Enterprise Architecture

THE *Open* GROUP
Making standards work®

TOGAF

TOGAF is a registered trademark of The Open Group

Who Are The Open Group?

The Open Group is a consortium. It was founded in 1996 when X/open merged with the OSF.

It's initial focus was on technical standards such as UNIX/POSIX, CORBA, WAP, ODBC, LDAP.

It now focuses on open standards and the flow of information across organisations.

One of the standards is the Open Group Architecture Framework (TOGAF).

The Open Group covers a diverse group that spans all sectors of the ICT community ICT customers, systems and solutions suppliers, tool vendors, integrators and consultants, as well as academia and researchers.
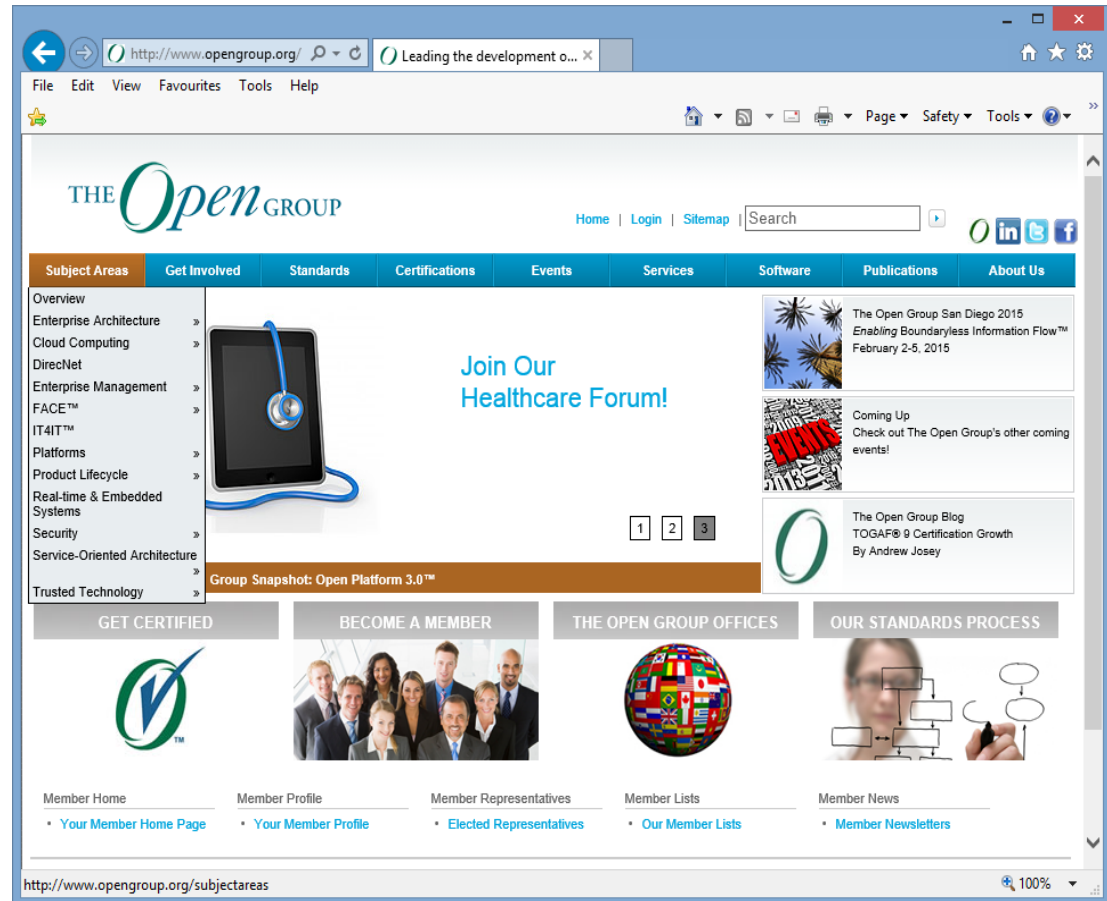
