

# **Enterprise SPICE®**

## **A Domain Independent Integrated Model for Enterprise-wide Assessment and Improvement**

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# Topics

- Background – problem and context
- What is SPICE
- What is Enterprise SPICE
- Project Phases
- Scope and Summary of Initial Release
- Using Enterprise SPICE
- Next Steps

# Background – the Problem

- Suppose you want/need to improve performance across your enterprise
  - There are many improvement models, standards, approaches
  - Each might help with part of the business
  - Using several separately can be expensive, confusing, ineffective
- How can an enterprise reap benefits of knowledge in a bewildering variety of standards, models and approaches?
- How can this be done efficiently and effectively?



# Our Solution

## Integration and Harmonization:

We propose that various models, standards, approaches be integrated and harmonized into a single enterprise model ...called

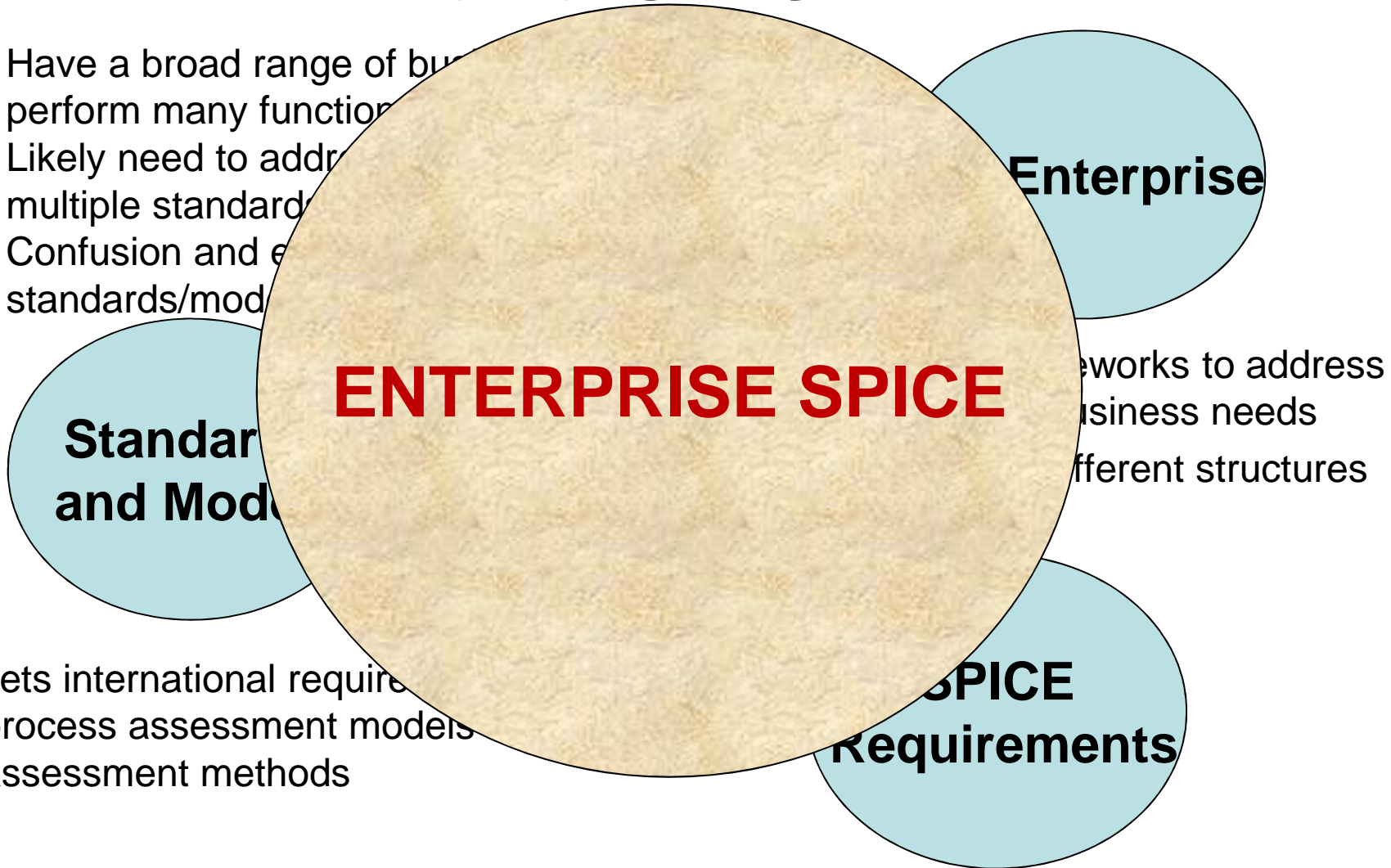
***Enterprise SPICE***

## This presentation:

Describes this proposed solution as being implemented by the Enterprise SPICE project.

