have important role in implementation of the scheme, which include;

- a) To organise awareness programme in coordination with NMIU, LMC, Associations, other stake holders etc. Apart from organizing awareness programmes, the MSME-DIs will motivate the potential MSMEs to avail the scheme and to participate in the National Award for Lean Implementation through various seminars, IMCs etc.
- b) To participate in first, third and fifth audits of lean implementation, jointly with NMIU.
 - i. The first audit is carried out to verify the results of first milestone i.e. diagnostic study report prepared by LM Consultant which include the status of lean implementation, Action Plan to achieve incremental improvement in each unit, etc. The Action Plan should be acceptable to the beneficiary units and sufficient to achieve the desired results.
 - ii. Third audit is carried out on the basis of report (Milestone Based Report, MBR-3) to

verify the achievements as mentioned in the Action Plan of DSR. Midterm correction of Action Plan, if any, should be referred to NMIU for approval. Generally major midterm corrections will not be allowed.

- iii. Fifth audit is carried out based on MBR-5 submitted by the LMC to verify the final improvements in comparison to the Action Plan. This is the final audit and a comprehensive report (completion report) is prepared by the LMC.
- c) Facilitate the beneficiary MSMEs to submit application for availing the scheme.
- d) Participate in the Screening and Steering Committee Meetings and Meetings for selection of Lean Manufacturing Consultants.

5.14 Screening and Steering Committee (SSC): At the highest level, SSC will guide, review, monitor and provide overall direction for implementation of the scheme and will be headed by the Development Commissioner (MSME). SSC will have overall responsibility for policy formulation, Scheme implementation and monitoring. It will be empowered to take all key decisions related to the Scheme and to approve minor modifications / procedural changes in the guidelines for operational expediency. SSC would deliberate on the issues put up by NMIU. It would lay down the detailed implementation strategy for the NMIU. It would also consider the recommendations of NMIU on each application. The constitution of the SSC will be:

| | | |
|----|---|------------------|
| 1. | AS & DC, MSME | Chairman |
| 2. | AS & FA /Alternate EA(IFW) | Member |
| 3. | Representative of NMCC | Member |
| 4. | Representatives of expert agencies like NPC and QCI | Member |
| 5. | In-Charge, NMIU | Member |
| 6. | Representative of Associations | Member |
| 7. | Director of MSME-DI concerned/ invitee | Member |
| 8. | Nodal officer handling LMCS in DC, MSME | Member-Secretary |
| 9. | Special invitees / experts/ consultants/IAs/ SPVs | |

The Steering Committee will hold its meetings periodically or as and when required.

6.0 Implementation Period: The implementation period will be maximum 18 months in each Mini Cluster to complete Diagnostic Study, implement the action plan, verify the incremental stages, submission of final report etc. However, it is required that the beneficiary units will follow the LM techniques after the exit of Government of India programme. Performance of Implementation of LM Techniques will be divided into 5 milestones. Each milestone is verified in audit before release of funds to LM Consultant.

- 1st Milestone - Completion of Cluster Specific Diagnostic Study Report (DSR). DSR includes
 - Existing status (5s, workspace management. Safety, health, energy conservation, Single Minutes Exchange of Dies. Total Productive Maintenance, Reduction in Inventory, Organization Structure, Layout, process of manufacture, visual base line survey, identification of 7 wastes, inventory practices, top chronic problems, etc.)
 - Time bound targets for achieving Incremental Improvements. Parameters are rated on scale of 1-10.
 - Phase wise Action Plan
 - Qualitative, quantitative, monetary benefits likely to be achieved.

- 2nd, 3rd, 4th & 5th Milestones: - Incremental Improvements to next stage on the scale of 1 -10

The units will be in touch with LMC for building on the gains occurred during the implementation phase. LMC in close coordination with the Mini Cluster will document/ prepare before and after status of various parameters. The documentation will be in form of case study, photographs, videos, etc. The documentation will be submitted to the office of DC, MSME from time to time. The first (Milestone Based Report - MBR-1), third (MBR-3) and last mile stones (MBR-5) in respect of Mini Clusters will be audited jointly by NMIU and O/o DC (MSME) through its field offices.