There are many member organisations come from all over the world; 50% from North America, 25% from Europe, and 25% from Asia-Pacific. These include Capgemini, Fujitsu, Hewlett-Packard, Hitachi, BT Plc, IBM, PWC, US Department of Defence and NASA.
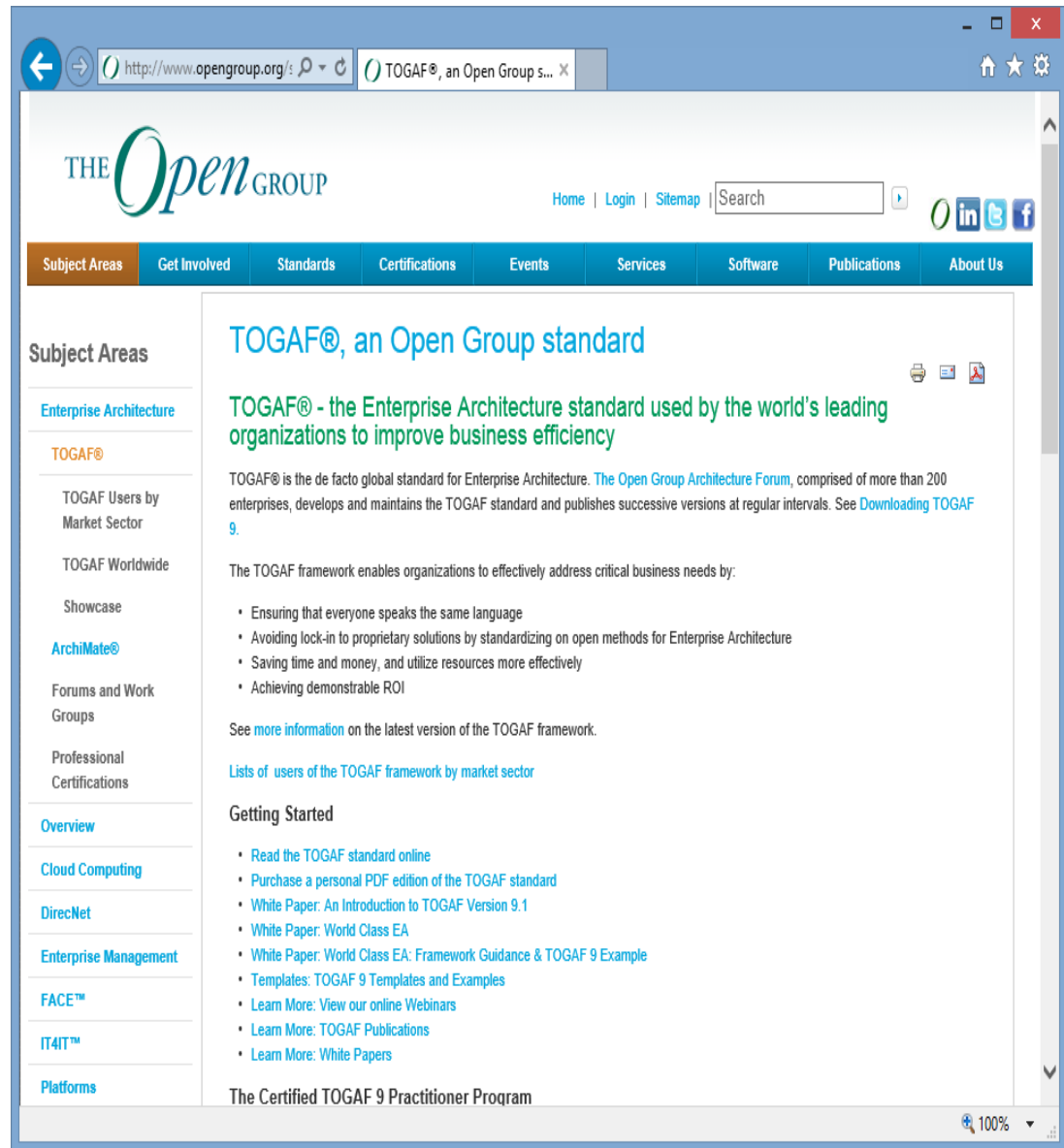
Many government departments and agencies use TOGAF particularly in Europe, and the US.
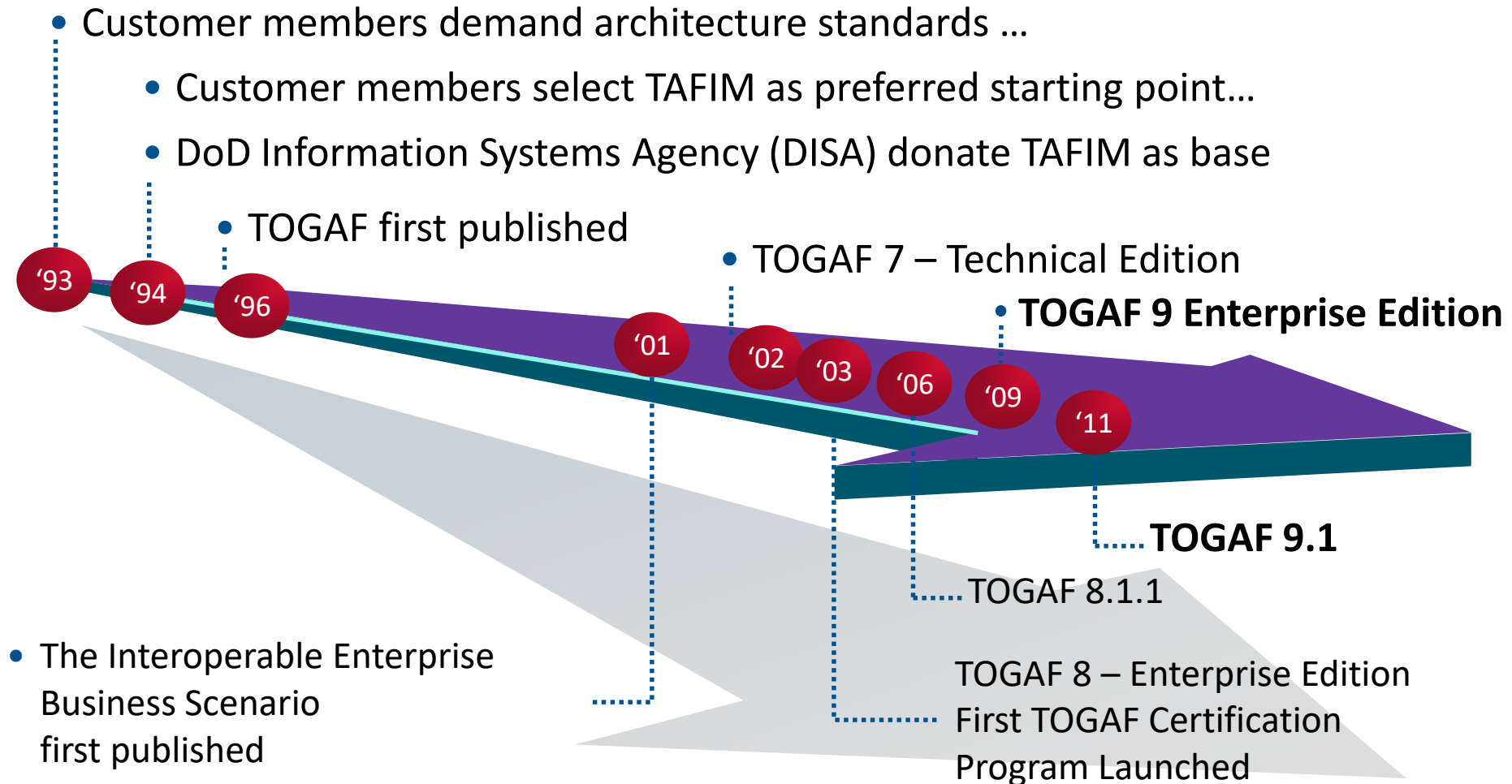
What Does The Open Group Do?