# Process Standards, Enterprises, and SPICE

- Have a broad range of business processes to perform many functions
- Likely need to address multiple standards
- Confusion and overlap in standards/models



- sets international requirements for process assessment models and assessment methods

# What is SPICE?

**ISO/IEC 15504 – *Information Technology – Process Assessment (SPICE)*** is the international standard setting requirements for:

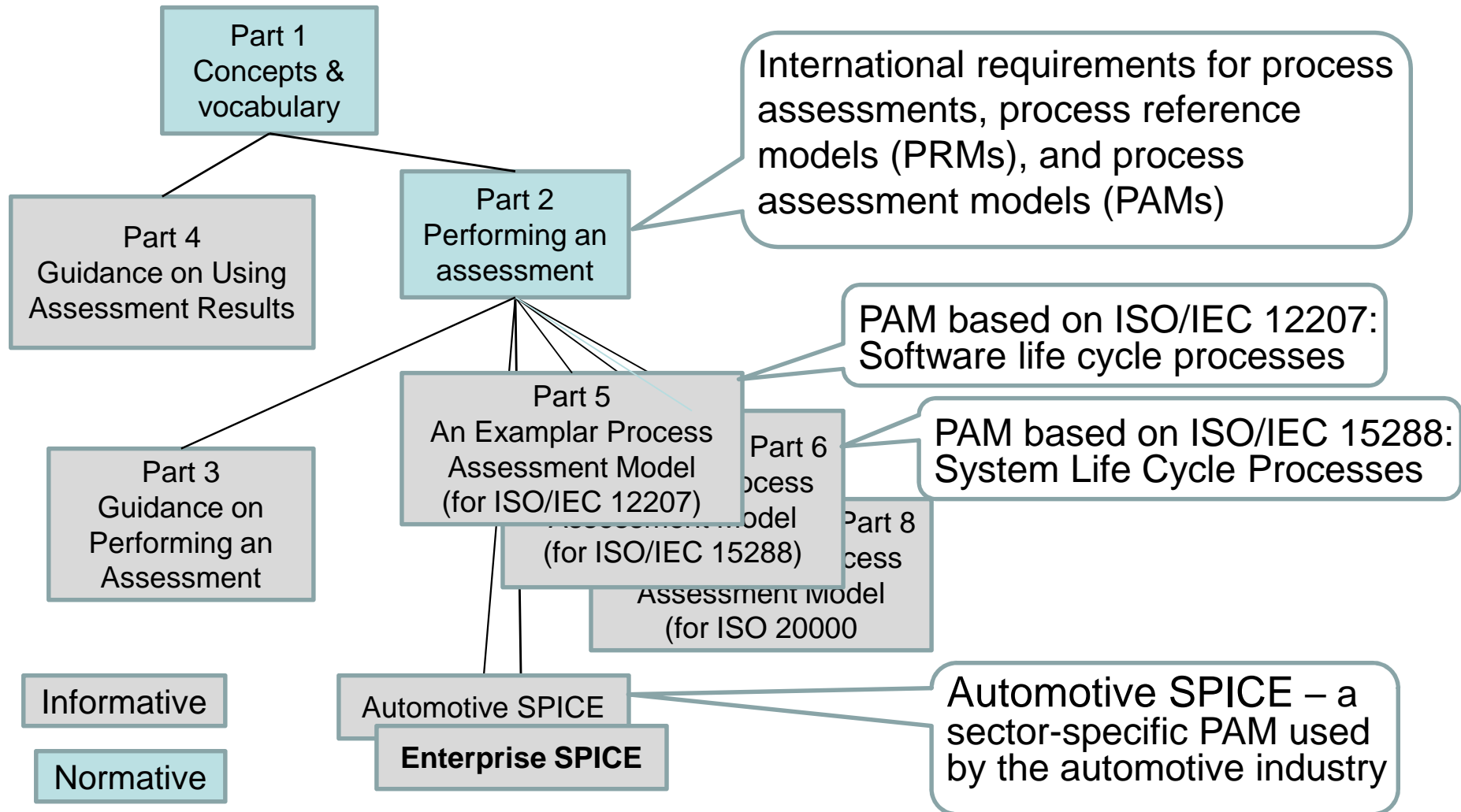
- assessment methods, and for
- models used for assessing process capability

