Applying EA-driven development of Air Traffic Management

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NATS

Setting the scene…

- The National Air Traffic Services (NATS), supported by Arup, are introducing a new approach to managing the development of requirements

  - Focused on future transformational change programmes

  - Approach founded on the TOGAF methodology

  - Underpinned by the use of an Enterprise Architecture

- Implementing this approach, for a ~£800m change portfolio in a highly complex critical national infrastructure domain, comes with many challenges and generates many lessons…

Who are NATS?

VIDEO

What is our Vision?

Industry-wide, problems with requirements drive substantial costs and delays

- Re-work where deficient

- Clarification where not clear

- Ultimately, failure to deliver the right thing

An EA-driven approach is seen as key to mitigating these issues

- Improving consistency and coherency

- Eliminating project-silos

- Providing greater clarity and strategic alignment

It's not just EA…

Changes are being delivered as part of a broader ***Business Change Framework***

- Portfolio, Programme and Project Management

- Change Management

- Benefits Management

All in a highly-regulated, risk-averse environment

What have we changed?

- Text-based to Model-based

- Service-oriented / capability-driven

- Top-to-bottom traceability / strategy-led

- Specialist roles and centralised teams

- Consistent but tailorable processes

- Appropriate use of stakeholder expertise

Leveraging Best Practice and Tools

ARUP NATS

The new EA and requirements approach uses:

- TOGAF and the NATO Architecture Framework (NAF)

- Business Motivation Model

- Standardised tools: MEGA and DOORS

The broader Business Change Framework also integrates these with:

- Management of Portfolios (MoP) and Managing Successful Programmes (MSP)

- People Centred Implementation (PCI)

Our Journey

ARUP **NATS**

Arup and NATS have been working together since 2017 to change the way NATS manage requirements

- Starting with a review of existing practices

- Recommending a new approach

- Developing a new methodology

- Developing a training and communication programme

- Supporting the initial implementation

Communicate Train

Implement

New Approach & Methodology

Recommendation

Arup Review

Implementing the change…
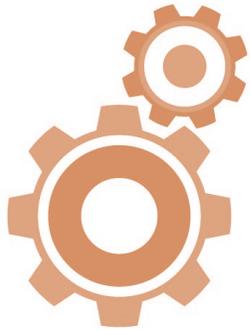
PROCESS	PEOPLE	CULTURE
Process Definition	Recruitment	Shared Vision
Guidance Materials	Training	Engagement
Templates	Centre of Excellence	Pragmatism
Role Definitions	Community of Practice	
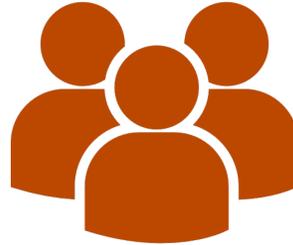
A Centre of Excellence

Previously - Requirements roles are treated as add-ons to other roles and spread out, without cohesion

The Vision - Centralise ownership and implementation of processes to be adopted and tools/guidance to support them

The Benefits - Efficient, coherent, consistent approaches with clear accountabilities and responsibilities

Successes

- Senior buy-in

- Investment

- Training

- Enduring support

Challenges and Lessons

- Dealing with the legacy

- Realistic ambition and pragmatism

- Devil in the detail

- Change curve

Thank you