

**LEAN AEROSPACE INITIATIVE**  
**Supplier Networks Research Team Workshop**  
**Building Lean Supplier Networks**



**January 13-14, 2000**

Presented by  
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Document: Workshop Goals & Process

## Phase III Team Charter

*CHARTER: Develop and deploy concepts, strategies and tools that optimize value streams supporting the design, production and sustainment of aerospace systems offering best lifecycle value*

*EXPECTED BENEFITS: Best lifecycle value to the customer; “win-win” prime-supplier relationships; significant network-wide (value stream) performance improvements & shared benefits*

- ⇒ Greater efficiency; higher quality
- ⇒ Lead time reduction
- ⇒ Flexibility and responsiveness

### CO-LEADS

MIT  
**Kirk Bozdogan**  
**Charlie Fine**

INDUSTRY  
**George Reynolds**  
**Northrop Grumman**  
**ESSS**

GOVERNMENT  
**Hamid Akhbari**  
**C-17 SPO, WPAFB**

- ❖ **Strategies, methods & tools for flowing lean principles throughout multi-tiered supplier networks<sup>+</sup>**
  - ↳ **Lean transformation roadmap:** Change management strategies & enablers; implementation steps & metrics
  - ↳ **Methods and tools:** Self-assessment tool; common supplier development guide; value stream mapping; performance metrics; gainsharing methods; electronic integration practices
- ❖ **Models for innovative supply chain integration to deliver best lifecycle value to customer<sup>+</sup>**
  - ↳ Supply chain design & integration models for building dynamic sustainable network-wide competitive advantage\*
  - ⇒ Fostering & “pulling” innovation over supplier networks
  - ⇒ Information infrastructure for building integrated virtual enterprises enhancing flexibility & responsiveness<sup>#</sup>

<sup>+</sup> Involves major international cross-benchmarking survey in collaboration with UK-LAI & LARP

<sup>\*</sup> Joint with Acquisition Research Team & with Lean Sustainment Initiative; in collaboration with UK-LAI, LARP and ISCM (see Chart #6)

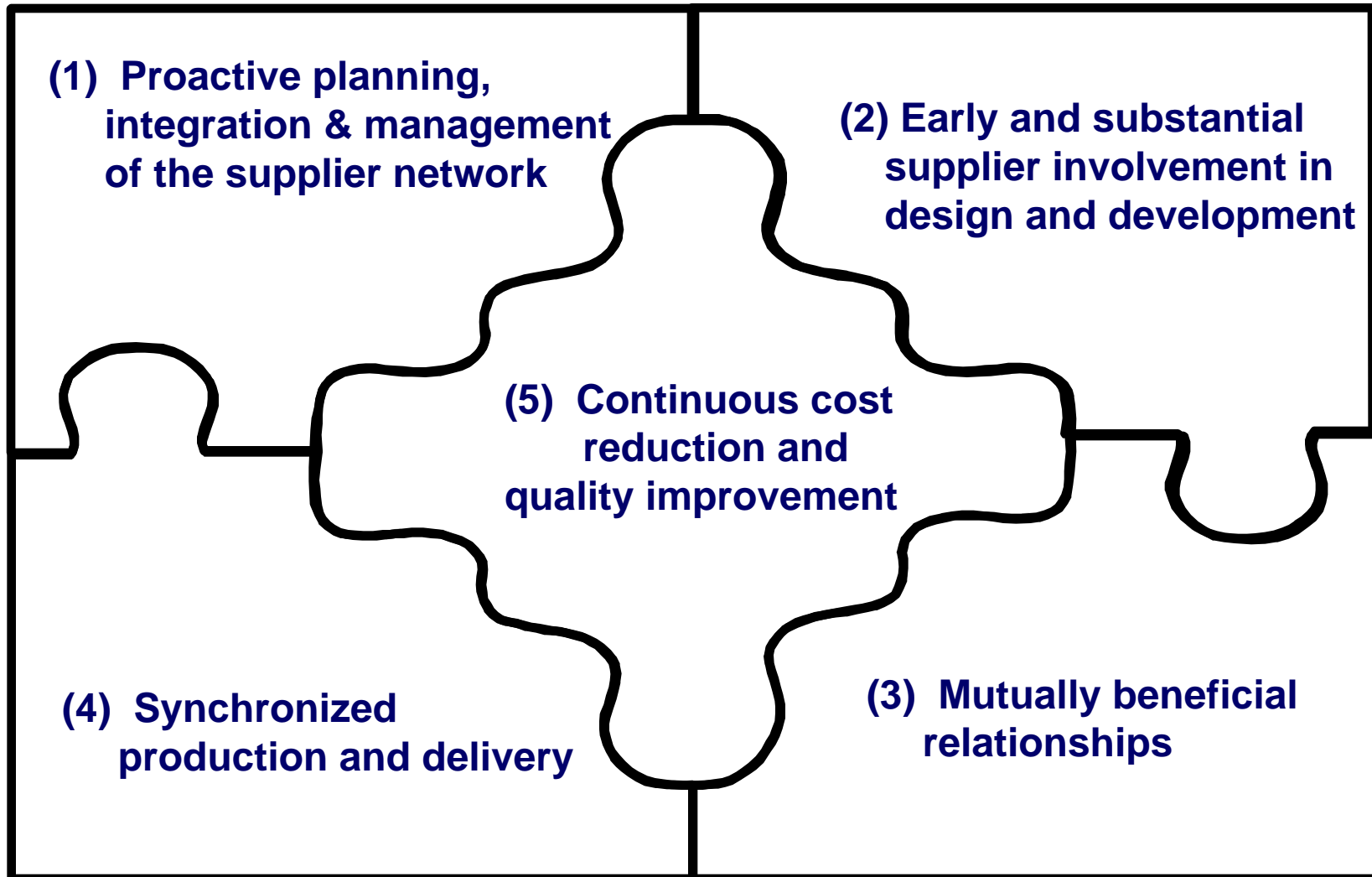
<sup>#</sup> Joint with Product Development Research Team.

