

EBU TECHNICAL



## Asset Management and SOA @ EBU

IBC'2008

Amsterdam, 10 September 2008

**Jean-Pierre Evain**

European Broadcasting Union



# MAM and SOA @ EBU: A follow-up from IBC 2007

---

## The EBU had organised a Tour of several Asset management Solution providers

- Ardendo, Avid, Blue Order, Dalet, S4M, Silex Media...

## Several questions were identified

- How could MAM be characterised and possibly compared?
- Could the EBU help in defining best practice workflows?
- What role will Service Oriented Architecture (SOA) play in the future?

## Action plan

- Democratising Asset Management and SOA – EBU Seminar in May 2008
- Organising internal EBU work toward SOA compliance:
  - Identify needs and scope for standardisation
  - Develop a proposal
- Networking between users and providers



# Broadcasting, time and need for change

---

## The audio-visual landscape is changing

- More platforms, more content, more competition
- Consumption habits and viewer expectations are evolving

## The business challenge

- Be present on the different delivery / distribution platforms
- Adapt content to the specific needs (usability, availability, etc.)
- Control production costs (“produce once, publish many?”)

## The technical challenge

- Adapt to business needs and optimise platform independent production
- Maximise reuse of well defined common resources by similar ‘roles’ having similar ‘needs’ across different production units
- Support ‘modularity’, ‘agility’, ‘scalability’ and customisation
- Facilitate integration with different platforms/solutions
- Separate functionalities, e.g. workflow from asset management



# SOA: the next step to asset management optimisation

---

## Framework

- rationalising production of a variety of assets from a business perspective

## Challenge

- start from the existing production environment and workflows
  - “start small, think big”, Eva-Lis Green, SVT
- keep control: get what you need/want as a broadcaster

## Requirements

- easy integration taking the best available tools from different providers including specific developments,
  - Content acquisition / ingest, multi resolution authoring and editing, search and retrieval, metadata customisation, rights management, play-out automation
- But also high-bandwidth real-time stream handling, cataloguing, non linear process capability, multi-resolution multi-compression cross-media file based production, redundancy, disaster recovery management, user oriented collaborative environments

## Criteria

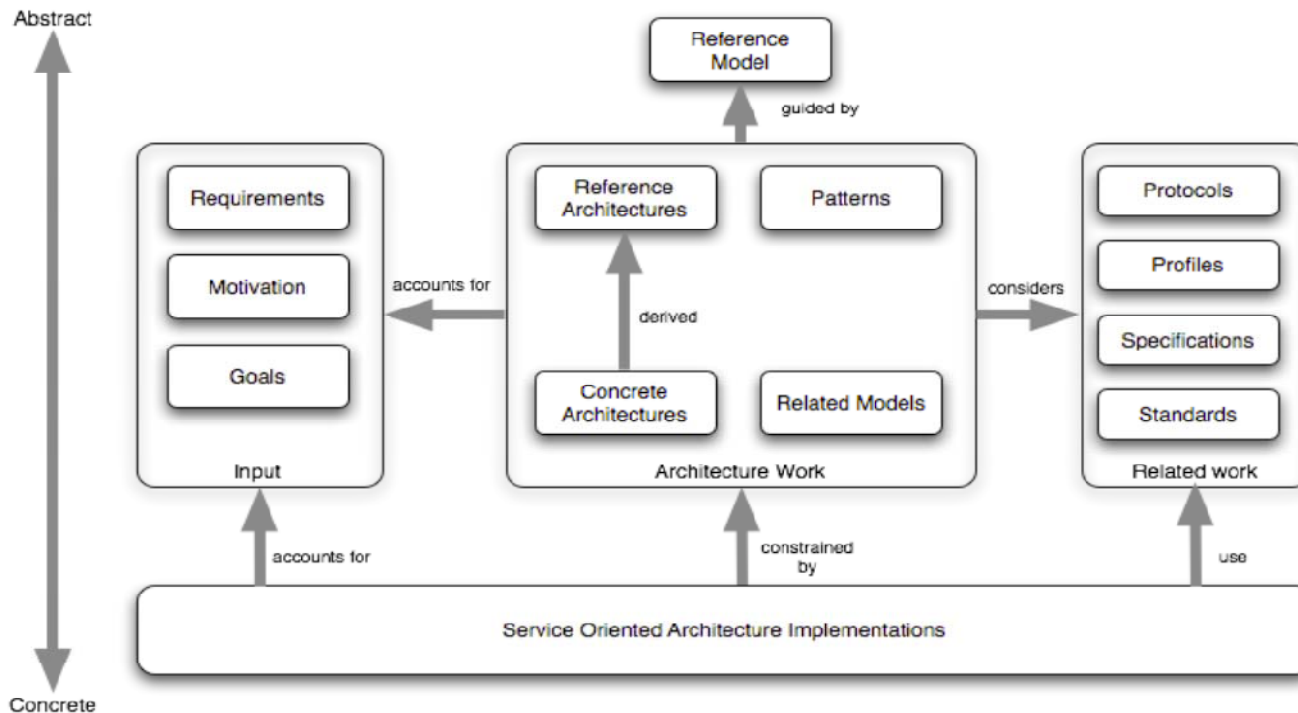
- performance, flexibility, scalability, expected return on investment
- maintenance & product lifecycle: upgrade vs. customisation



