

## INTEGRATED SUPPLY ROUTE MAP

Although this route map is aligned to a product life cycle, the process of integrating supply can start at any stage. It is essential that irrespective of the PLC stage of intervention, that the first activity is to develop a mutually agreed value profile and value deployment matrix for the value stream members. It is therefore shown as a separate and initial stage. All stages are assumed to involve appropriate members of the value stream

PHASE	NEED	TOOL/TECHNIQUE	OUTPUT
Initiate	Establish objectives, goals, targets and metrics that meet the needs of collaborators <i>(Ideally developed with all members)</i> Agree approach to risk and benefits <b><i>(Ideally developed with all members)</i></b>	Value proposition and profile for value stream Value deployment matrix  Relationship development, facilitation and coaching Risk allocation matrix	Attributes that will determine value for members KPIs , targets and the contribution members are expected to make Sharing agreements
Planning	Determine required degree of integration <i>(for each member and his downstream customer)</i> Determine performance/cost targets – for sub system or component <i>(Ideally cascaded back up stream)</i> Customer requirements <i>( both end and down the value stream)</i>  Concept development <i>(Involving key suppliers)</i>	Value proposition and value profile analysis  Value Planning – comparative VA, technology option selection  Value profile and Functional Performance Specification  VE	Definition of how value will be achieved and implications for internal structure, style and processes. Benchmark of current best performance, cost to function and selection of optimum new technology. Statement of desired attributes and their relative importance. Structured design and process brief. Concept matching requirements and functional input to system FMEA
Product Design and Development	Review design options to select best fit with design brief <i>(Involving key suppliers)</i> Review product design and associated process proposal to optimise performance and cost <i>(Involving key suppliers)</i>	Value profile  VA	Option that best meets end customer needs  Improved design and process to achieve best VfM and functional input to FMEA

<p>Process Design and Development</p>	<p>Determine process requirements <i>(Separately at each key supplier)</i></p> <p>Review overall process system – at all relevant stages of the value stream <i>(Separately at each key supplier)</i></p> <p>Review selected activities <i>(Separately at each key supplier)</i></p>	<p>Functional performance specification</p> <p>Process VA and value stream mapping</p> <p>Process VA and selected others (eg.CTQ,Root cause analysis, DoE)</p>	<p>High level requirements – see above</p> <p>Identification of low process efficiencies</p> <p>Optimised activities meeting performance requirements at lowest cost</p>
<p>Product and Process Validation</p>			
<p>Supply</p>	<p>Improve value for money – improve performance, quality or reduce cost throughout value stream <i>(At selected key suppliers)</i></p>	<p>Supply chain based VA. This will focus both on product and process issues within a total cost framework. It will not be restricted to manufacturing process issues but will deal with any activity that impacts on ineffective value stream performance. VA will be augmented by a range of linked value tools – shared with TQM, Kaizen, 6 Sigma and lean,</p>	<p>Improved product and value chain performance. The emphasis will be on holistic improvement rather than islands of productivity. Total value stream cost concepts and pain/gain sharing are fundamental</p>