



# Emerging Standards for Asset Management:

## Canadian Network of Asset Managers (CNAM) and ISO 55000 Update



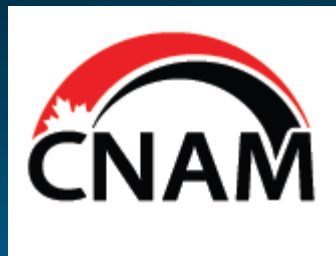
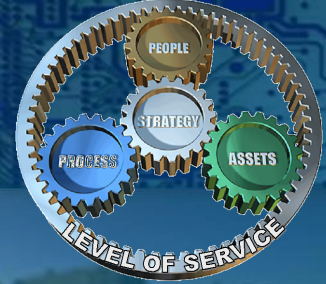
Presented by:  
**Steve Wyton, P.Eng, MBA**  
Manager, Corporate Project & Asset Mgmt  
City of Calgary



# Agenda

- The Canadian Network of Asset Managers (CNAM)
- Introduction to the emerging standard ISO 55000
- Challenges & Advantages of AM standards





# The Canadian Network of Asset Managers (CNAM)

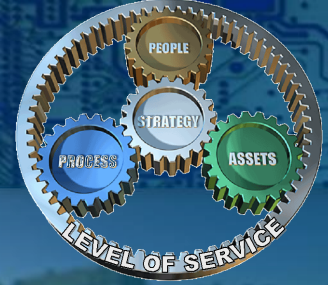
- **Mission:**

The CNAM is a non-profit organisation established by municipalities for municipalities to promote awareness and knowledge transfer of Municipal/Utility infrastructure asset management principles, practices and experiences.

- **Vision:**

The CNAM is the definitive forum through which professional practitioners can both gain and share knowledge on the latest developments and initiatives in Municipal/Utility infrastructure asset management.

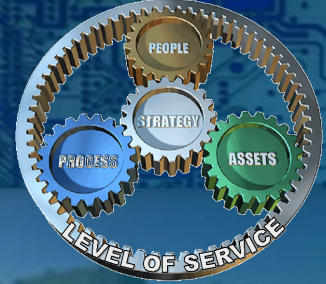




# CNAM 2011 Workshop Burnaby

- 215 (capped) attendees from 50+ municipalities
- 40 speakers:
  - 5 countries (UK, Australia, New Zealand, Canada, USA)
  - 3 levels of government
  - 20 municipalities
  - 2 streams – presentations and hands on workshops
- 3 keynote speakers:
  - Dr. Ian Greenwood, Opus International
  - Dr. Andrew Lemer, The Matrix Group
  - Brian Thwaites, Brainspeaker Inc.





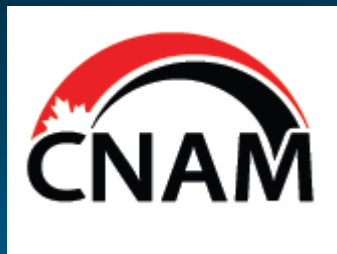
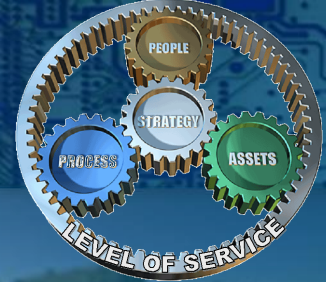
# CNAM 2011 Action Items

## 1. Develop CNAM Strategic Plan

## 2. Take action: Establish Subcommittees for:

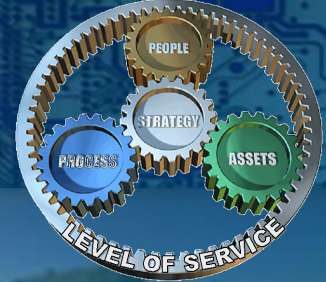
- Partnerships, Business Strategies & Marketing, Education & Research, Workshop, ISO PC 251
- Establishing AM regional groups and workshops
  - Supporting AMBC and AMSask – NAMS guidelines for Canadian Municipalities
- CNAM Tereo Award
- TCA (PSAB 3150) subcommittee
- Partnership with the IAM (UK), knowledge center and professional designation





