

Global Perspectives - ISO 55000 & Beyond

November 21, 2018



Presentation Outline

- History of Asset Management Standards
- What is ISO 55000?
- Why is it important?
- Benefits of ISO 55001
- Implementing ISO 55002
- CAMA Certification



Evolution of Asset Management

1993 - First NSW Public Sector 'Total Asset Management Manual'

1999 – US Dept. of Transportation “Asset Management Primer”

2000 – IPWEA published the first edition of IIMM

2004 – IAM published PAS 55:2003

2004 – Canadian NRCC published “Municipal Infrastructure Asset Management” guide

2009 - PAM – PAS 55 Assessment Methodology

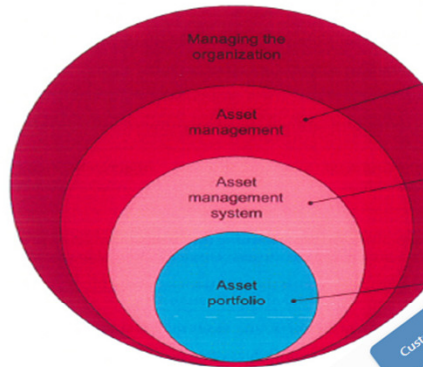
2009 – PSAB 3150 requirement for public assets' amortized valuation

2014 – ISO 55000 Standards

2018 - Ont. Reg. 588/17: Asset Management Planning for Municipal Infrastructure

Asset Management Resources

ISO 55000



GFMAM AM Landscape



IAM Model



PAS 55

AMC Model



IPWEA IIM Manual



Corporate Asset Management

History of ISO 55000

2009 - Objective: to prepare a single standard (ISO 55000) based on the UK BSI PAS 55:2008