7.0 COVERAGE AND ELIGIBILITY: The Scheme is open to all Micro, Small and Medium Manufacturing Enterprises throughout the country. The units should be registered with DIC (EM-II) or with any other agency (Professional body, association, Govt agency, department, etc). The units are required to form a MC ideally of 10 units (minimum 6) by signing among themselves a Memorandum of Understanding (MoU) (**Annexure 1**) to participate in the Scheme.

8.0 APPROVAL PROCESS

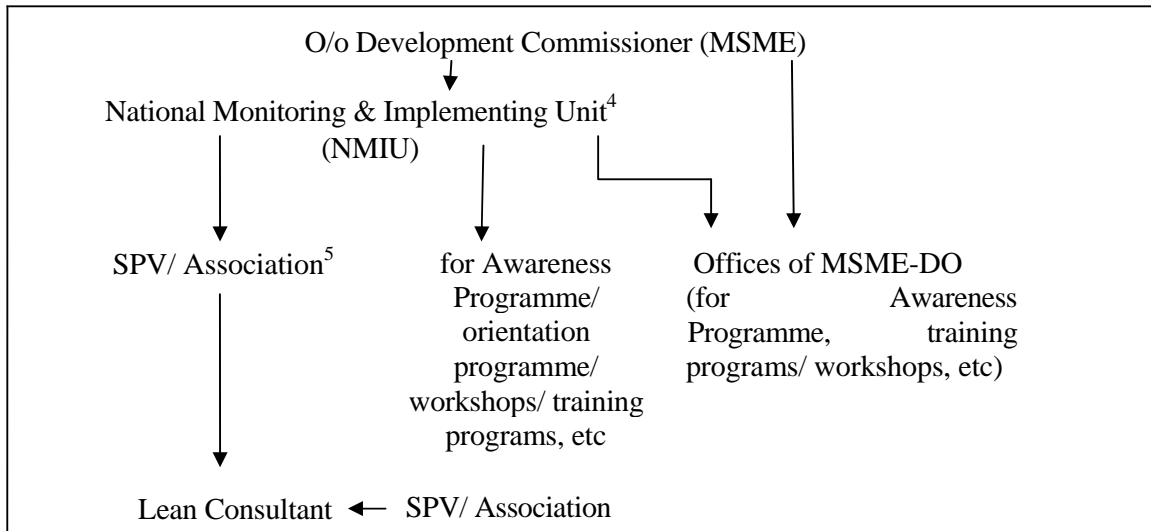
- NMIU will examine and recommend the applications for SSC approval. NMIU/MC will present the proposal in the SSC.
- If any application is not complete, SSC may accord "in-principle approval". MC would then comply with the requirements. NMIU would undertake due diligence on compliance. Once NMIU is satisfied with the compliance, it may issue the Sanction Memo under information to the SSC.
- Having obtained sanction for its project, MC shall proceed with the selection of the LMC and finalize the terms of engagement in consultation with the NMIU. SPV shall thereafter provide the details of the terms to NMIU who would issue an Approval for Signing Memo, which would enable the MC to sign a Tri-Partite agreement with LMC and NMIU

9.0 MODALITIES OF FUND TRANSFER

LMC would raise the bill for the services rendered to the SPV. The payment to LMC by SPV would be on a milestone basis in 5 tranches of 20% each. After the achievement of first stage (preparation and acceptance of DSR), the SPV will pay its contribution to the LMC (first tranche of 20% fee). The subsequent four tranches will be paid out of scheme funds by the NMIU. NMIU will release funds in the account of MC and MC will pay to the LMC.

- i. **Fund Transfer to NMIU:** For facilitating the smooth and faster roll out of the Scheme at a National Level, the total amount of grant envisaged under the Scheme would be periodically transferred to NMIU to be kept in a separate account to be opened by NMIU. NMIU could take the funds out of this account against compliance of pre-defined conditions. NMIU would keep and periodically report on the fund status to SSC.
- ii. **Fund Transfer to SPV:** NMIU would transfer the funds to SPV/MC into their separate account opened for the project. This transfer of funds will be towards the amount of the fees paid by SPV to LMC for achieving a particular milestone, after cross checking with a report for the achievement of same milestone and of satisfactory performance of the LMC. NMIU would seek documentary evidence in the form of a certificate of the Authorized Signatory of the SPV, which would also form part of the Progress Report.