# SOA: definitions and compliance

## The reference model (OASIS)

- "an architecture paradigm for organising and utilising distributed capabilities that may be under the control of different ownership domains...". Or, combine best of breed resources from different providers.



## The concept of 'service'

- "a mechanism to enable access via internet protocols to processes via an interface described using predefined rules and procedures".

## What needs to be done to let SOA play a role of standard?



# SOA in broadcasting architectures

---

## SOA meets the requirements by supporting

- The integration of heterogeneous functional tools like legacy and new equipment / tools from different manufacturers, software platforms, asset management tools to ingest, browse, edit, log, document, catalogue, search, retrieve, schedule and publish digital content
- Metadata, provided by the *Services*, populating each broadcaster's overall data model
- Scalability by adding new tools, from different providers, exposed as new *services* enhancing the overall system functionality
- Flexible workflow management through *service* invocation across production units

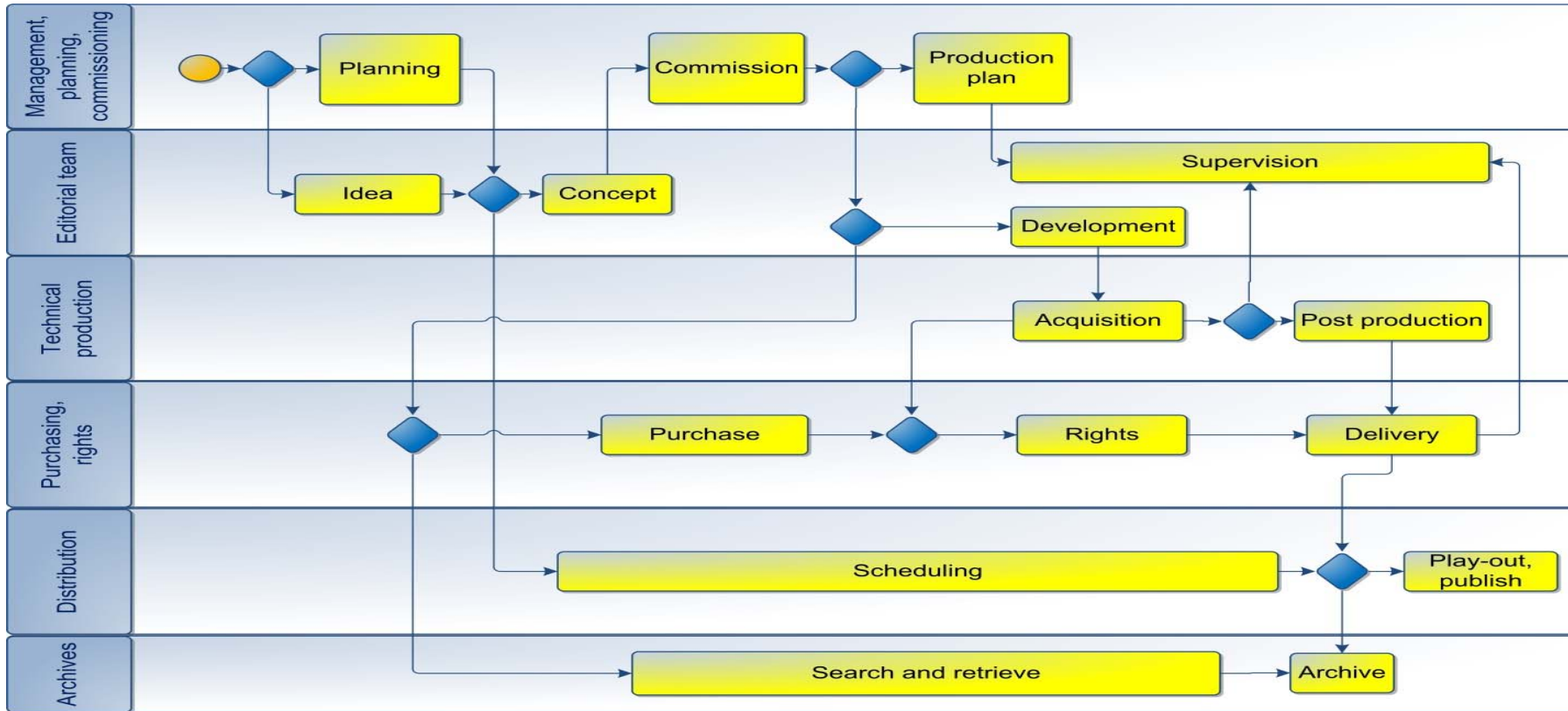
**Specific broadcast engineering requirements such as real time transfer, traffic and synchronisation shall not be underestimated. SOA is not only IT !**