# 2011 Accomplishments

- 170 members, 50+ municipalities (since Sept 09)
- Established as an association
- Establishment of bylaws and strategic plan
- Creation of product for IIMM
- Support National Infrastructure Summit
- Development of partnerships:
  - Asset Management BC & Saskatchewan
  - CERIU – Centre d'Expertise et de Recherche en Infrastructures Urbaine
  - IAM – Institute for Asset Management (UK)



# CNAM 2010 AGM Elections

## CNAM Executive:

Steve Wyton, Chair (Calgary)

Alain Gontier, Vice Chair (Ottawa)

Normand Hatchey, Secretary/Treasurer  
(Montreal)

## Members at Large:

Kevin Bainbridge, (Robinson)

Barry Davis (Burnaby)

Russell Crook (Red Deer)

Holly Power-Garrett (Halifax)

Bradley Leeman (Edmonton)

Ross Homeniuk (CH2M Hill)

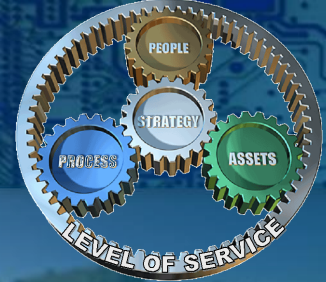
Karen Gasmo(Regina)

Gareth Lifton (CH2M Hill)

Perry Heath (Govt of NWT)

Robert Gallivan (Region of Waterloo)

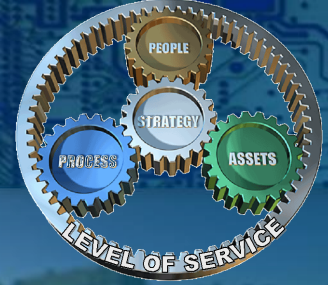
John Murray (City of Hamilton)



# How CNAM adds value

- Linking municipalities: discussion forum, knowledge transfer, national/regional workshops
- Further support to regional/provincial partners
- Further global partnership development
  - NAMS, Global Forum for Asset Management
- Development of standards and guidelines
  - ISO 55000 – Management System for AM: “what”
  - Encourage AM guidelines and tools (IIMM, NAMS): “how”
  - AM knowledge center, AM competencies
  - Tangible Capital Assets support



