CMMI® Today – The Current State

CMMI® Technology Conference 2003
November 18, 2003

Ron Paulson
Vice President, Engineering
Lockheed Martin Corporation

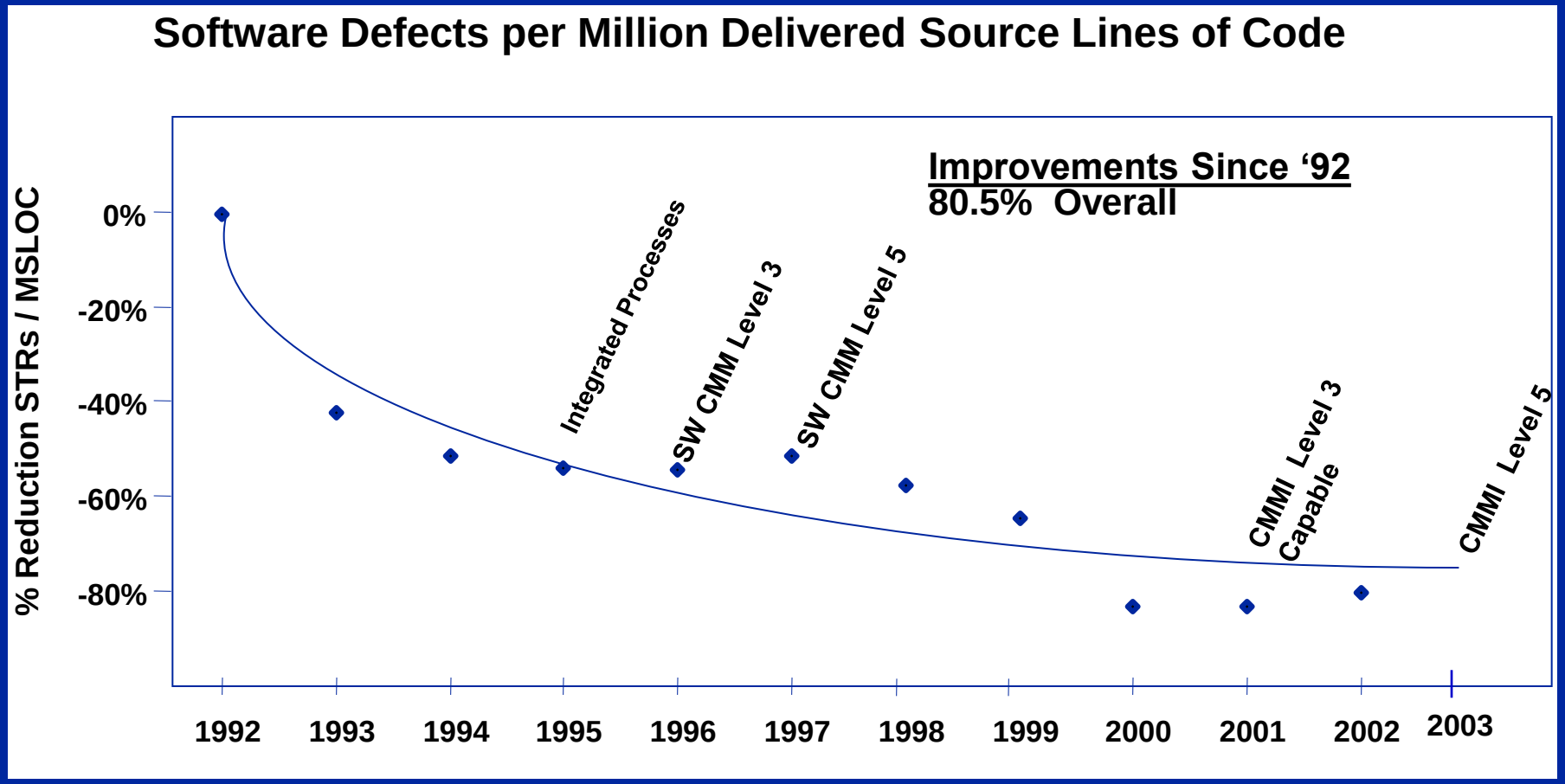
® CMMI is registered in the U.S. Patent and Trademark Office by Carnegie Mellon University.

Why is Lockheed Martin implementing CMMI®?