**SOA offers solutions to avoid painful upgrades, e.g. of an asset management system, conflicting with customisation made on a previous version.**



# SOA compliance, step 1 – defining business patterns

## Simplified overall broadcasting production model



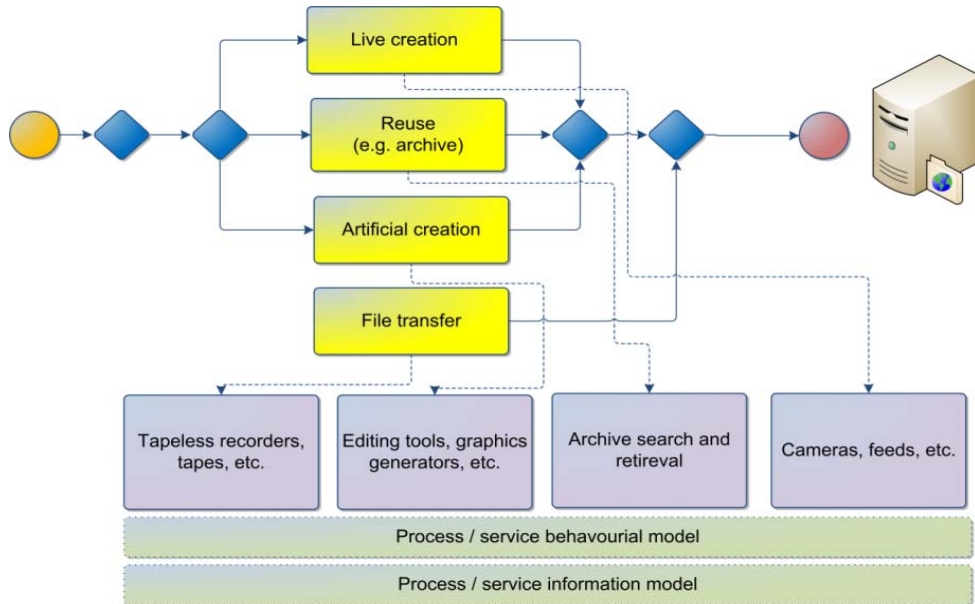
Detailed business patterns for 'News' and 'Drama' almost completed

SOA compliance, step 2: identify eligible services and provide their behaviour and information models



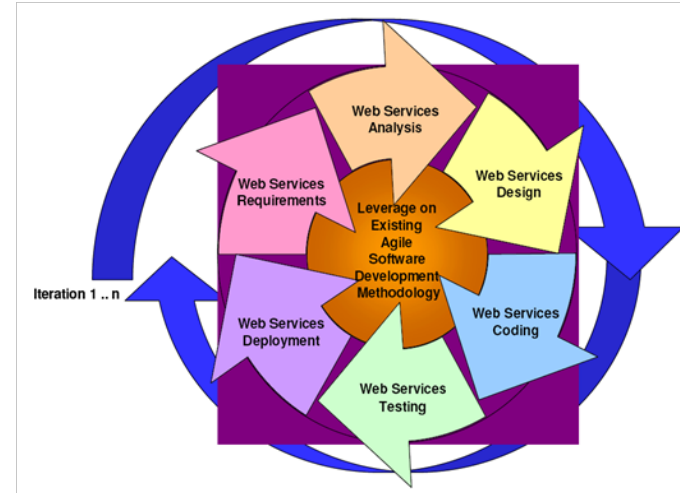
# SOA compliance, step 2 – identify eligible services