ISO/PC 251: 30 Participating countries; 14 Observing countries

2014 - THREE coordinated standards: ISO 55000, ISO 55001 and ISO 55002 published

2018 – ISO/TC 251; Revised ISO 55002

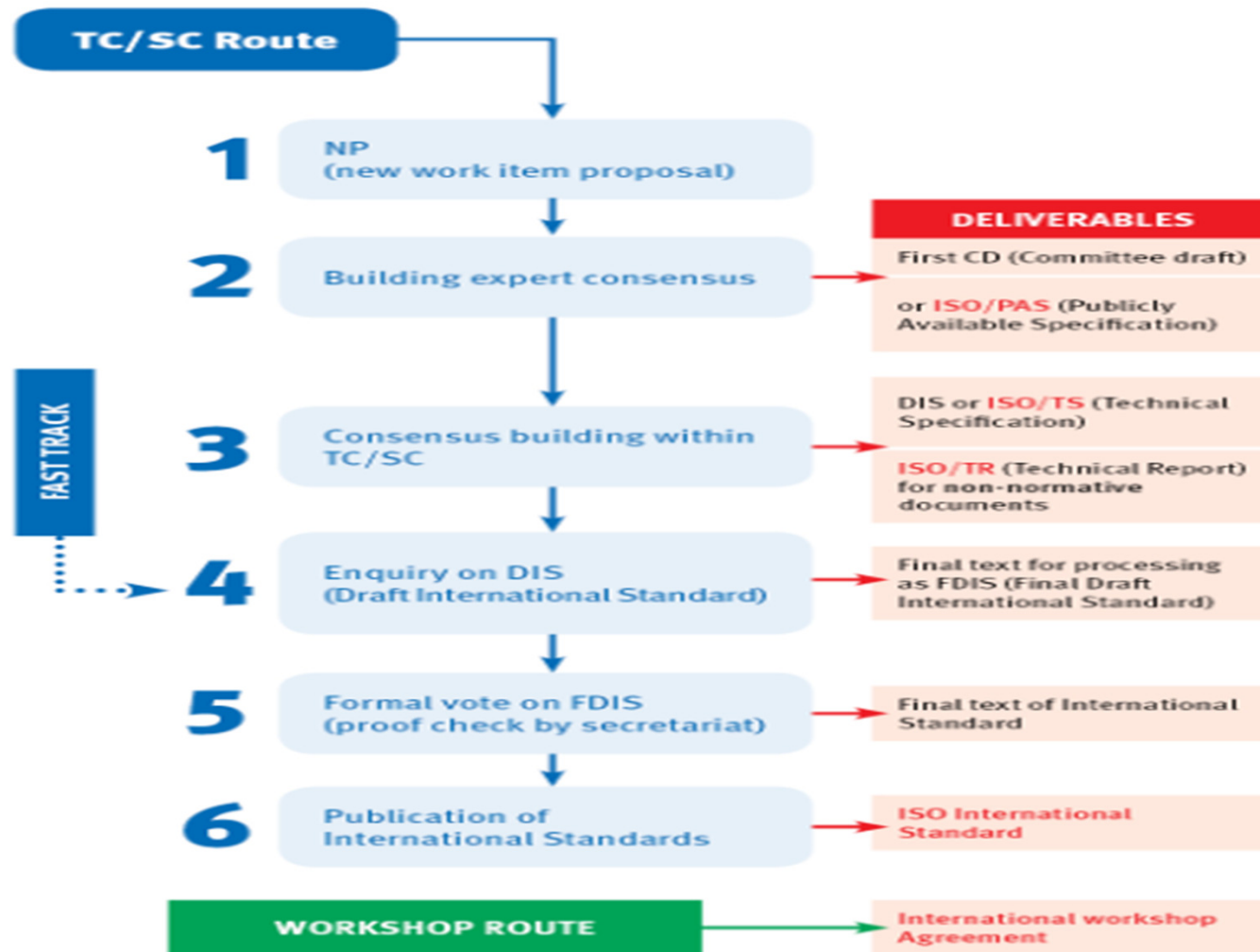
ISO Deliverables

The different types of ISO publications:

- ISO Standards
- ISO/TS Technical Specifications
- ISO/TR Technical Reports
- ISO/PAS Publicly Available Specifications
- IWA International Workshop Agreements
- ISO Guides



ISO Process



ISO 55000/PC 251

30 Participating countries

Argentina (IRAM)
Australia (SA)
Belgium (NBN)
Brazil (ABNT)
Canada (SCC)
Chile (INN)
China (SAC)
Colombia (ICONTEC)
Czech Republic (UNMZ)
Finland (SFS)
France (AFNOR)
Germany (DIN)
India (BIS)
Ireland (NSAI)
Italy (UNI)

Japan (JISC)
Korea, Republic of (KATS)
Mexico (DGN)
Netherlands (NEN)
Norway (SN)
Peru (INDECOPI)
Portugal (IPQ)
Russian Federation (GOST R)
South Africa (SABS)
Spain (AENOR)
Sweden (SIS)
Switzerland (SNV)
United Arab Emirates (ESMA)
United Kingdom (BSI)
United States (ANSI)

