<table>
<thead>
<tr>
<th>TSC Category</th>
<th>Solutioning and Programme Management</th>
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</thead>
<tbody>
<tr>
<td>TSC</td>
<td>Material Flow Modelling</td>
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<tr>
<td>TSC Description</td>
<td>Analyse the inflow and outflow of material, substance or product flows across different industrial sectors or within ecosystems to achieve optimisation</td>
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<thead>
<tr>
<th>TSC Proficiency Description</th>
<th>Level 1</th>
<th>Level 2</th>
<th>Level 3</th>
<th>Level 4</th>
<th>Level 5</th>
<th>Level 6</th>
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<tr>
<td></td>
<td>LOG-SCL-3004-1.1</td>
<td>LOG-SCL-4004-1.1</td>
<td>LOG-SCL-5004-1.1</td>
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<td></td>
<td>Analyse current end-to-end flow of material with respect to current and future business needs</td>
<td>Develop models to optimise material flow based on conclusions drawn from gap analysis</td>
<td>Evaluate models to optimise material flow to ensure alignment to business objectives</td>
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**Knowledge**
- Process improvement techniques and tools
- End-to-end material flow processes
- Industry best practices for material flow
- Statistical analysis techniques
- Future business needs projection techniques
- Process improvement approaches
- Performance metrics for material flow
- Modelling techniques and methodologies
- Techniques of capacity planning
- Market trends in material flow optimisation
- Process improvement frameworks
- Emerging trends in material flow optimisation
- Strategies of capacity planning
- Strategies of material flow management

**Abilities**
- Project future business needs
- Analyse gaps of current end-to-end material flow with respect to key performance indicators, current industry best practices and future demand
- Implement material flow improvement plans
- Develop appropriate performance indicators for material flow
- Develop material flow optimisation plans to close identified gaps
- Simulate material flow optimisation plans with models
- Formulate priorities in measuring key performance of supply chain processes
- Evaluate proposed material flow models by business impact, ensure marketing competitiveness and meeting future customer needs
- Drive implementation of material flow optimisation models