<b>PRODUCT CATEGORIES</b>	<b>MAJOR PRODUCTS (Examples)</b>
<b>OUTREACH</b>	<ul style="list-style-type: none"> <li>• Provide “content” support to regional supplier workshops</li> <li>• WEB-based communication products (on-going)</li> <li>• Annual “for fee” conferences on special topics open to all small-to-medium size aerospace suppliers*</li> </ul>
<b>LEARNING</b>	<ul style="list-style-type: none"> <li>• Topical and/or implementation workshops (twice a year)</li> <li>• Lean transformation roadmap, methods &amp; tools</li> <li>• Summer short course on supply chain management strategies and methods (yearly, starting in 2001; provide support to “Integrating the Lean Enterprise” short course in June 2000)</li> <li>• Supply chain design &amp; management self-assessment tool*</li> <li>• Common supplier training and development guide*</li> <li>• IT tools for mapping supplier knowledge value stream*</li> </ul>
<b>ENDURING</b>	<ul style="list-style-type: none"> <li>• Contributions to Lean Enterprise Model (LEM)</li> <li>• Conference reports, working papers and publications</li> <li>• Book contribution –“SUPERCHAINS”</li> </ul>
<b>POLICY</b>	<ul style="list-style-type: none"> <li>• Policy recommendations (potential examples)               <ul style="list-style-type: none"> <li>⇒ Fostering innovation in supplier networks</li> <li>⇒ Interoperability, globalization &amp; international collaboration</li> </ul> </li> </ul>

\*Contingent upon availability of additional funding.

