

# International AM Standards -

30 of the best

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# Why Standards?

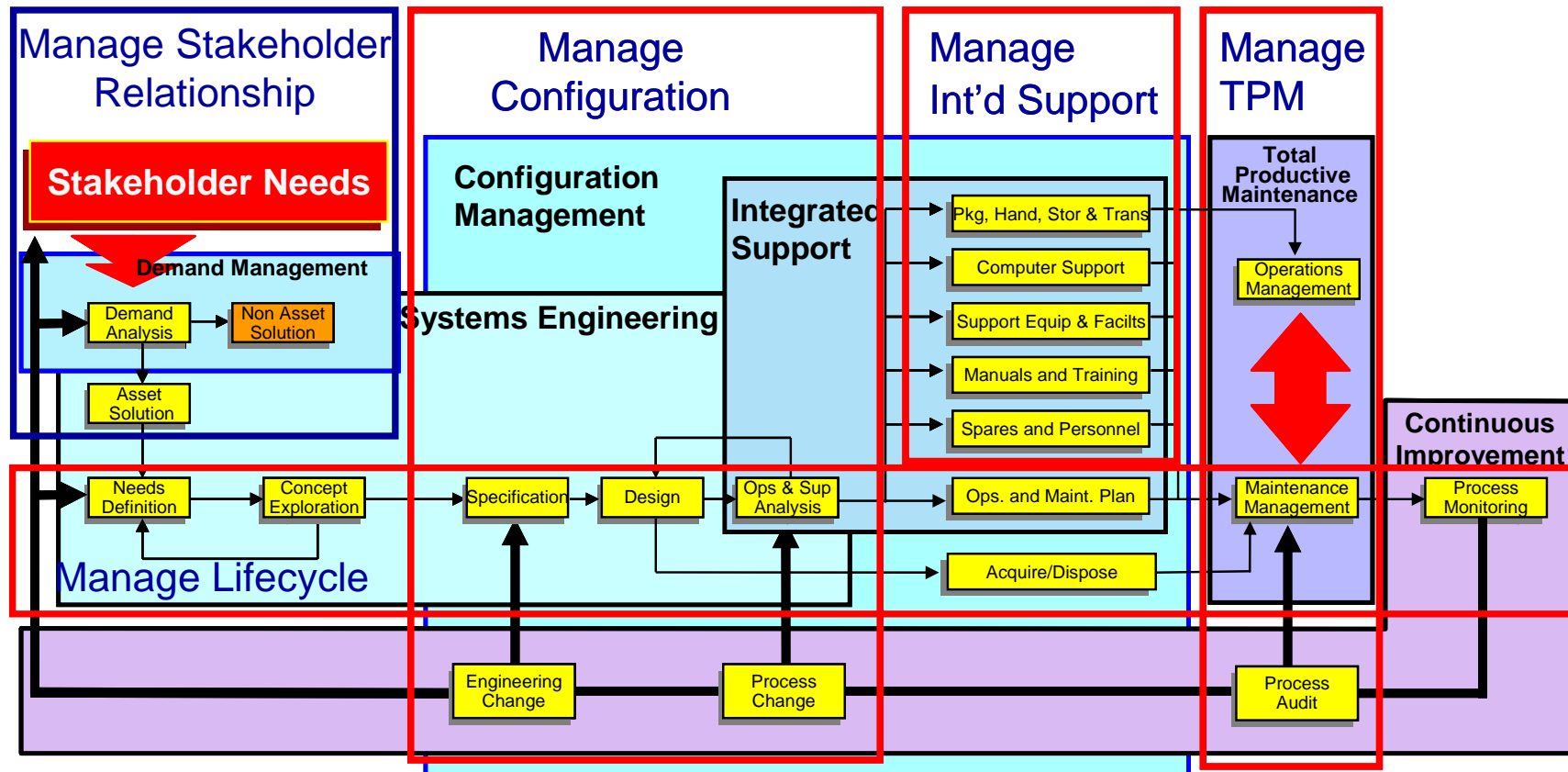
- Professionalise, Standardise, Benchmark
- Common vocabulary
  - Expand understanding
  - See patterns across contexts
  - Contractual definitions
- Shared mental model -> Learning organisation
- Assurance for external agencies
- Third party reference for disputes
- Internal consistency

# 30 of the best?

- What qualifies as a standard?
- Boundary issues (*life cycle discipline*)
- Sub-discipline interest v AM interest
- Framework issues (*how to classify*)