**SPICE** originally stood for **S**oftware **P**rocess **I**mprovement and **C**apability **d**etermination

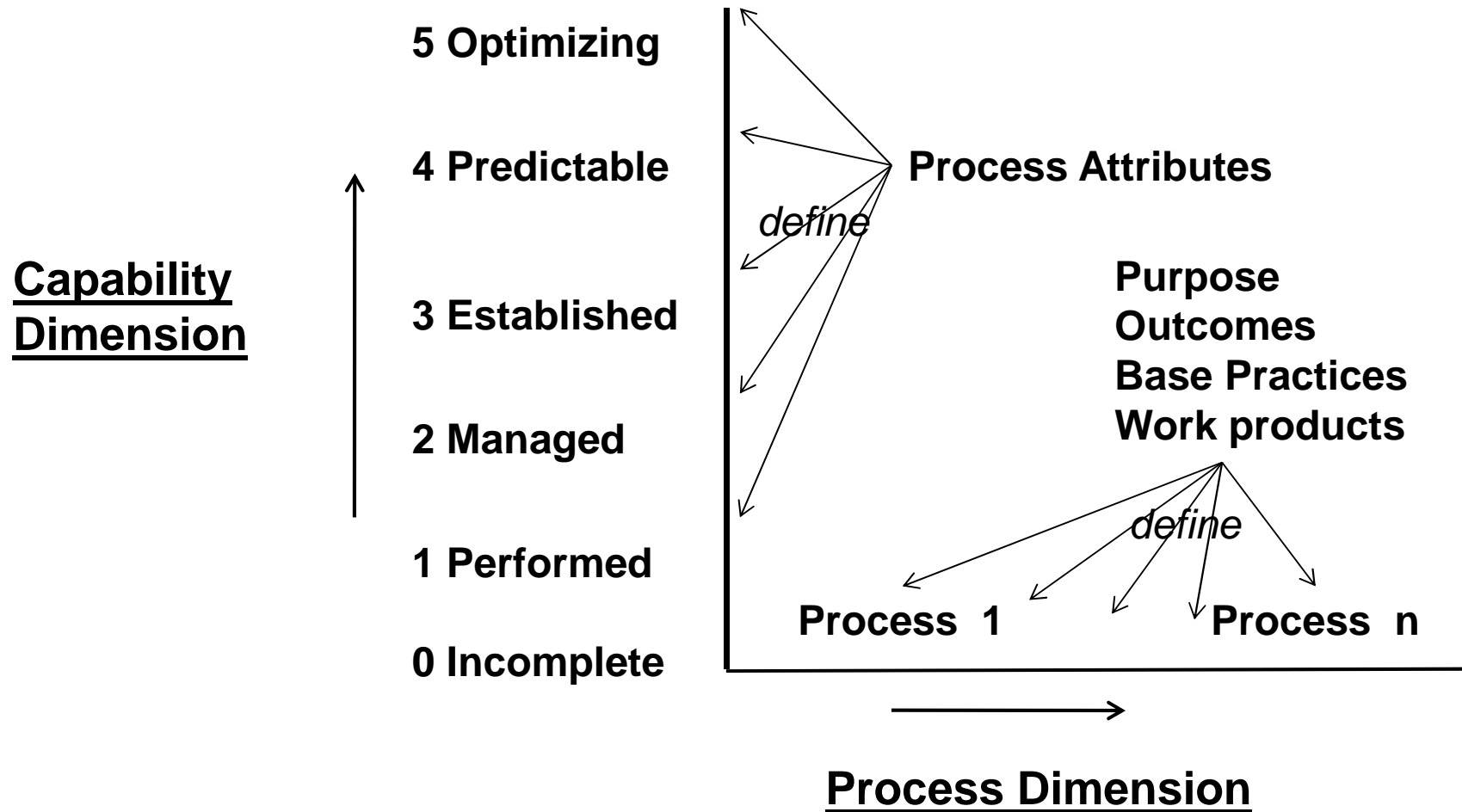
- Originally ISO/IEC 15504 was a software-specific standard
- The “S” now stands for “Software, System, and Service”
- Scope has been broadened to address any disciplines



# ISO/IEC 15504



# Structure of SPICE Conformant Models



# Benefits to Stakeholders

- **Single Unified Model:** no need to use many separate standards/models
- **Pick and Choose:** select areas relevant to the business
- **Authoritative and Robust:** from widely recognized standards and sources, with mapping to sources
- **Comprehensive:** broad, expanding, range of disciplines
- **Synergized:** each source contributes important perspectives
- **Reduced Costs:** for training, improvement, assessment, simultaneous ratings/certification vs. one model
- **Enhanced Effectiveness:** via integrated guidance across the enterprise
- **Certification:** certification services from accredited bodies

# The Enterprise SPICE Project

- First proposed, SPICE 2006 in Luxembourg
- Formally launched, SPICE 2007 in Seoul, Korea



## Project Structure

- Sponsor: SPICE User Group
- Advisory Board: governs project
  - 15 members voted in every 2 years ●
- International Project Leader
- Volunteer Participants in various roles (board member, author, assessor, reviewer, ...)
  - Over 120 project participants from 31 ● countries ●

# Project Phases

Enterprise SPICE is being carried out in 3 phases:

- **Phase 1: Initial Release:** Development of initial Enterprise SPICE Process Assessment Model (*completed*)
- **Phase 2: Deployment and Usage:** Communications, Training, Guidance Documents, Structured Feedback Mechanisms, Partnerships, Assessment Oversight, Interest Groups, Tool Support, ... (*in progress*)
- **Phase 3: Subsequent Releases:** further enhancements and improvements (*as we proceed*)

# Development of Initial Release

## 2008

- Draft Enterprise SPICE Process Reference Model (PRM) developed and distributed for international stakeholder review
- Over 400 comments received and addressed

## 2009

- Draft Enterprise SPICE Process Assessment Model (PAM) (process dimension) developed and distributed
- Over 500 comments received and addressed
- Some trial assessments conducted

## 2010

- Initial release published and ready for use

# Scope – Sources and References

**Stakeholders determined material to be integrated.**

## **Sources:**

FAA-iCMM is baseline source *(already integrating ISO 9001, ISO/IEC 12207, ISO/IEC 15288, ISO/IEC 15504, MBNQA, CMMI, EIA 731, previous CMMs, MIL-STD-882C, MIL-STD-882D, IEC 61508: DEF STAN 00-56, ISO 17799, ISO 15408, ISO/IEC 21827, NIST 800-30).*

*Plus:* ITIL v3; ISO/IEC 20000; CobIT v4.1; People-CMM; ITIM, ISO 14001, CMMI-SVC.