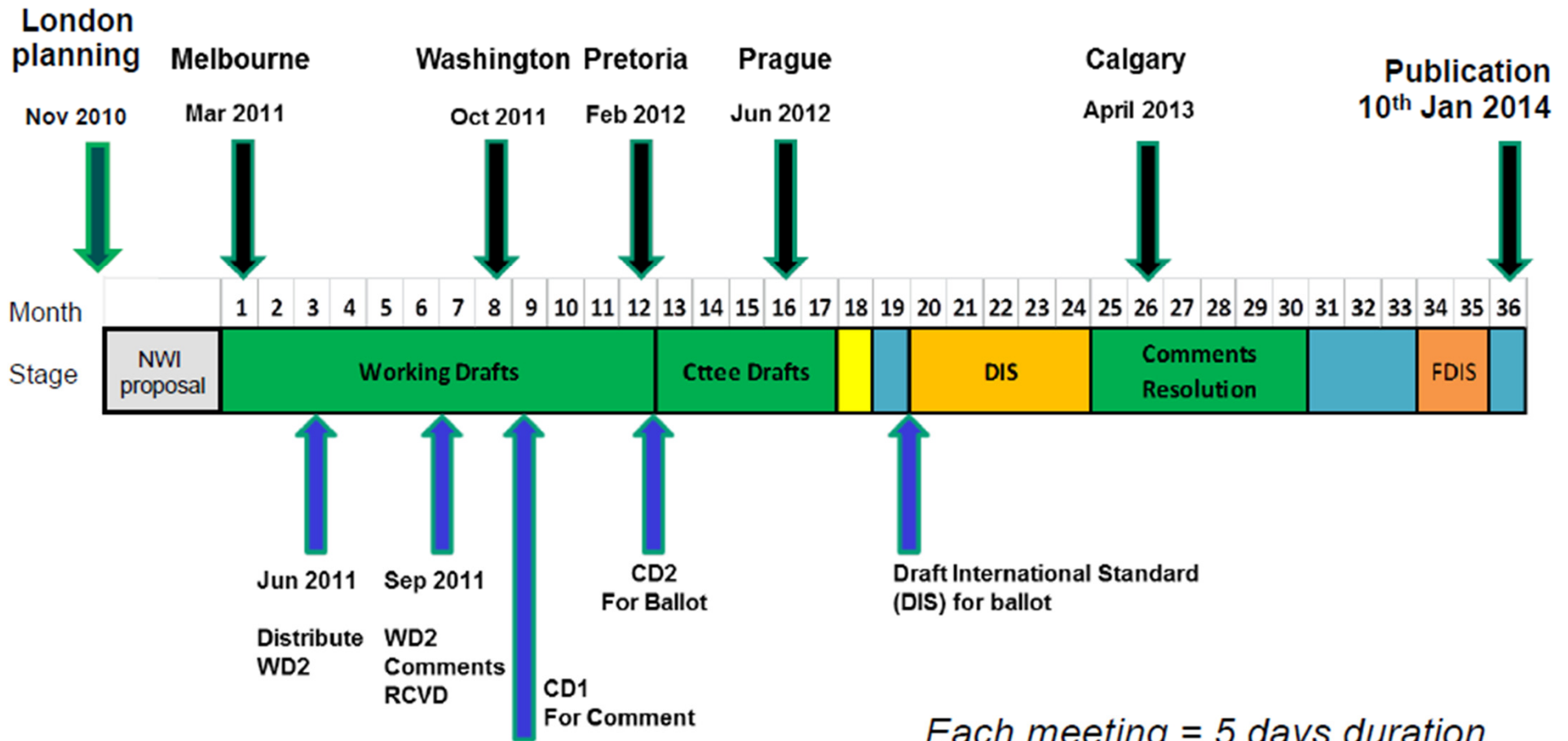
14 Observing countries

Observers

Armenia (SARM)
Austria (ASI)
Costa Rica (INTECO)
Denmark (DS)
Hong Kong (ITCHK SAR)
Hungary (MSZT)
Iceland (IST)
Iraq (COSQC)
Israel (SII)
Malaysia (DSM)
Morocco (IMANOR)
New Zealand (SNZ)
Slovakia (SUTN)
Thailand (TISI)



ISO 5500 Development Plan



*Each meeting = 5 days duration
Final one (Calgary): 80 participants*

Source: The Woodhouse Partnership Ltd., Feb 2014

ISO 55000 Suites

- ❑ ISO 55000: *Asset management – Overview, principles and terminology*
- ❑ ISO 55001: *Asset management – Management systems - Requirements*
- ❑ ISO 55002: *Asset management – Management systems - Guidelines on the application of ISO 55001*



ISO 55000 Definitions

*An asset is an item, thing or entity that has potential or actual **value** to an organization.*

ISO 55000

*Asset management is defined as the set of **coordinated activities** that an organization uses to realize value from assets in the delivery of its outcomes or objectives. Realization of value requires the achievement of a balance of **costs, risks and benefits**, often over different timescales.*

