

What is Enterprise Architecture (EA)

When and how to engage with EA

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WHAT is EA (Enterprise Architecture)



- The purpose of EA is to act as a **central service** to drive OoCIO and Business Enterprise alignment, direction and assurance
- The goal is to **create a unified ICT environment** and standardized approach to ICT by **“leading with architecture”**
- Key to this is the **sharing of reusable components and interoperability** among ICT systems and services
- EA takes an **enterprise wide, end-to-end view of ICT** using industry recognised architecture principles and practices

Enterprise Architecture operates at two main levels;

- The strategic level where the scope and span is the **entire enterprise viewpoint** rather than solely on specific business problems.
- The tactical level (known as the design authority and incorporating solution architecture), focusing on the Enterprise Architecture scope and span of **specific service area proposals, requirements and ICT solutions**

EA have specialist skills and knowledge in areas such as Information Architecture, Technical Architecture, Business Architecture, Clinical Terminology, Security and Assurance, Test and Certification, Information Governance and Compliance.

Outside of any formal approach to Enterprise Architecture as outlined above, EA is there as a central resource and team to help you sound out, discuss and seek HSE OoCIO Enterprise skills, input and feedback.

Not architecting and designing ICT solutions and systems in advance, to HSE national and international standards and best practise, and not configuring systems so they can integrate with other HSE systems, may result in individual, localised and potentially unmanaged solutions.

Which would you prefer and be happy to be part of, the vision on the left or the right ?



Lack of Urban Planning

- Public transit, parks, schools are after thoughts.
- Inefficient, siloed everyone out for themselves.
- No common services.
- No rules, standards or policies
- Not scalable; growth is constrained



Good Urban Planning

- Future looking: planning and analysis
- Efficient, governed, planned constructions
- Common Services (streets, schools, utilities)
- Standards (fire, safety, quality)
- Organised, structured, scalable for growth

- ✓ **DATA:** EA provide, via what is called a 'Data Dictionary', a **National single point of reference/truth for core HSE Data sets**. The data dictionary is backed by agreed common national data standards, value sets, data owners and other core elements. It is the central "encyclopaedia and dictionary" for HSE Data Sets. A team of SMEs from different areas of the HSE provide expertise and input to defining data and data sets
- ✓ **Integrating systems and services:** Enterprise approach to the design and testing of systems for integration and sharing, based on international methods and best practices
- ✓ **Data compliance and governance:** Information Governance (IG)... protecting data and its use especially in regard to regulatory compliance and auditing
- ✓ **Clinical Terminology:** An often ignored area of ICT enablement for Health solutions
It is critical to ensure that health data uses internationally approved coding structures and systems to ensure data is exchangeable, understood and can be used for clinical decision making and is not open to misinterpretation
Without this, data is difficult to interpret and raises potential for incorrect clinical decision making
- ✓ **Business requirements and ICT solution modelling:** The importance of modelling and defining business needs to understand actual ICT solutions and options is critical. Rather than, just acquiring or implementing a solution and trying to make it fit later.
- ✓ **Security/Standards:** 100's of standards and policies may to be considered for ICT enablement of Health Services including HSE, DOH, HIQA, ISO other standards.
These may need to be applied to numerous areas such as data, applications, internet/application messaging and protocols, solution testing, GDPR, PIA, systems integration, user access, security, auditing.
Trying to figure out what is what is can be challenging for those not familiar with standards
- ✓ **Vendor requirements and evaluation:** Helping vendors to understand the HSE ICT enterprise environment, defining vendor requirements and evaluating vendors capability to deliver these, are key to successful delivery of shared and common national solutions
- ✓ **Integration with Irish and European/Worldwide Health systems:** Solutions need to design and plan for potential sharing of health service data outside of core solution needs.

Projects and solutions



Some of the Areas addressed



WHEN (to engage)

Engage at the earliest possible stage of a proposal, project or ICT solution requirements, especially if any of the following apply:



- If you are working on an ICT solution that **captures or exchanges data**. Especially around defining your datasets or using existing definitions of data
- If you need help or direction on defining or **modelling HSE business service requirements** in respect to potential ICT enterprise requirements and options
- If you are developing **functional requirements/specifications or tenders**
- Considerations for local or national solutions or vendor **systems that may need to integrate** or be tested for integration capability
- Considerations and requirements for HIQA, DOH, **Health standards**, Information Governance, data privacy, **HSE Security policies, GDPR**
- If you are involved in configuring a system or solution that uses **clinical data**
- If any of the **EA skills areas**, project or solutions **addressed in previous slides seem relevant** or familiar to solutions you are working on, then engage.
- If you need help **understanding what Enterprise Architecture** is and how it might apply to your ICT solution

As EA covers such a wide area, if you are unsure what EA does and if EA can help you, then ask. Initial engagement can be as simple as an informal phone call to help you 'sound out' things.