**References:** ISO 31000, eSCM-CL, eSCM-SP, PMI Standard for Portfolio Management, PMBOK, and FEA Practice Guidance.

# Summary of Content

Enterprise SPICE provides the process dimension of the Process Assessment Model

**Categories:** 29 processes in 4 categories:

- Governance/Management – processes that set direction and oversee execution of other processes.
- Life Cycle – processes that cover typical life cycle of a product or service.
- Support – processes that contribute to success and quality of all processes.
- Special Applications – provide ways Enterprise SPICE processes might be implemented for a particular application.

*Note: This construct is an innovation introduced in Enterprise SPICE*



# Process Descriptions

## **Each Enterprise SPICE process is described by:**

- Purpose – functional objectives of the process
- Outcomes – expected positive results
- Base Practices – activities to be performed to achieve outcomes
- Relationship Notes\* - between and among processes
- Work Products – input and output
- Mapping\* - to the materials used to derive the process description

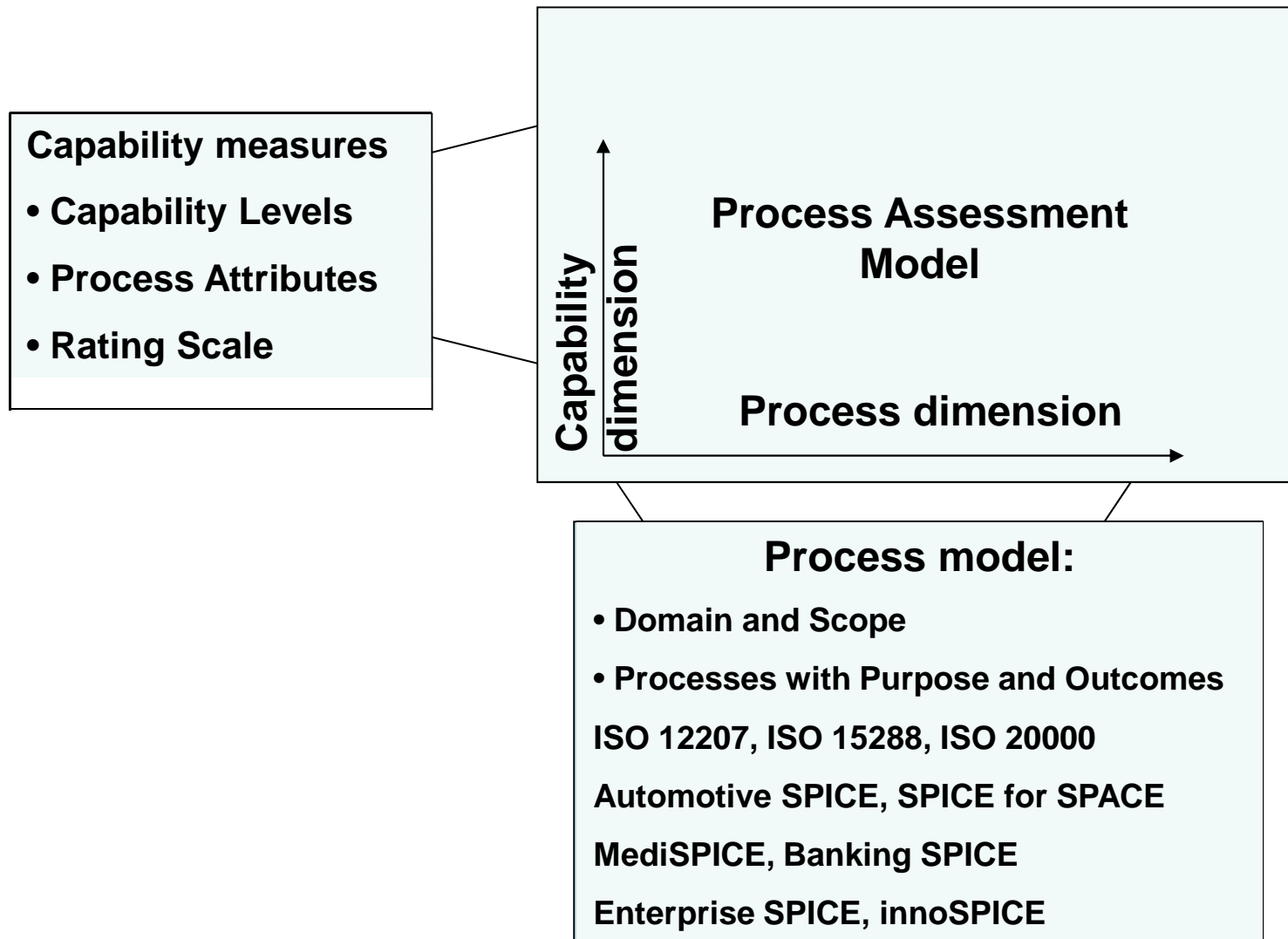
*\* Note that Relationship Notes and source mapping are additional new constructs in SPICE models*