- *CMMI® has direct impact to our business*
  - *Improved quality*
  - *Higher productivity*
  - *Better predictability*
  - *Customer satisfaction*
- *CMMI® extends process improvement across the enterprise*

© Copyright Lockheed Martin Corporation 2003

Lockheed Martin Systems Integration* Quality



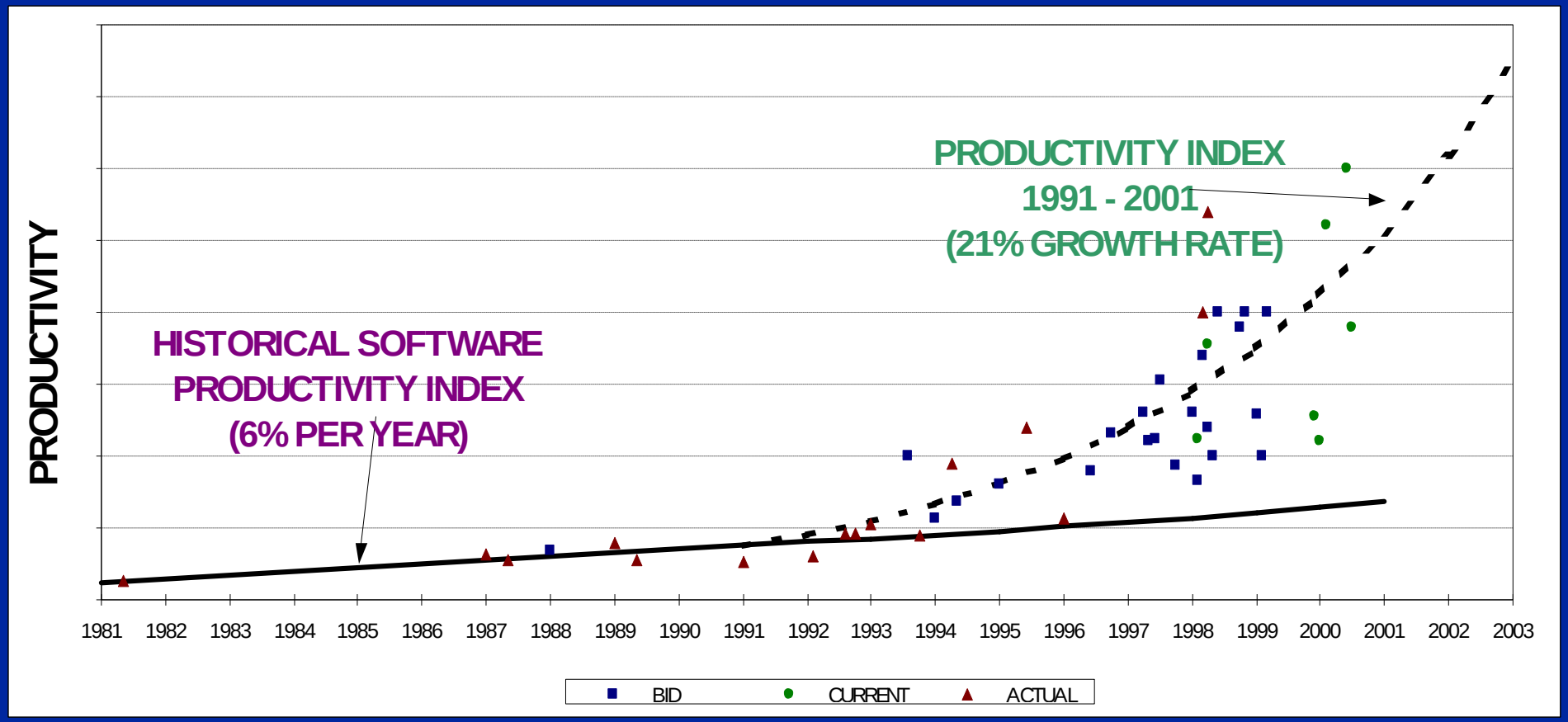
* STR / MSLOC = Software Trouble Report/Million Source Lines of Code

*** Systems Integration in Owego, NY**

® CMMI and CMM are registered in the U.S. Patent and Trademark Office by Carnegie Mellon University.