FUNDS FLOW CHART



⁴ Based on MoU

⁵ Funds will be provided to SPV / Association as per prevailing guidelines and to have better coordination with LM consultant

(To be executed on Stamp Paper of Appropriate Value)

MEMORANDUM OF UNDERSTANDING AMONGST MINI CLUSTER (MC)

This Memorandum of Understanding is entered into on this the _____ day of _____
2014 at _____

AMONGST

1. _____ having its registered office at _____ (hereinafter referred to as the **First Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
2. _____ having its registered office at _____ (hereinafter referred to as the **Second Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
3. _____ having its registered office at _____ hereinafter referred to as the **Third Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
4. _____ having its registered office at _____ (hereinafter referred to as the **Fourth Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
5. _____ having its registered office at _____ (hereinafter referred to as the **Fifth Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
6. _____ having its registered office at _____ (hereinafter referred to as the **Sixth Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
7. _____ having its registered office at _____ (hereinafter referred to as the **Seventh Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
8. _____ having its registered office at _____ (hereinafter referred to as the **Eighth Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
9. _____ having its registered office at _____ (hereinafter referred to as the **Ninth Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)
10. _____ having its registered office at _____ (hereinafter referred to as the **Tenth Part**, which expression shall, unless repugnant to the context include its successors and permitted assigns)

The above mentioned parties of the First, Second, Third, Fourth, Fifth, Sixth, Seventh, Eighth, Ninth and Tenth Part are collectively referred to as Parties and each is individually referred to as a Party.

WHEREAS

1. Purpose

The purpose of this Moll is to enable units who are signatories of this agreement to join together for implementation of Up-scaled: Revised 2013 Lean Manufacturing Competitiveness Scheme (herein after referred to as Scheme) of Ministry of Micro, Small and Medium Enterprises,(herein after referred to MSME) Government of India.

2. Reference

1. Lean Manufacturing Competitiveness Scheme Guidelines of MSME, 2013.
2. Empanelled list of Lean Manufacturing Consultants (LMCs).

3. Background

With the advent of Globalization, the competition in the manufacturing sector is ever increasing. In this competitive environment, the enterprises need to adopt efficient practice to sustain. While the big industries usually have dedicated funds and resources for innovation and efficiency, the small and medium enterprises have hardly any time or resource for this important but not so direct activity.

Hence, with the view to help these industries gain efficiency, the Ministry of Micro, Small and Medium enterprises has launched Lean Manufacturing Competitiveness Scheme. In this Scheme, ideally 10 MSMEs (minimum 6 units) producing similar products, and having similar production process, would come together.

4. Scope

This Memorandum of Understanding defines the term between the units for implementation of the Scheme in the Mini Cluster.

NOW IT IS HEREBY AGREED AS FOLLOWS:-

1. Consortium

1.1 The parties do hereby irrevocably constitute a consortium (the Consortiums) for the purpose of jointly participating in the implementation of the Scheme.

1.2 The parties hereby undertake to participate in the implementation process only through this consortium and not individually and/or through any other consortium constituted for this purpose, either directly or indirectly or through any of their Associates.

2. Covenants

The parties hereby undertake that in the event the consortium is declared to be selected, it shall incorporate a Special Purpose Vehicle as per scheme guidelines for entering into a Joint Agreement for performing all its obligations as the participants in terms of the Joint Agreement for the purpose.