# Enterprise SPICE Future

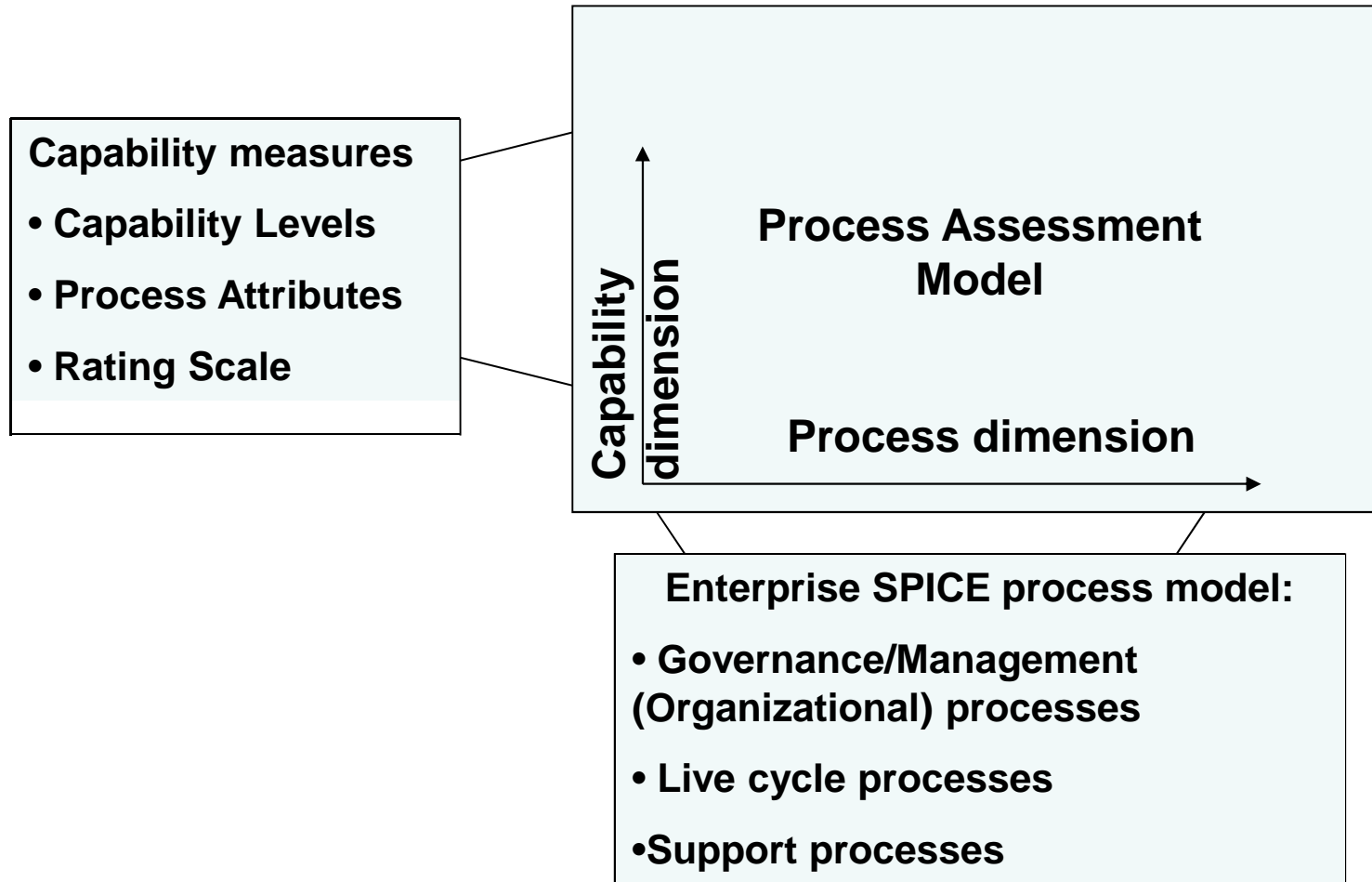
## SPICE Transition

- ISO/IEC 15504 is currently transitioning to ISO/IEC 33001-99 series of standards.
- Conformant products (e.g. PRMs and PAMs) developed by the community can be submitted for endorsement as Publicly Available Specifications (PAS).
- Enterprise SPICE model is conformant with ISO/IEC 15504-2 requirements for PAMs
- It is anticipated that the Enterprise SPICE model will become part of the new ISO/IEC 330xx series