© Copyright Lockheed Martin Corporation 2003

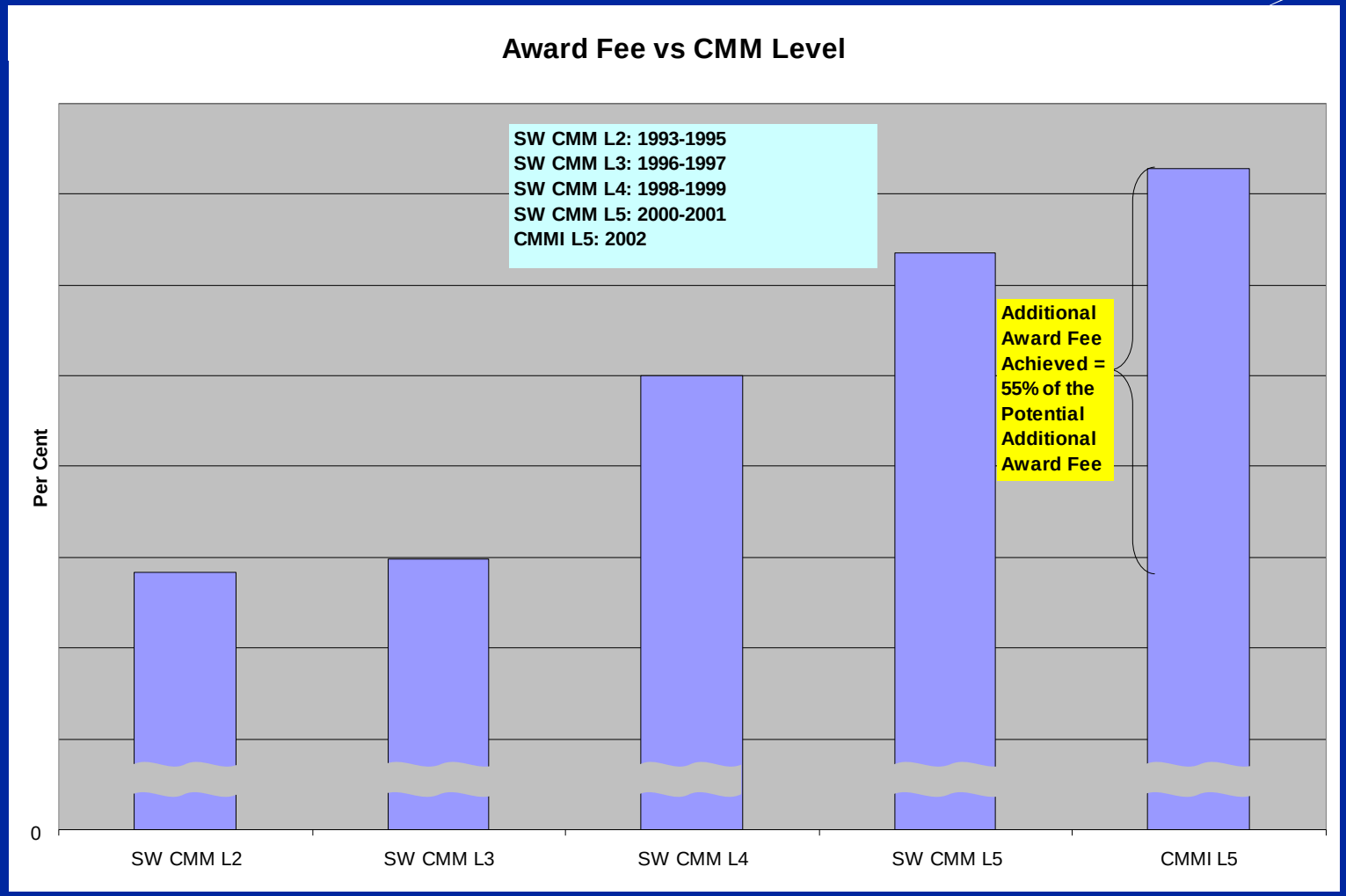
MS2* Syracuse Productivity



** Maritime Systems and Sensors*

© Copyright Lockheed Martin Corporation 2003

Lockheed Martin M&DS* Award Fee



**** Management & Data Systems***

® CMMI and CMM are registered in the U.S. Patent and Trademark Office by Carnegie Mellon University.

© Copyright Lockheed Martin Corporation 2003

How is Lockheed Martin implementing CMMI®?

