HOW TO IMPLEMENT AN OBsolescence PLAN, UTILISING IEC62402 IN YOUR BUSINESS

GRAHAM GORING
IEC MT20 CONVENOR
Agenda

- Obsolescence Management (OM) is part of the discipline of Dependability (IEC TC56)
- Obsolescence Management Plan (OMP)
- IEC 62402 Ed.2 MT20
  Maintenance Team (16)
  8 countries + IIOM Liaison

- IIOM
- Adoption of IEC62402
  - OMP Requirements
  - OMP in the Life Cycle
  - OMP includes Concept and Design
  - Obsolescence Management Approach
    - Risk Assessment – technology example
  - Mind Maps (Summaries)
    - GOMP
    - Resolutions
  - Process Steps diagram

- Contact
  - Definitions
  - Obsolescence Data Repository
What is IIOM and Mission

International Institute of Obsolescence Management (IIOM)
formerly
COG (Component Obsolescence Group International Ltd)

IIOM Mission
The IIOM mission is to:
• Advance the science and practice of Obsolescence Management
• Promote and recognise high standards of practice and professional competence
• Open opportunities for development and career paths for practitioners of Obsolescence Management
• Generate widespread awareness and understanding of the discipline.

www.theiiom.org
Membership

- Individual Memberships will allow individuals to process up the CPD ladder.
- Organisations will be able to certify their OM capability using endorsed IIOM assessors.
IIOM National Chapters

- Anyone from any country can join IIOM
- Membership across many industries and the supply chain in UK, USA, Germany, Ireland, France, Netherlands, Australia, Denmark, Norway, Switzerland & Italy
- When there is a critical mass in a particular country – an IIOM Chapter will be set up
- A Chapter start-up process and delegation agreement in place to articulate responsibilities of IIOM Chapters
- Chapters for UK and Germany exist today
- Next Chapter – BENELUX (Belgium, Netherlands, Luxembourg)
- Future Chapters – USA, Italy, Australia…
  Also adopted countries of the standard, see following…
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OMP Requirements

- The objective is to ensure that obsolescence is managed as an integral part of design, development, production and in-service support in order to minimise the cost and detrimental impact throughout the product life cycle.
- Continuing to assess the performance of the plan and take necessary action to change accordingly
- The product environment in which the product has to perform e.g. temperature range
- The plan is managed and communicated to all (relevant) staff by the senior manager (Obsolescence Manager) who is nominated by the Plan Owner (organisation)
- The requirements of the plan are flowed down the supply chain as required.
OMP Scope in the Life Cycle

OMP

The OMP mandates the processes to ensure the programme contractually defined requirements are met.

Is the contract for all or part of the life cycle?
- Concept through to Disposal
- Includes materiel planning
- Support Contract

OM for?
- All items
- Only EEE items
- Spares
- Level of detail

Regulations
- Customer
- Industry e.g. Aerospace
- Safety
- Territory e.g. EU
- Environment e.g. REACh
OMP includes Concept and Design

- If the plan includes the Concept and Design life cycle steps then include a
  - Sustainment Strategy
    - Use long life; technologies, products, items and materials
  - Supplier Strategy
    - Identify preferred manufacturers
    - Use multisource items
  - Technology Strategy
    - Modularity, Transparency and Open system architecture
    - Ensure compatibility between technologies and processes
  - Identify critical items
    - Reducing Hardware-Software dependence
  - Creating an ‘obsolescence resilient design’
Obsolescence Management Approach

- Perform a Risk Assessment initially on all items grouped into the technologies selected
- Establish the approach for each technology by
  - Obtaining Technology Road Maps
    - Continue to monitor and agree updates with manufacturers
  - Obtaining Manufacturer Strategies
    - Monitor Market Trends
    - Perform life cycle forecasting
- Assess the obsolescence impact
  - Select Reactive Approach with Low impact results
    - Resolve issues
  - Select Proactive Approach with Medium or High impact results
    - Resolve concerns
- Continue to Perform Assessments and Review Approach
  - Adjust approach and plans
Risk Assessment – technology example

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- Impact
- Probability
- Cost

- Simple 1
- Complex 2
- Equivalent 1
- Available 1
- LR 2
- Obsolete 2
- Re-design 3
- Storage 2
Process Steps, Managing Obsolescence

- **Plan for obsolescence**
  - Develop an obsolescence management plan in the framework of product life cycle management
  - Consult the plan and react accordingly to handle the obsolescence issue

- **Check for obsolescence**
  - Implement strategic measures as early as possible during the concept and development life cycle steps
  - Monitoring and Surveillance at all life cycle steps to ensure early resolution if required

- **Act as planned**
  - Assessments identifying Obsolescence concerns
  - Implement Proactive measures

- **Obsolescence Management**
  - Adjust OMP
    - Requirements
    - Regulations
    - Environment
  - Add proactive measures
  - Sustainment Strategy
  - Supplier Strategy
  - Technology Strategy
  - Identify critical items

- **Track changes**
Contact

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Component and Obsolescence Management:
BSI Chair DS1/2; IEC TC56 MT20 Convenor; IEC TC107 MT2 WG2,4&5;
IECQ WG4; IIOM UK Council – Head of Research & Standardisation.

Counterfeit Avoidance:
Member of CAWG, BSI GEL107, IEC TC107 WG3, IECQ WG6
SAE G19CI and G19T
**Organisation Definitions**

- **Authorised Distributor**: An organisation that has a franchise agreement with an original manufacturer to supply their items. Note to entry: the franchise agreement may include warranty, flow down, product lines, and distribution regions.

- **Certified Manufacturer**: An organisation assessed as capable of producing items to a specification. Note to entry: typically a production line certified for the materials industry.

- **Authorised Aftermarket Manufacturer**: An organisation that has permission from the original manufacturer, usually due to obsolescence, to produce items from the original organisation's material and tooling, including the transfer of Intellectual Property Rights (IPR).

- **Original Component Manufacturer (OCM)**: An organisation that produces an item, material or component that is intended for embodiment into an assembly or a product by an original equipment manufacturer (OEM). Note to entry: OCM is a common term used to identify a position in the supply chain and is the design authority/IPR holder for the item, material or component.

- **Original Equipment Manufacturer (OEM)**: An organisation that produces an assembly, product or system. Note to entry: OEM is a common term used to identify a position in the supply chain and is the design authority/IPR holder for the assembly, product or system. Note to entry: The assembly or product might be regarded as an item by a customer.