HOW (to engage)

- EA Delivery lead direct approach
- Register a request for EA input (via simple online EA form)
- Via PPM and PMO project leads and managers for registered proposals and projects
- Request an Architecture Advisory Service session (AAS) via EA Delivery lead
- EA Solution Architects
- Directly with an EA Lead where appropriate

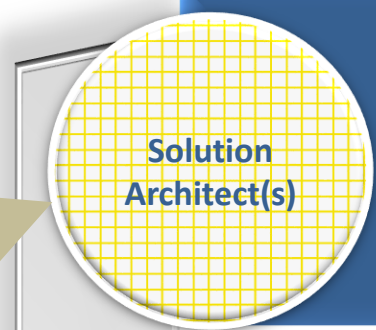
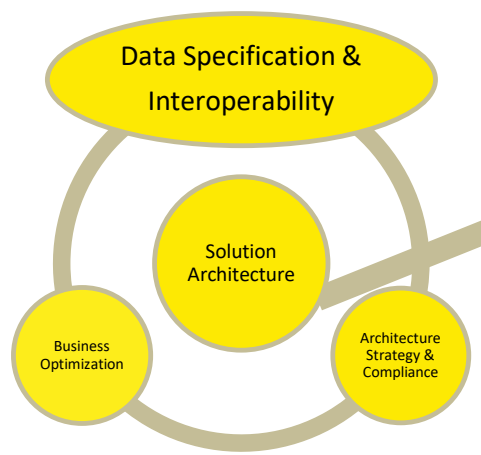
Note: Contact details and information on above will be provided separately to this presentation

- The AAS is a gives you the opportunity to **with the whole EA team in one place** to discuss your solution/challenges. A schedule of monthly meetings are schedule for 2020 in Dr Steevens meeting rooms
- It is there to either simply help with ‘sounding out’ Business/Service or ICT requirements, or, to provide ICT expertise on certain aspects of a project or ICT enabled solutions specification or design.
- The AAS session is informal and advisory only and is focused on helping projects to discuss EA considerations. It is not intended to criticise or challenge any individual or project
- Feedback to date from AAS meetings is that just generally discussing and sharing thoughts on a project raised considerations and solutions not previously thought of that crossed numerous HSE business/Service areas as well as ICT areas

Solution Architecture - Embedding Architecture into Programmes & Projects

HOW

CORE ARCHITECTURES CORE ARCHITECTURES CORE ARCHITECTURES



PROGRAMMES & PROJECTS

A Solution Architect is assigned to a specific project to work with the project team and its architecture designate(s) to manage the solution's architecture design.

ENGAGEMENT PROCESS

- Programmes/Projects request a solutions architect via the EA Delivery Manager at various stages of the project lifecycle to complete the relevant architecture documentation.
- The solution architect searches the Enterprise Architecture (EA) Library for the relevant standards and patterns to develop the architecture of the proposed solution
- If anything is missing, the solution architect will work closely with the core Enterprise Architecture specialists to develop and publish the enterprise artefact.
- Thereafter, the solution architect configures the relevant architecture component to meet the needs of the project & completes the relevant documentation.
- Once approved, the solution architect saves the specific solution architecture into the EA library for future reference and reuse

Enterprise Architecture Team

The role of EA Solution Architecture is to provide 'on the ground' high level Enterprise Architecture solution direction, vision, design and alignment between specific HSE business proposals and HSE ICT Enterprise Architecture requirements.

Enterprise Architecture specialists work closely with support solution architects and provide them with architecture standards and patterns to support the EA solution design delivery process.

Enterprise Architecture

ENTERPRISE ARCHITECTURE & NATIONAL DESIGN AUTHORITY

- **Product Line: SOLUTION ARCHITECTURE**
- **Product: Architecture Request Management**
- **Product: Options Appraisal & Attestation**
- **Product: eHealth Solution Architecture**
- **Product: Design Assurance & Support**