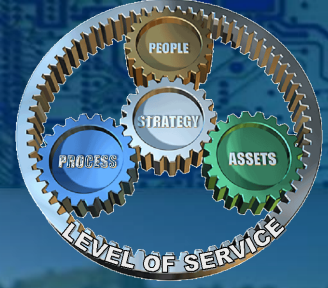


# CNAM 2012 - Montreal, QC

## May 6 - 9, 2012

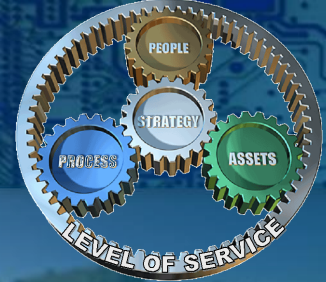


May 6-9, 2012  
Hilton Montreal Bonaventure Hotel  
Montréal, Québec, Canada

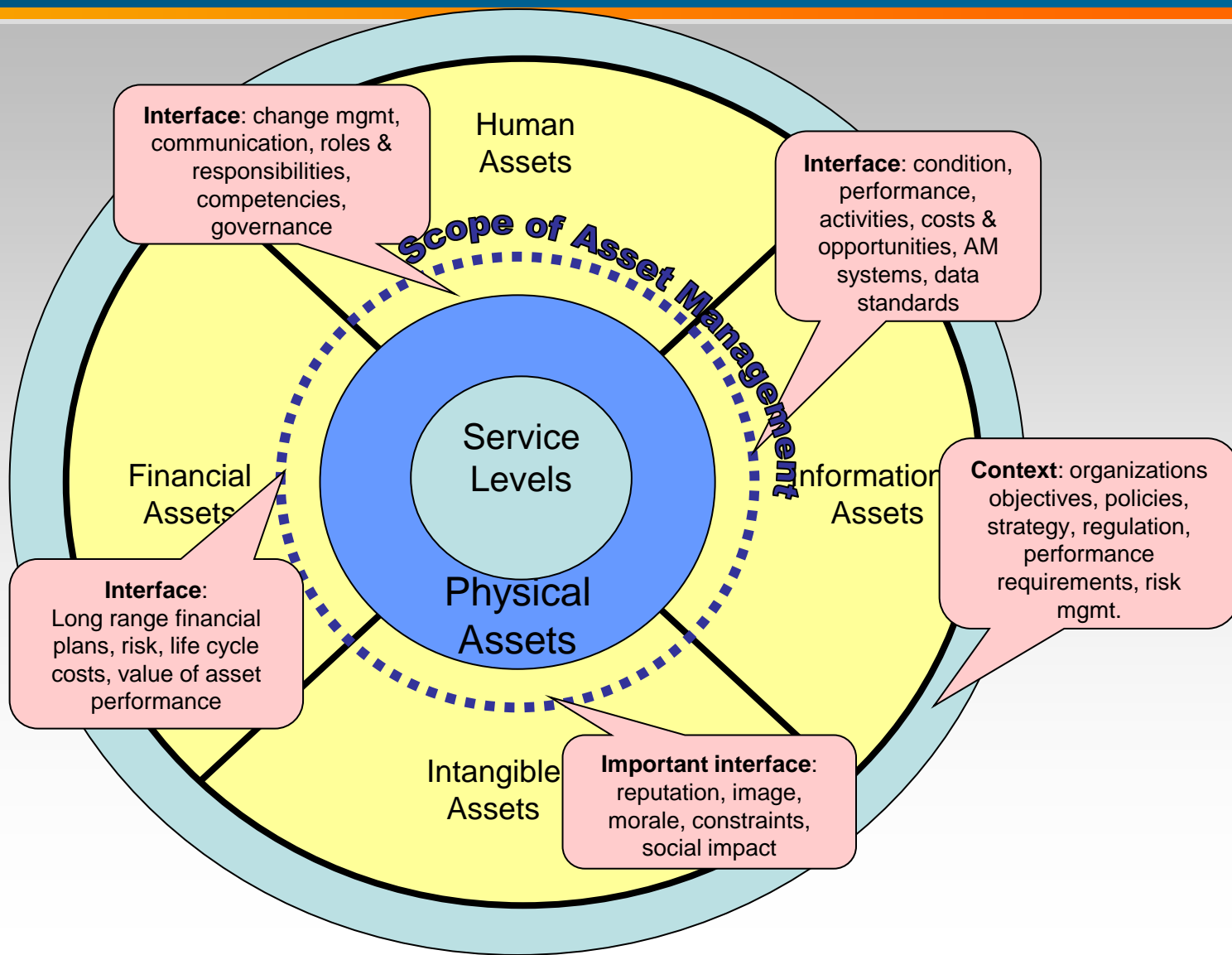


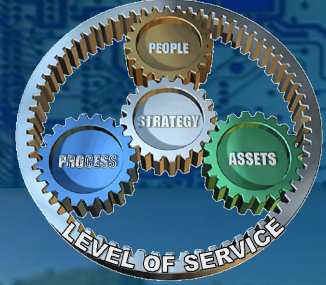
# Introduction to ISO 55000

- Management standard: Defines “what” for asset management system, not “how”:
  - An umbrella standard, not a technical specification.
- Multi-sectoral (private, public, regulated)
- Based upon a continual improvement cycle
- Requires AM/financial planning, risk mgmt
- Demonstrate diligence for an AM system, as well as asset performance
- Document structure:
  - 55000 – Overview, principles and terminology
  - 55001 – Requirements: “Thou shall”
  - 55002 – Guidelines: “You should”



# Scope of ISO 55000

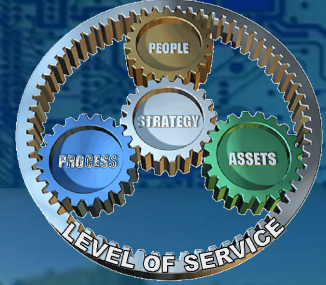




# ISO PC 251 - Asset Management (ISO 55000)

- November, 2009: British Standards Institute makes bid to ISO Technical Management Board to create an ISO standard for AM based on PAS 55 (Publically Available Specification).
- February, 2010: ISO TMB agrees to establishing a project, but first asks BSI to hold preliminary meeting to scope project with international experts.
- June, 2010: Preliminary meeting held in London, UK. Agreement reached by all attendees on scope. Attendance included Canada, UK, France, Portugal, Spain, Finland, Netherlands, Sweden, Japan, Australia and others.