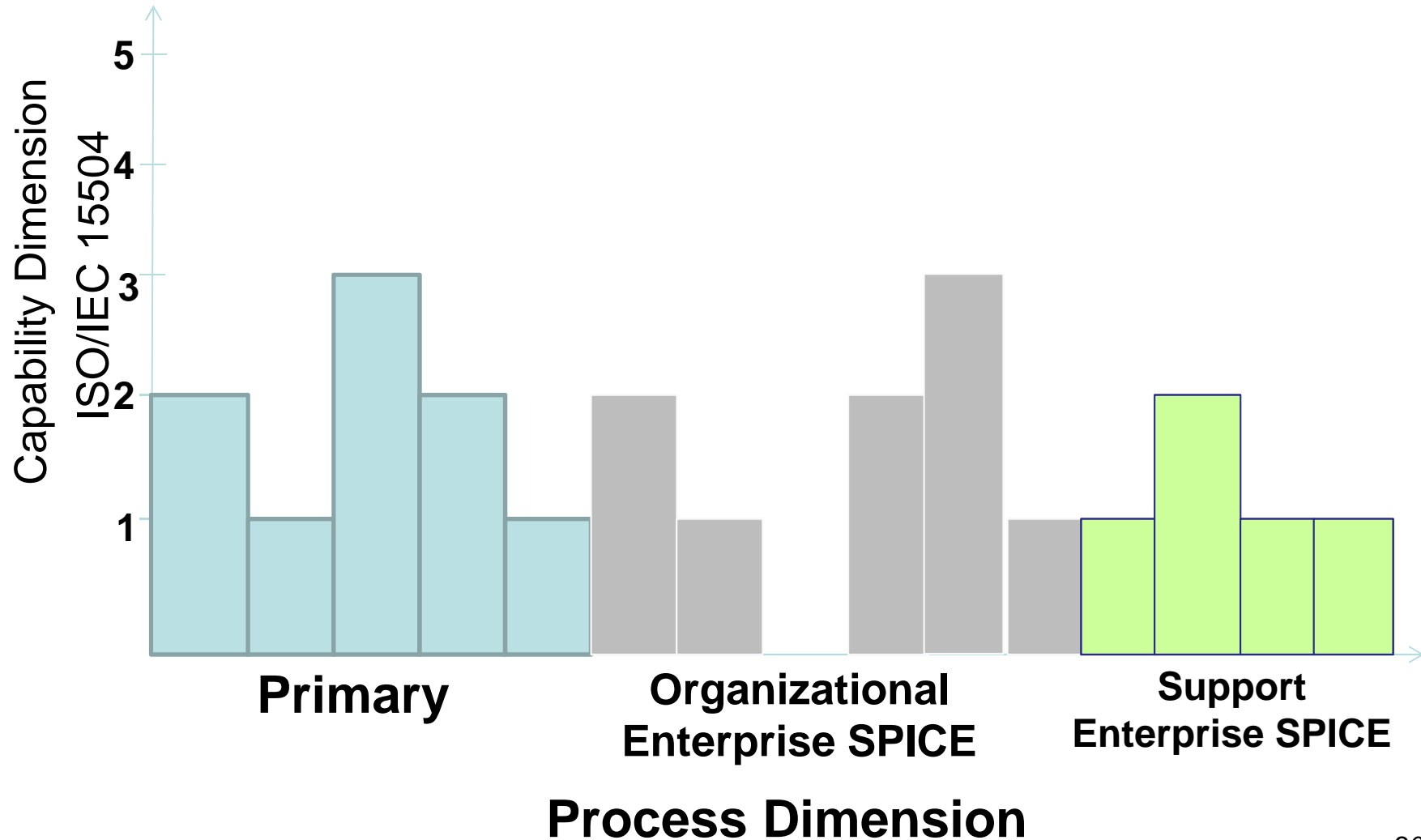
# Context of Enterprise SPICE: ISO/IEC 15504 + External Process Model



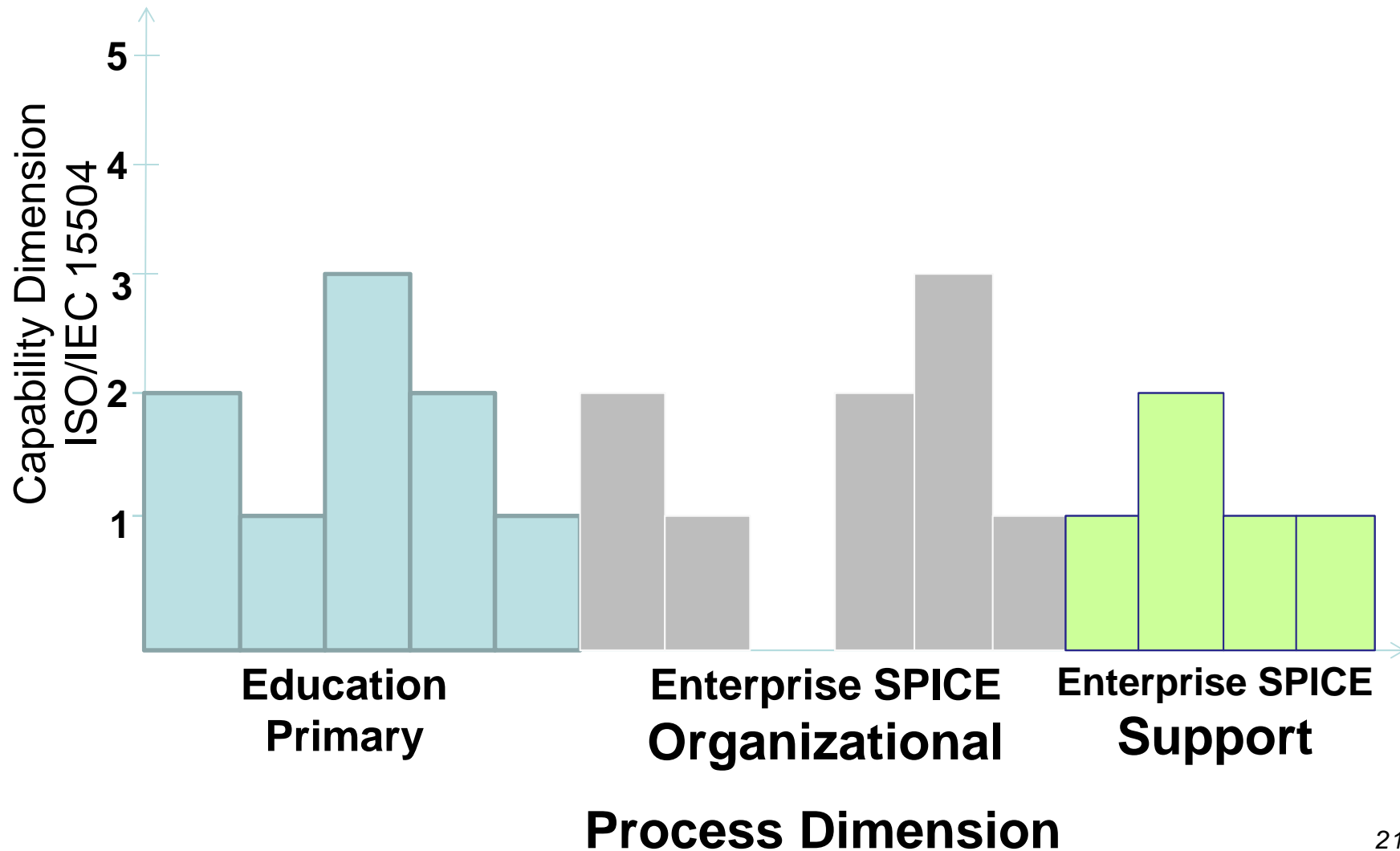
# Enterprise Capability Maturity Model: Enterprise SPICE as an umbrella