## Example: Acquisition / ingest

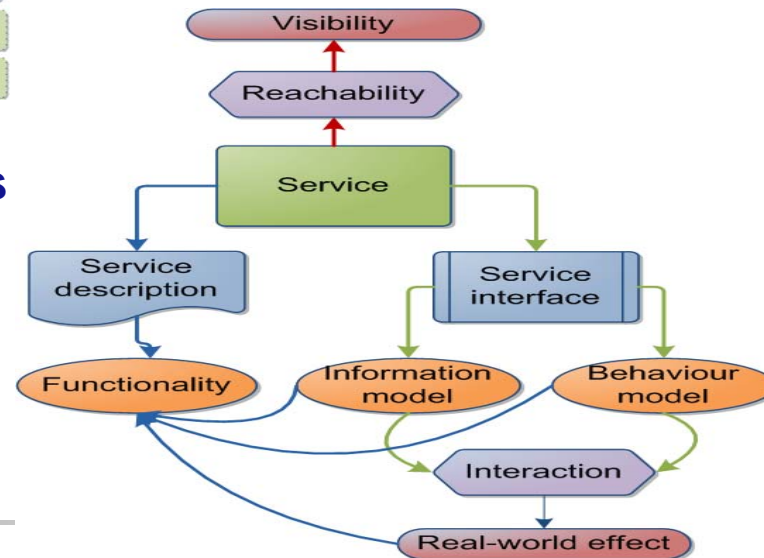


## Define web compliant services

- behaviour model
- information model

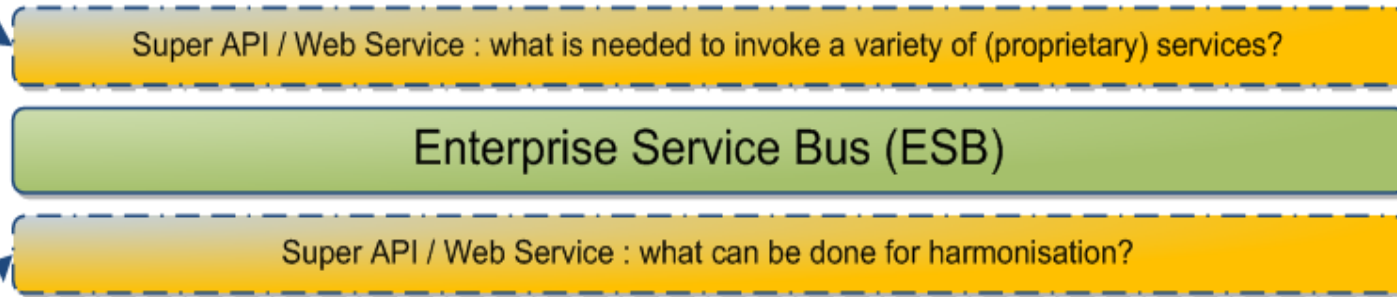
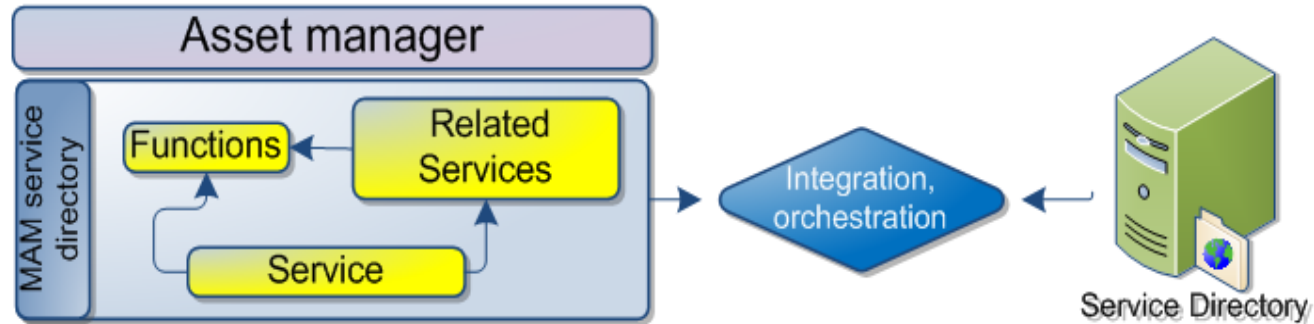


## OASIS & Web Services





# Step 3 - Towards market realisation



# Conclusions

---

**Migration to compliant SOA is a must and should be seen as a opportunity.**

**From a broadcaster perspective, the advantages are numerous:**

- flexibility, scalability, upgradeability, reusability, richer controlled workflow management, easier to integrate, business and user oriented, cross media friendly, etc.

**The goal:**

- Implement the 'plug an play' and 'content and service discovery' concepts

**The approach:**

- 'top-down' business service eligible SOA compliant process analysis
- +
- 'bottom-up' interoperability with existing solutions and products
- =
- web-service centric architecture around a standardised service directory

**Collaboration between all interested parties will be facilitated.**



EBU TECHNICAL



**Thank you**

evain@ebu.ch