ISO 55000

ISO 55000

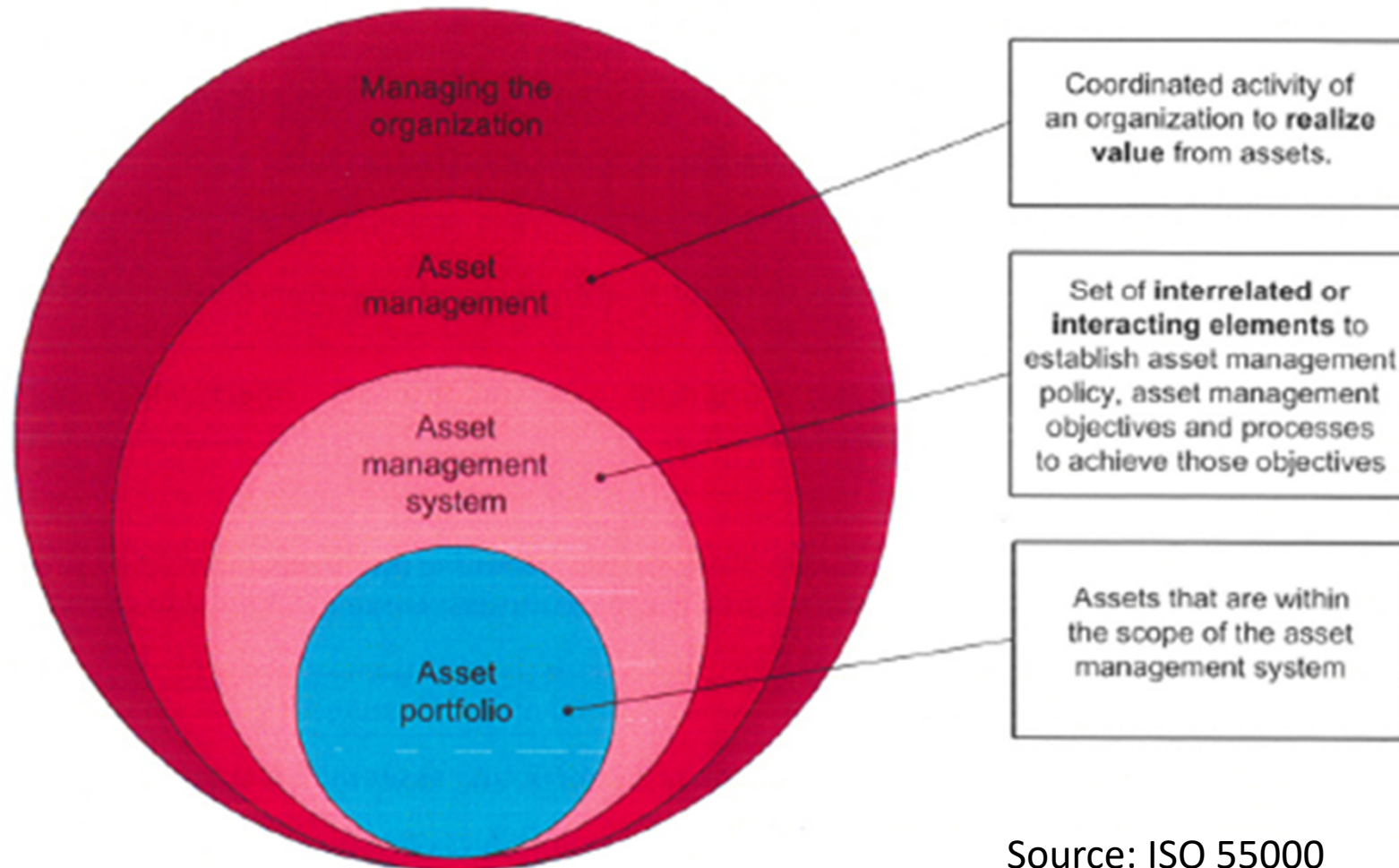
- Explains *Asset Management fundamental concepts* and needs;
- Provides an overview of asset management, its principles and terminology;
- Outlines the expected benefits from adopting asset management;
- Explains different terms and definitions used in Asset Management;