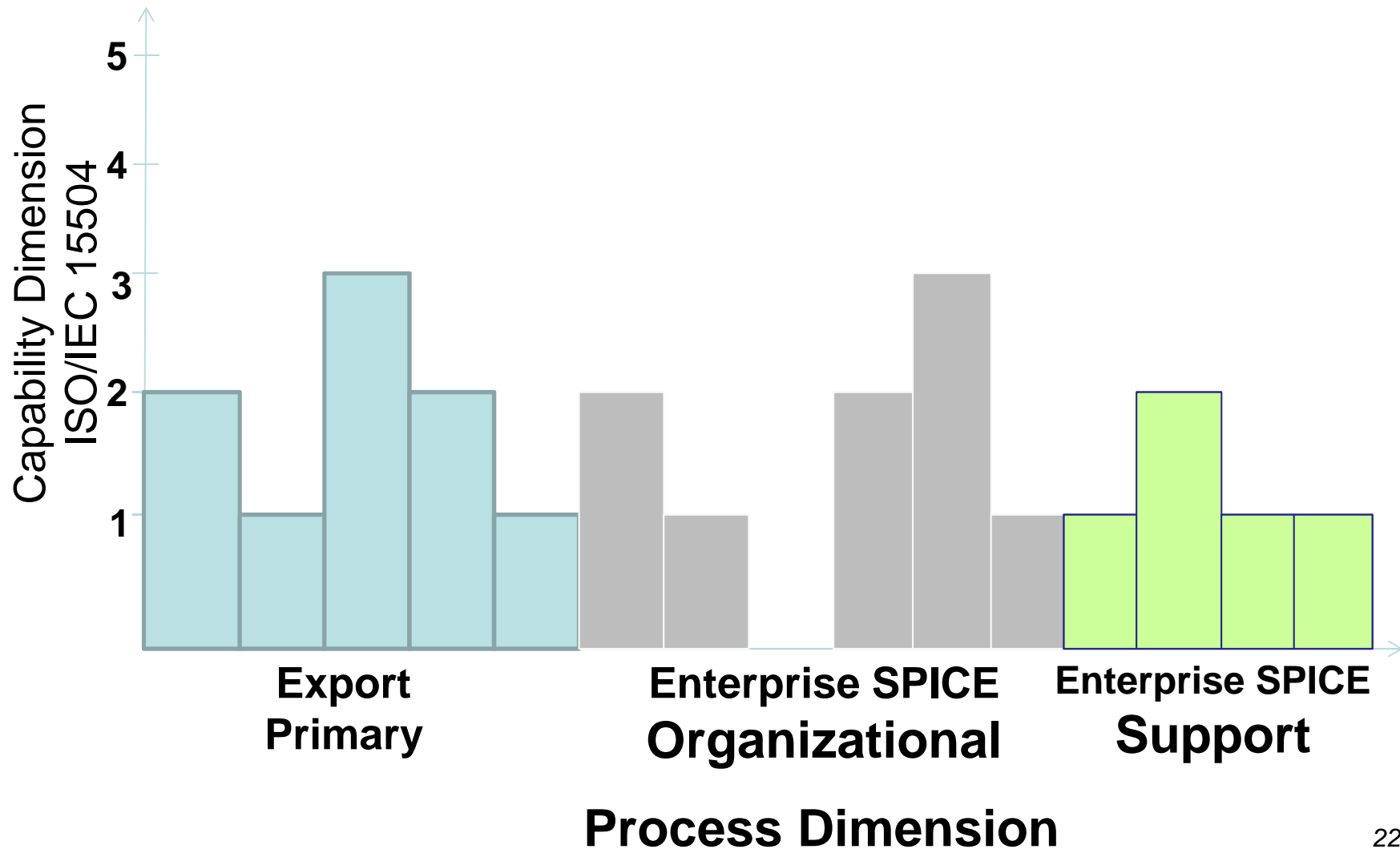
# Generic Capability Maturity Model



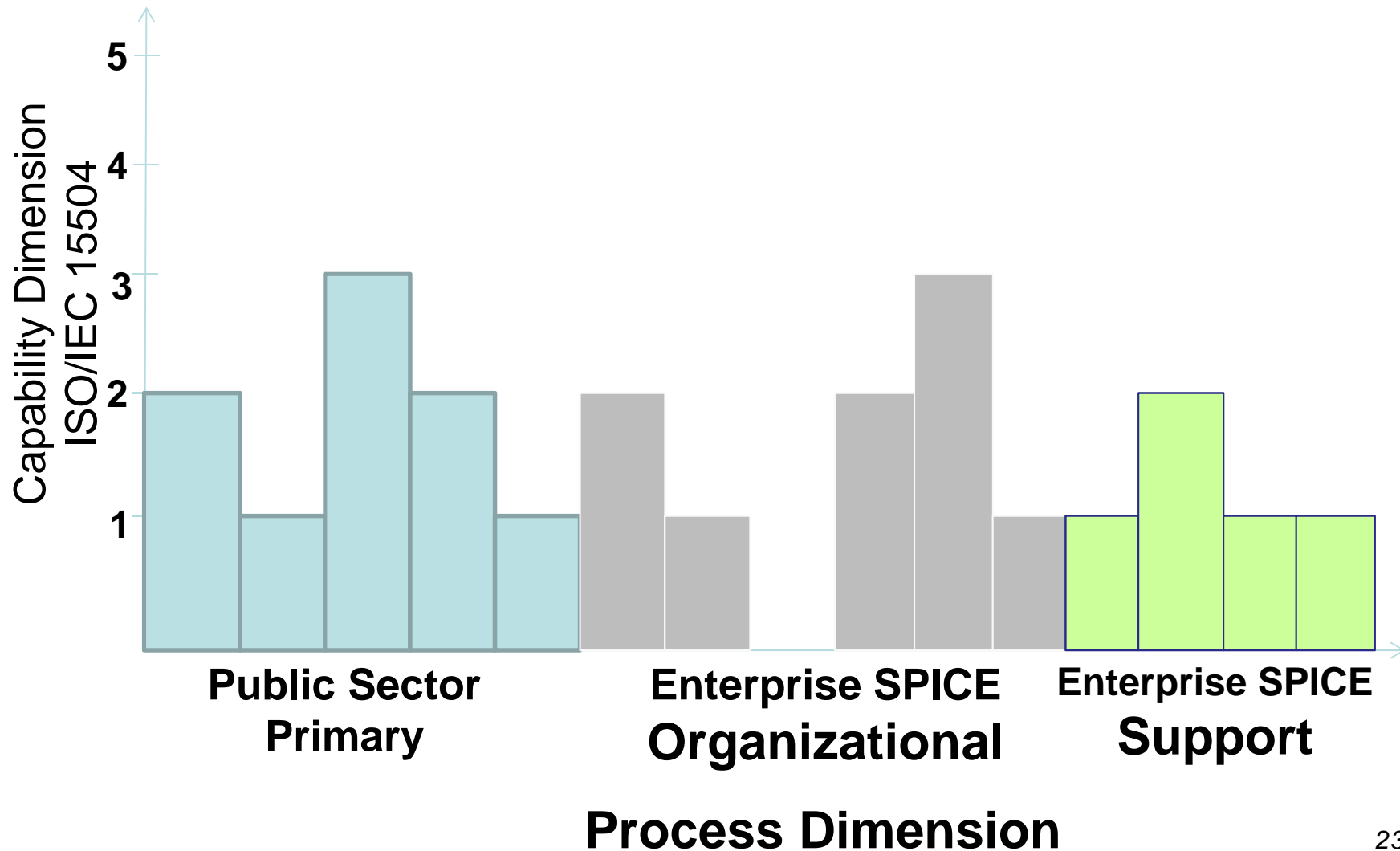
# Education Capability Maturity Model EduSpice



# Export Capability Maturity Model X-Spice



# Public Sector Institution Capability Maturity Model



# Next Steps

## Next steps – your part

*We hope you use our initial release for enterprise-wide improvement and let us know your experiences*

## Next steps – our part

- Proceed with Phase 2 efforts

*Communications, Training, Guidance, Partnerships, Assessment Oversight, Interest Groups, Tool Support*

- Concurrently work on enhancements/ improvements

*We are devoted to continuous improvement*

*With your help, we intend to provide the best enterprise improvement guidance available*

# Questions, comments?

For latest information and  
free download of Enterprise  
SPICE visit

[www.enterprisespice.com](http://www.enterprisespice.com)



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