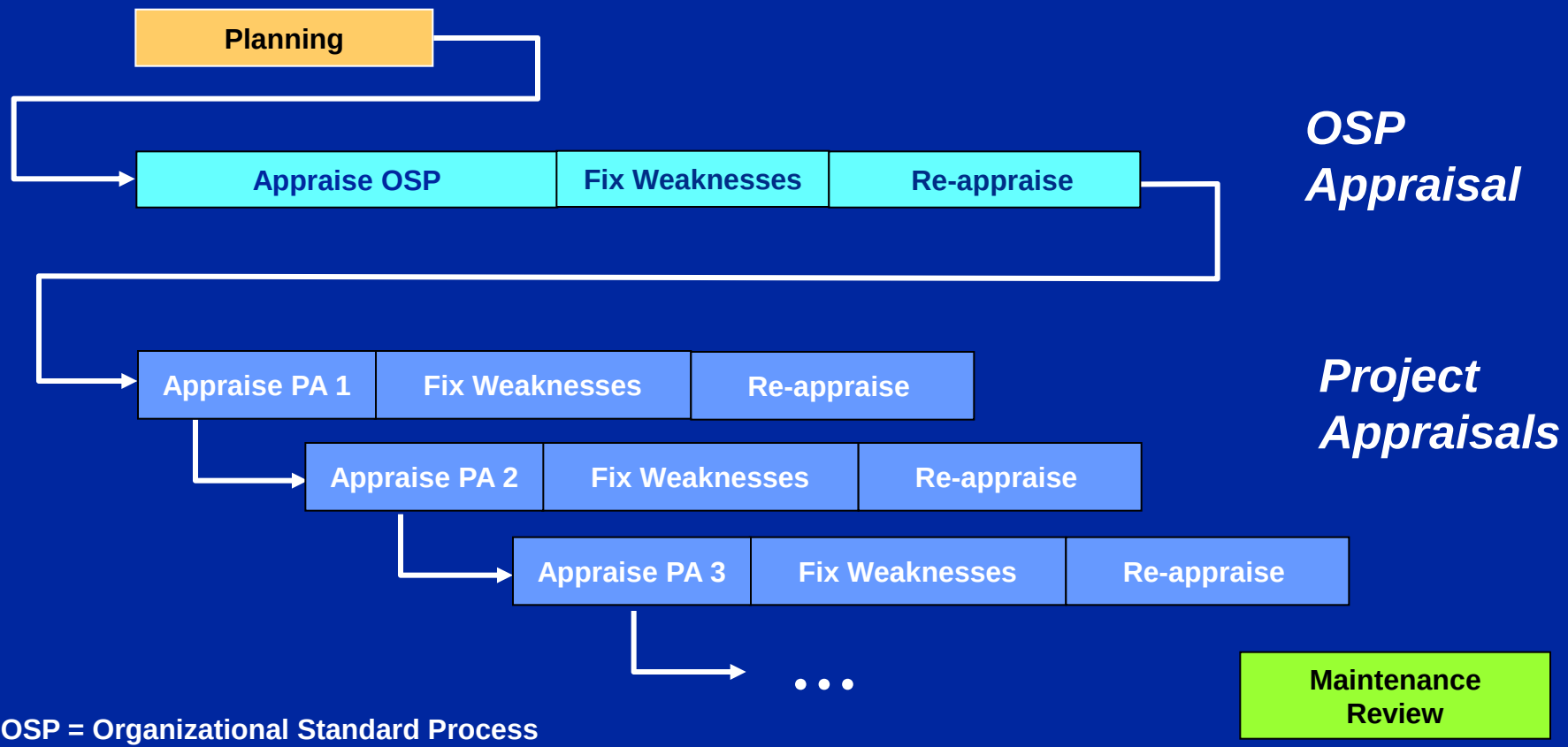
- *Corporate policy requires CMMI® adoption*
- *CMMI® is being addressed in the context of our business requirements*
  - *Our Integrated Engineering Process (LM-IEP) standard includes CMMI®*
  - *CMMI® complements our lean and six sigma initiatives*
- *An incremental appraisal approach is being deployed*
  - *Lockheed Martin's Continuous Appraisal Method (CAM) is efficient and effective*
  - *CAM meets ARC* Class A method requirements*
- *SCAMPI℠ is being used to meet customer requirements*

** Appraisal Requirements for CMMI®*

℠ SCAMPI is a service mark of Carnegie Mellon University.

© Copyright Lockheed Martin Corporation 2003

Incremental Appraisal Using CAM



OSP = Organizational Standard Process
PA = Process Area

Institutionalization focus with minimal project disruption

© Copyright Lockheed Martin Corporation 2003

CMMI® Achievements*

- *4 Maturity Level 5 organizations, including the world's first*
- *2 Maturity Level 4 organizations*
- *3 Maturity Level 3 organizations*

** Maturity levels obtained using SCAMPI℠ and CAM*

We're making progress toward our corporate objective

© Copyright Lockheed Martin Corporation 2003

The Road Ahead

- *CMMI® models need to be expanded for better*
  - *Life cycle coverage, e.g., maintenance, acquisition*
  - *Enterprise scope coverage, e.g., HW engineering, finance, strategic planning, workforce management*
  - *Mechanisms for adding specialty areas such as safety, security and services to the model's core*
- *Incremental, delta and multiple certificate appraisal options are needed in SCAMPI℠ for more efficient and effective appraisals*
- *Process improvement benefits are continuing with CMMI® but better ROI data is needed*