3. Role of the parties

- a. It is the collective and joint responsibility of all members of the Mini Cluster to carry out the Lean Manufacturing Competitiveness Scheme in their Mini Cluster. The members shall allocate the responsibility of implementing the Scheme to a team comprising of representation from all levels of the organization
- b. The units would adhere to Terms & Conditions of the Lean Manufacturing Competitiveness Scheme throughout the period of implementation.
- c. The units would co-operate and work in collaboration with the Lean Manufacturing Consultant for carrying out the diagnostic study of their process, and will provide all necessary inputs and information required by the LMC for the purpose.
- d. The units also undertake to implement the suggestions given by the LMC, and in case they are unable to do so in some of the conditions, explain the same in writing to the satisfaction of the Consultant, who may try to solve the problem and make fresh recommendation to improve the processes in the Industry.
- e. The units understand that the Government grant up to 80% of the cost is for a period of 18 month or till completion, and units agree to fund and implement the scheme at-least for one more year by themselves through this SPV.
- f. The units would report their progress from time to time as required by the Scheme. The failure to do so may result in delay/stopping of re-imbursement by National Monitoring & Implementing Unit (NMIU).

4. Monetary and Performance terms

- i. The units in the Mini Cluster will form a SPV for the purpose of the Scheme once the approval is accorded to the Mini Cluster.
- ii. The SPV then will search for a Lean Manufacturing Consultant from the Empanelled list, or will ask NMIU to select for them. The terms of reference for the LMC shall be as described in the Guidelines of the Scheme,
- iii. After the SSC sanctions the NMIU the appointment of the Consultant for the Mini Cluster, the units shall contribute an amount equal to 20% of the Total fees of the Lean Manufacturing Consultant to an escrow account of the SPV.
- iv. The LMC shall conduct diagnostic study for the SPV and shall submit its first report with set of action items, along with the Invoice for the first stage,
- v. The SPV shall pay the first installment of 20% of the fees from the funds contributed by the units.
- vi. An escrow account will be opened by SPV with two signatories to operate the account,
- vii. NMIU in turn shall reimburse the SPV for the amount expended after verification of the actions taken by units on the recommendation of the LMC, the tasks performed by LMC and on basis of surprise checks conducted by NMIU.
- viii. From the next stage onwards, the SPV will have to submit a Utilization certificate along with the receipt from the LMC for the fees paid,
- ix. The Government grants for the Scheme shall be restricted to 80% of the Consultancy fees of LMC. The SPV needs to sign an undertaking to this effect before getting the first trench of reimbursements.

5. Monitoring Mechanism

The units would be required to submit through LMC their progress report from time to time to the NMIU in the prescribed format. Inability to submit progress report or inadequate progress may lead to suspension of the unit from the Mini-cluster, and no compensation for the amount initially paid would be given to such a unit.

6. Shareholding in the SPV

The parties agree that the proportion of shareholding among the parties in the SPV would be in the form of trustees.

7. Validity

This MOU shall be valid till the approval is accorded to the Mini Cluster by Screening and Steering Committee (SSC), after which the Mini- cluster would be converted into a Special Purpose Vehicle.

IN WITNESS WHEREOF THE PARTIES ABOVE NAMED HAVE EXECUTED AND DELIVERED THIS AGREEMENT AS OF THE DATE FIRST ABOVE WRITTEN

SIGNED SEALED AND DELIVERED BY FIRST PART

WITNESS

- 1.
- 2

SIGNED SEALED AND DELIVERED BY SECOND PART

WITNESS

- 1.
- 2.

SIGNED SEALED AND DELIVERED BY THIRD PART

WITNESS

- 1.
- 2

SIGNED SEALED AND DELIVERED BY FOURTH PART

WITNESS

- 1.
- 2.

SIGNED SEALED AND DELIVERED BY FIFTH PART

WITNESS

- 1.
- 2.

SIGNED SEALED AND DELIVERED BY SIXTH PART

WITNESS

- 1.
- 2.

**POWER OF ATTORNEY
(BY MC TO ITS AUTHORIZED SIGNATORY)**

(On a Stamp Paper of relevant value and to be notarized)

Whereas the Office of the DC(MSME). Ministry of Micro. Small & Medium Enterprises. Government of India, has announced Up-scaled: Revised 2013 Lean Manufacturing Competitiveness Scheme for Micro, Small and Medium Enterprises.