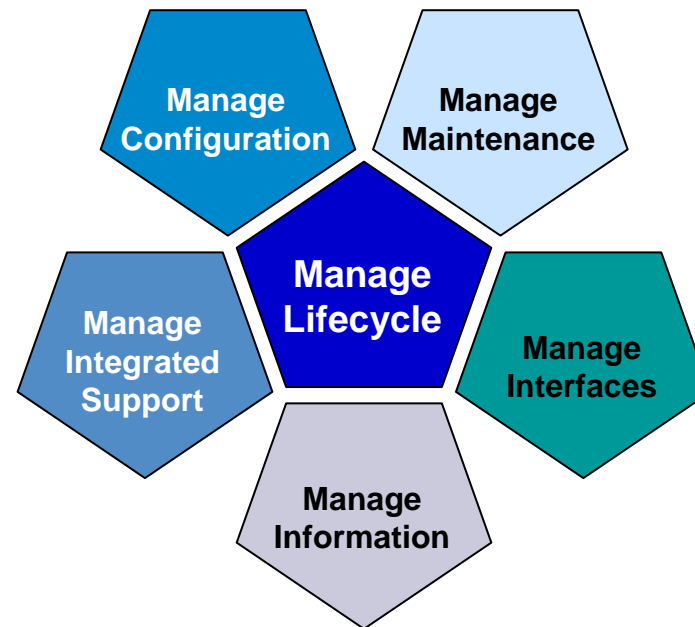
# Frameworks – Technologies

## Process Model



# Frameworks – CM

- ANSI/GEIA 649 – Consensus Standard on Configuration Management.



# Mapping

## *From AMC Technologies Process Model*

AM     Asset Management

SE     Systems Engineering

DM     Demand Management

CM     Configuration Management

IS     Integrated Support

QAM    Quality & Audit Management

MM     Maintenance Management

OM     Operations Management

## *From EIA649*

LC     Manage Life Cycle

INT    Manage Interfaces

CM     Manage Configuration

IS     Manage Integrated Support

INF    Manage Information

MM     Manage Maintenance

# Manage Life Cycle

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AS/NZS 4360:2004	Risk management
AS/NZS ISO/IEC 12207:1997/Amdt 1:2004	Information technology -- Software life cycle processes
ISO/IEC 19770-1:2006	Information technology -- Software asset management -- Part 1: Processes
PAS 55-1:2003	Asset management Specification for the optimised management of physical infrastructure assets
ANSI/EIA 632-2003 <i>Drafts under development:</i> <i>BSR/EIA 632-A-200x</i> <i>BSR/EIA SP-3537-A (ANSI/EIA 632-1)</i> <i>BSR/EIA SP-4028 (ANSI/EIA 632-2)</i>	Processes for Engineering a System
ISO/IEC 15288:2002 AS/NZS 15288:2003	Systems engineering -- System life cycle processes

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# Manage Interfaces

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ISO 19439:2006 ISO 19439:2006/Cor 1:2006	Enterprise integration -- Framework for enterprise modelling
ISO/IEC 20000-1:2005 AS ISO/IEC 20000.1-2007	Information technology -- Service management -- Part 1: Specification

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# Manage Configuration

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ANSI/EIA-649-A 2004 <i>superseded EIA-IS649</i> <i>Draft under development:</i> <i>BSR/EIA 649-B-200x</i>	National Consensus Standard for Configuration Management
IEEE 828-2005 <i>Supersedes IEEE 828-1998</i>	IEEE Standard for Software Configuration Management Plans
ISO 10007:2003 AS/NZS 3907:1996	Quality management systems -- Guidelines for configuration management

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# Manage Integrated Support

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ISO 16091:2002	Space systems -- Integrated logistic support
ISO 21849:2006	Aircraft and space -- Industrial data -- Product identification and traceability
IEC 60300-3-12 Ed. 1.0 (Bilingual 2001) AS IEC 60300.3.12-2004	Dependability management - Application guide - Integrated logistic support
IEC 62309 - Ed. 1.0 - Bilingual	Dependability of products containing reused parts - Requirements for functionality and tests

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# Manage Information

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PAS 2001:2001	Knowledge management
MIL-STD-38784(1) NOT 2	STANDARD PRACTICE FOR MANUALS, TECHNICAL: GENERAL STYLE AND FORMAT REQUIREMENTS
ISO/PAS 20542:2006	Industrial automation systems and integration -- Product data representation and exchange -- Reference model for systems engineering
ISO/IEC 15289:2006 AS/NZS ISO/IEC 15289:2007	Systems and software engineering -- Content of systems and software life cycle process information products (Documentation)

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# Manage Maintenance

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ISO/IEC 14764:2006 AS/NZS 14764:2001	Software Engineering -- Software Life Cycle Processes – Maintenance <i>AS/NZS title: Information technology - Software maintenance</i>
IEC 61014 - Ed. 2.0 - Bilingual	Programmes for reliability growth
IEC 61703 - Ed. 1.0 - Bilingual	Mathematical expressions for reliability, availability, maintainability and maintenance support terms
IEC 61713 - Ed. 1.0	Software dependability through the software life-cycle processes- Application guide
IEC 62308 - Ed. 1.0 - Bilingual	Equipment reliability - Reliability assessment methods
IEC 62347 - Ed. 1.0 - Bilingual	Guidance on system dependability specifications

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# Quality and Audit Management

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ISO 9000:2005 AS/NZS ISO 9000:2006	Quality management systems -- Fundamentals and vocabulary
ISO 10014:2006 ISO 10014:2006/Cor 1:2007	Quality management -- Guidelines for realizing financial and economic benefits
ISO 19011:2002 AS/NZS ISO 19011:2003	Guidelines for quality and/or environmental management systems auditing
ISO/IEC 25000:2005	Software Engineering -- Software product Quality Requirements and Evaluation (SQuaRE) -- Guide to SQuaRE
ISO/IEC 90003:2004	Software engineering -- Guidelines for the application of ISO 9001:2000 to computer software

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