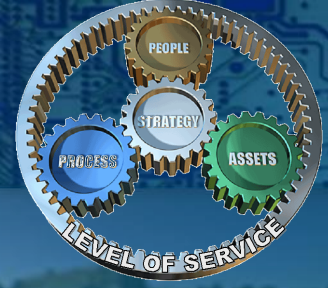




# ISO PC 251 - Asset Management (ISO 55000)

- August, 2010: ISO TBM approves project scope. PC 251 officially created.
- October, 2010 Canada a participant. Each country developing its “mirror” project committees.
- March 2011, Melbourne, Australia: working draft one vetted (140 pages of country comments)
- July 2011, working draft 2 submitted for country comments
- October 10-14 2011, PC 251 meeting #2, Washington, DC – Approved Committee Draft
- Project end date: February 2014

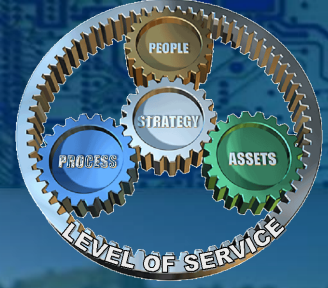




# Introduction to ISO 55000

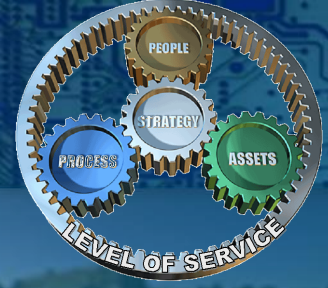
- **Context of the organization**
  - Org context, needs and expectations of stakeholders, defining the asset management system
- **Leadership**
  - Management commitment, policy, org roles, responsibilities
- **Planning**
  - Asset management objectives and plans
- **Support**
  - Resources, Tools, facilities and equipment, Competence, Communication, Information management
- **Operational planning and control**
  - Risk management, change management, outsourcing
- **Performance evaluation**
  - Monitoring and evaluation, Audit, Management review
- **Improvement**
  - Nonconformity and corrective action, continual improvement





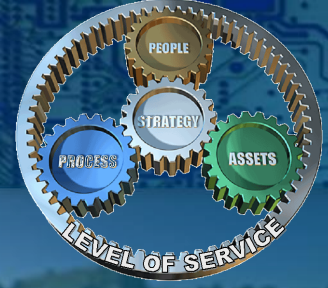
# Challenges and Considerations in Developing ISO 55000

- Use of language across sectors and countries.
- Integrating long range financial planning and recognition of international financial practices: fair value vs. historic cost (Int'l Accounting Standards Board).
- Lifecycle versus whole life: “value realization period”.
- Risk management: leverage ISO 31000?
- Consideration of other international AM standards beyond PAS55: IIMM, NAMS, Infraguide.
- Definition and structure of “strategy”, strategic/operational planning.
- Depth and breadth of standard – application to contractors, consultants, etc.



# Advantages in Adopting/ Certifying to an AM Standard

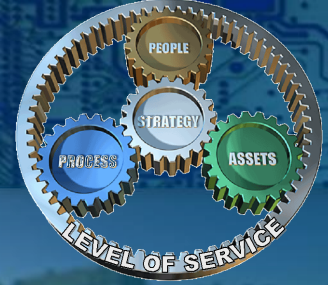
- Example:
  - Shell (oil platforms and export pipelines)
    - Production uptime increased by 17% over 4 years
    - Simultaneous opex savings over \$250 million (50%)
    - Safety and integrity indices improved
    - Winners of national training award for empowerment
  - Scottish Water:
    - Reduced opex by 40% (4 years), exceeded service targets
    - Delivered capital program for \$1 billion less
  - City of Calgary
    - AM reporting resulted in \$3.3 billion contribution from provincial government and justified increase capex for maintenance of \$234 million (50%)
    - Efficiency gains totaling \$1.8 million annually in Roads and deferral of capex maintenance in Wastewater.



# Challenges in Adopting/Certifying to an AM Standard

- Management standards don't measure outcomes.
- Expense of certification
- Unwavering support of "Top Management"
- Change management
- Technological and data requirements
- Duration of implementation – succession and knowledge management during project
- Time before value realization
- "Herding cats" – setting and moving in a common direction





# Questions?

steve.wyton@calgary.ca  
(403) 268-5746



**BUILDING  
MOMENTUM** 2012  
Montreal, Québec

May 6-9, 2012  
Hilton Montreal Bonaventure Hotel  
Montréal, Québec, Canada