# **Lean Supply Chain Management Framework**

*(LAI Supplier Networks Team Product, 1995)*

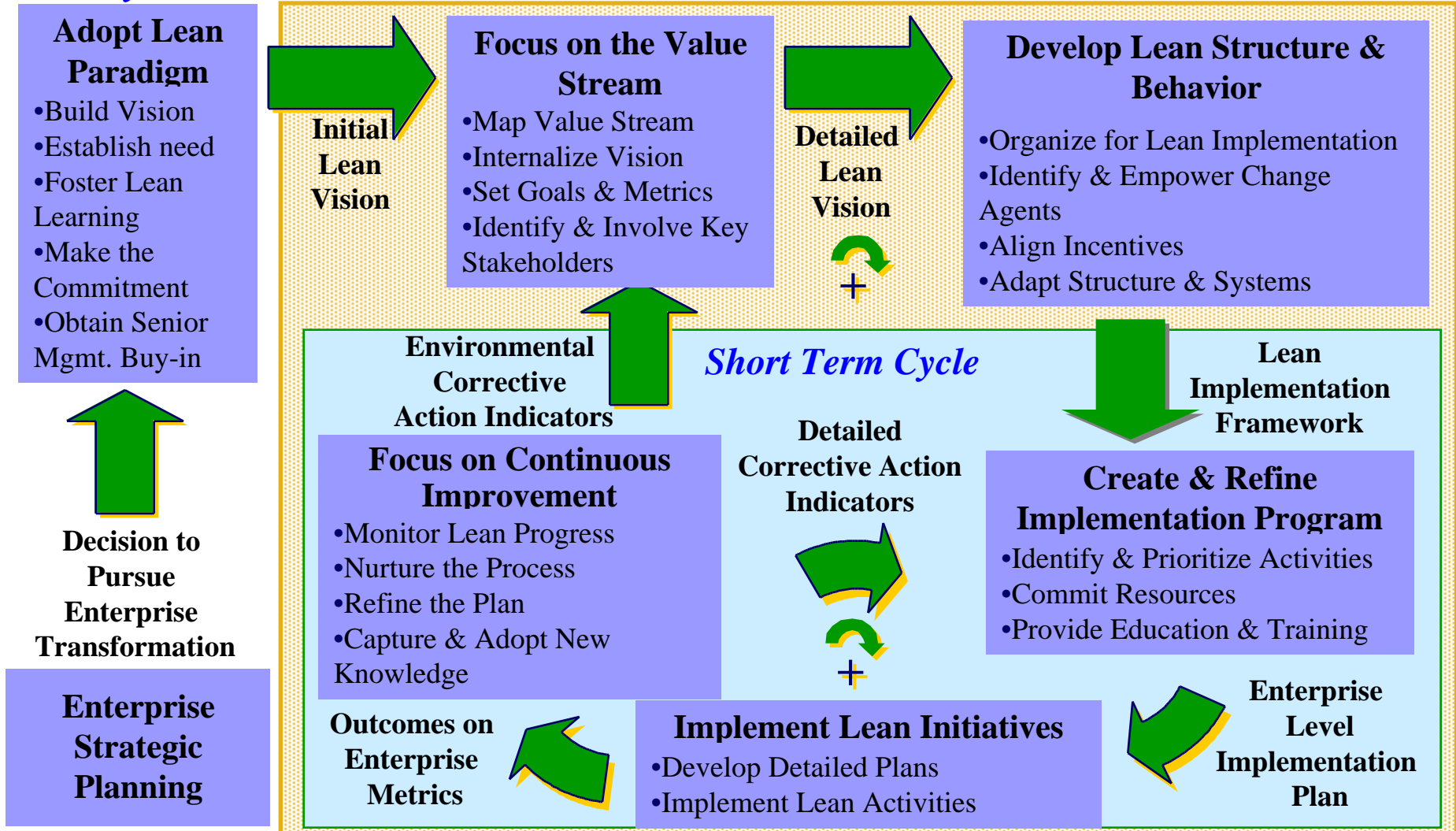


# Enterprise-Level Transition-to-Lean: Illustrative Roadmap

(From Debbie Nightingale, MIT, 10/29/99)

*Entry/Re-entry  
Cycle*

*Long Term Cycle*



## Workshop Expectations

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- ❖ **Foster transformative group learning & take-home results**
  - Collaboration
  - Knowledge-sharing
- ❖ **Make progress toward achieving Phase III team charter**
- ❖ **Start process focusing on development of roadmap & tools/methods for building lean supplier networks**
  - Capture & consolidate group thinking (“base case”)
  - Establish process for further product definition & development
  - Charter subteams to develop & deliver tangible products
  - Define process for providing “content” support to subteams
- ❖ **Identify major gaps in knowledge for calibrating Phase III research agenda**

## **Workshop Ground Rules**

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- ❖ **Everyone: please participate, don't act as a "tourist"**
- ❖ **Equal access to group dialogue; no one excluded**
- ❖ **All contributions welcome & respected**
- ❖ **Stay on topic & build on contributions by others**
- ❖ **Emphasize really important points, can work details later**
- ❖ **Avoid disproportionate discussion of specific issues**
- ❖ **"Park" issues/questions that can't be readily resolved**
- ❖ **Make list of topics/areas where team needs more substantive knowledge (e.g., MIT research results, white papers, references, etc.)**



## Guide for Breakout Sessions

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- ❖ Use workshop ground rules in all breakout sessions
- ❖ Consult more detailed guidelines in handout
- ❖ Make good use of limited available time (120 min)
  - **Brainstorm (20 min):** Capture group's thoughts on major blocks of activities, implementation steps, tools/methods)
  - **Consolidate (20 min):** Cluster results into dominant categories
  - **Structure (20 min):** Order group's output into a structured process (sequential, parallel elements)
  - **Roadmap (45 min):** Refine structured results; clarify major elements; identify links and feedback loops
  - **Summarize (15 min):** Prepare summary outbrief
- ❖ Push forward with all deliberate speed but avoid temptation to address all problems now