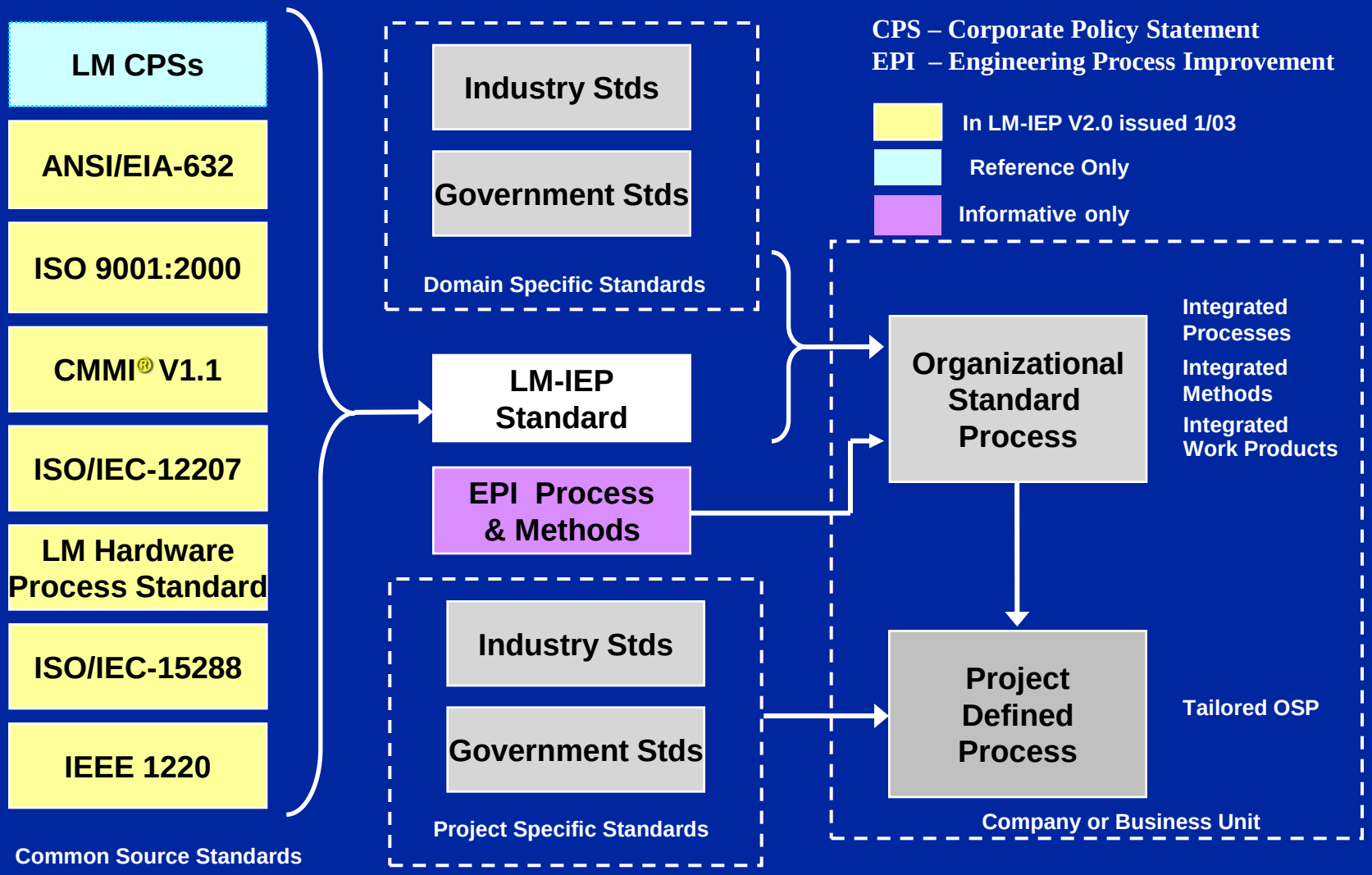
Process improvement is a journey with significant benefits accruing along the way – CMMI® must also improve!

© Copyright Lockheed Martin Corporation 2003

Backup Charts

© Copyright Lockheed Martin Corporation 2003

LM-IEP Context



© Copyright Lockheed Martin Corporation 2003