Key Fundamentals

- Value
 - Assets exist to provide value
- Alignment
 - Translate organizational objectives into technical & financial decisions, plans and activities
- Leadership
 - Leadership & workplace culture key to realize value
- Assurance
 - Giving assurance that assets will fulfil their required purpose

Fit in Organization



Asset Management Framework



ISO 55001

Specifies the requirements for the establishment of a management system for asset management

Explains the System's requirements for:

- Implementation
- Maintenance
- Continuous Improvement



Management Systems - Requirements

1. Organizational Context
2. Leadership
3. Planning
4. Support
5. Operation
6. Performance Evaluation
7. Improvement



Why is it important?

- Supports a culture of proactive, continual improvement, and drives effectiveness and efficiency in the realization of increased value from its assets.
- Reflects the latest thinking and best practices in asset management.
- Offers organizations a common language and a trustworthy decision making framework enabling consistency in asset management practices.



ISO 55002

Provides guidance for the application of an asset management system;

It builds on the seven requirements specified in ISO 55001

Each requirement is broken down into required processes and procedures needed for implementation and maintenance of the system.

Some important notes

- Intended to be used for managing physical assets in particular, but it can also be applied to other asset types.
- Does not provide financial, accounting or technical guidance for managing specific asset types
- Provide information on the relationship between the financial and non-financial asset management functions.
- The term "asset management system" is used to refer to a management system for asset management.



Some of the key processes (1)

- Strategy and Planning
 - Policies, Objectives, Strategies & Plans
- Asset Knowledge
 - Information strategy, standards, systems, data management
- Risk & Compliance
 - Risk management, contingency planning, sustainability, management of change, asset monitoring, asset valuation



Some of the key processes (2)

- Asset Decision-Making
 - Opex & Capex decisions, resourcing strategy, shutdown strategy
- Lifecycle Value Realization
 - Asset acquisition, systems engineering, configuration management, operations & maintenance, asset rationalization & disposal
- Organization & People
 - Leadership, Org. structure, culture, competence management.



Global Trends

Known certified organizations:

- Asia (61)
- Australia (30)
- Europe (84)
- Middle East & Africa (11)
- The Americas (13)

4 USA; 4 Brazil; 1 Colombia; 1 Chile; 1 Panama, 1 Dominican Republic; 1 Mexico

Certified Asset Management Assessor (CAMA)

WPIAM develops, maintains, and administers the CAMA exam through its member organizations.

The certification is conducted in accordance with ISO 17024 *

Exam complies with:

- GFMAM Competency Specification for ISO 55001:2014 Asset Management System Auditor/Assessor
- ISO 17021:2014 Part 5: Competence requirements

**ISO 17024 - Conformity assessment - General requirements for bodies operating certification of persons*

Assessor Role

- Diagnose the organizational maturity
- Recommend asset management actions
- Develop & formulate asset management responses
- Developed further in ISO 17021*- Part 5: Asset Management competency requirements for auditors of ISO 55001

**ISO 17021 - Conformity assessment - Requirements for bodies providing audit and certification of management systems*

Benefits of Certification

For Individuals:

It establishes their credentials in asset management knowledge and comprehension, globally.

For Organisations:

It enables to determine the competence and experience of personnel, whether they are part of an audit team, or helping to implement and assess asset management systems.



What next?

ISO/TC 251 Scope: Standardization in the field of asset management

Reference	↓	Title
ISO/TC 251/AHG 1 ⓘ		Spanish Translation Task Group
ISO/TC 251/CAG 01 ⓘ		Chairman's Advisory Group
ISO/TC 251/WG 3 ⓘ		Communications
ISO/TC 251/WG 4 ⓘ		Product improvement
ISO/TC 251/WG 5 ⓘ		Finance
ISO/TC 251/WG 6 ⓘ		Preparation for the next revision of ISO 55001
ISO/TC 251/WG 7 ⓘ		Development of ISO 55011

Guidance on alignment of asset management, finance and accounting

Guidance on the development of government asset management policy



For more information

<https://committee.iso.org/home/tc251>



Thank You

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