Whereas, the industry units are interested in forming a Mini-cluster as required in the Scheme for taking benefits of the Scheme, and adopt Lean Manufacturing techniques in their industries, in accordance with the terms and conditions of the Scheme and other related documents in respect of the Scheme, and

Whereas, it is necessary as per the Guidelines of the Scheme for the members of the Mini Cluster to appoint a Nodal Officer with all necessary power and authority to do for and on behalf of the units, all acts, deeds and things as may be necessary in connection with the Mini Cluster's proposal for the implementation of Scheme who, acting jointly, would have all necessary power and authority to do all acts, deeds and things on behalf of the Mini Cluster, as may be necessary in connection with the Mini Cluster's application for the Scheme.

NOW THIS POWER OF ATTORNEY WITNESSETH THAT; We,
M/s.

do hereby designate Mr/ Ms. _____ as the Nodal Officer for the Mini Cluster, to do on behalf of the Mini Cluster, all or any of the acts, deeds or things necessary or incidental to the Mini Cluster's proposal for the Scheme, including submission of application/proposal, participating in conferences, responding to queries, submission of information/documents and generally to represent the Mini Cluster in all its dealings with the Screening and Steering Committee (SSC), National Monitoring and Implementing Unit (NMIU), Lean Manufacturing Consultant (LMC), Office of the DC(MSME), Ministry of Micro. Small & Medium Enterprises, or any other Government Agency or any person, in connection with the Scheme.

We hereby agree to ratify all acts, deeds and things lawfully done by the Nodal Officer, our said attorney pursuant to this Power of Attorney and that all acts, deeds and things done by our aforesaid attorney shall and shall always be deemed to have been done by us.

Dated this the _____ day of _____ 2014

IN WITNESS WHEREOF, we have executed this POWER OF ATTORNEY in the presence of the witnesses attesting hereunder at _____

EXECUTANTS:

(To be executed by all the members of the Consortium)

SIGNATURES

1. FIRST PART
2. SECOND PART
3. THIRD PART
4. FOURTH PART
5. FIFTH PART
6. SIXTH PART
7. SEVENTH PART
8. EIGHTH PART

IN THE PRESENCE OF:

- 1.
- 2.

**Application format by MCs/SPVs for participation in
Up-scaled: Revised 2013 Lean Manufacturing Competitiveness Scheme
of
O/o Development Commissioner (MSME),
M/o MSME, Nirman Bhawan, New Delhi-110108**

Date: _____

Name of the Contact Person of MC/SPV:

Address:

Telephone No. & Fax:

Mobile:

E-mail:

Subject: Application for Participation in the Up-scaled: Revised 2013 Lean Manufacturing Competitiveness Scheme

Sir,

We, the undersigned wish to avail the benefits of the Up-scaled: Revised 2013 Lean Manufacturing Competitiveness Scheme to enhance our competitiveness. We have gone through the guidelines of the Scheme. The details of industries interested are as follows:

| Sr. No. | Company/ Unit Name | Address with telephone, Mobile, e-mail etc. | Type of product | E. M. No., Date of Issue, Issued by | No. of Manpower | Broad Facilities Available (eg. Machineries available, Shop Floor Area, Capital Investment etc.) | Annual turnover |
|---------|--------------------|---|-----------------|-------------------------------------|-----------------|--|-----------------|
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| 12 | | | | | | | |

We have made an assessment of Product Manufacturing at our premises, and we feel that we can achieve efficiency by following Lean Manufacturing techniques.

In pursuance of the Scheme, we wish to incorporate a Special Purpose Vehicle named _____ incorporated under the _____ Act, <Year>.

OR

In pursuance of the Scheme, we wish to incorporate a Distinct Project Group (DPG) named _____ under the already existing Association / SPV named _____ incorporated under the _____ Act, <Year>.

We hereby undertake that none of the units named above in the application form has availed any kind of benefit under the pilot phase of this scheme.

A memorandum of Understanding to this regard has been signed between the units, and the units have jointly nominated the undersigned with the Power of Attorney to communicate on their behalf for the purpose of the implementation of the Scheme. A copy of the MoU & PoA are attached herewith for your kind perusal.

Yours Sincerely,

<Signature>

(Name of the Authorized Signatory)

Enclosures:

1. Memorandum of Understanding (MoU)
2. Power of Attorney (PoA)