The Open Group defines standards and provides certification for people using those standards.

These certifications include:

IT Architect
IT Specialist
**TOGAF Architect**
CORBA
LDAP
POSIX
UNIX

Member (Therefore User) Driven

- Customer members demand architecture standards …
  - Customer members select TAFIM as preferred starting point…
  - DoD Information Systems Agency (DISA) donate TAFIM as base
  - TOGAF first published

'93 '94 '96

- TOGAF 7 – Technical Edition

TOGAF 9 Enterprise Edition

'01 '02 '03 '06 '09 '11

TOGAF 9.1

TOGAF 8.1.1

- The Interoperable Enterprise Business Scenario first published

TOGAF 8 – Enterprise Edition
First TOGAF Certification
Program Launched

TOGAF Momentum

- More than 100,000 downloads

- Over 32,000 certified practitioners

- More than 300 corporate members of The Open Group Architecture Forum

- Over 100,000 TOGAF series books shipped

- Association of Enterprise Architects membership at more that 38,000

TOGAF Certification Statistics

- TOGAF® 9
  - Foundation (10,000)
  - Certified (22,500)
  - Total (32,500) since February 2009
- TOGAF® 8
  - 1813
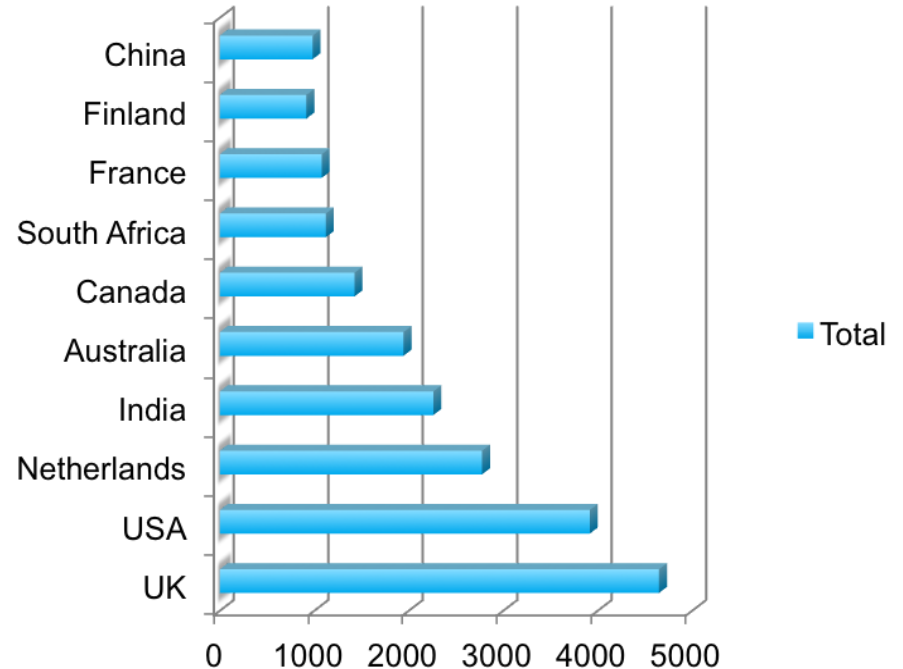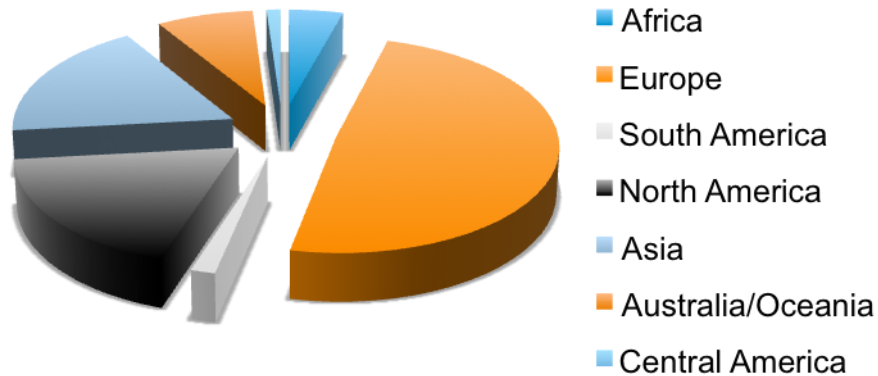
TOGAF 9 Market Drivers

- Ongoing quest for boundary less Information Flow
- In a survey of members, the three most prominent views:
  - The need for closer alignment with the business
  - The desire for simple implementation, greater usability
  - The next version of the TOGAF standard should be an evolution rather than a revolution
- Consideration for different architectural styles, e.g. SOA
- Security is an increasing concern for CIOs and Enterprise Architects due to disappearance of traditional boundaries
- Need for greater detail on Architecture Development Method (ADM)

Introducing the TOGAF 9 Standard

- Developed, reviewed and approved by a collaborative of 300 members from some of the world's leading IT customers and vendors

- An evolution from TOGAF 8.1.1 that preserves existing investments
  - The core Architecture Development Method
  - Existing investment in people - knowledge and skills
  - Existing investment in tools

- Expanded detail and clarification of existing proof points

- Restructured for better usability

- More focused on holistic enterprise change

- Clear links between business and IT objects

- Increased consistency of output

TOGAF Version 9.1

- TOGAF 9.1 was released in December 2011

- It is the first maintenance update to the TOGAF 9 standard

- It is an upwards-compatible evolution addressing usage feedback and comments raised

    – It addresses over 400 comments received

    – Contains over 450 changes

- TOGAF 9 Technical Corrigendum 1 (Document U112) is available describing each change in detail

The Components Of TOGAF 9

TOGAF is formally made up of 7 parts that capture different aspects of the enterprise architecture.

TOGAF™ Version 9

TOGAF SERIES

TOGAF

THE *Open* GROUP
www.opengroup.org

VHP
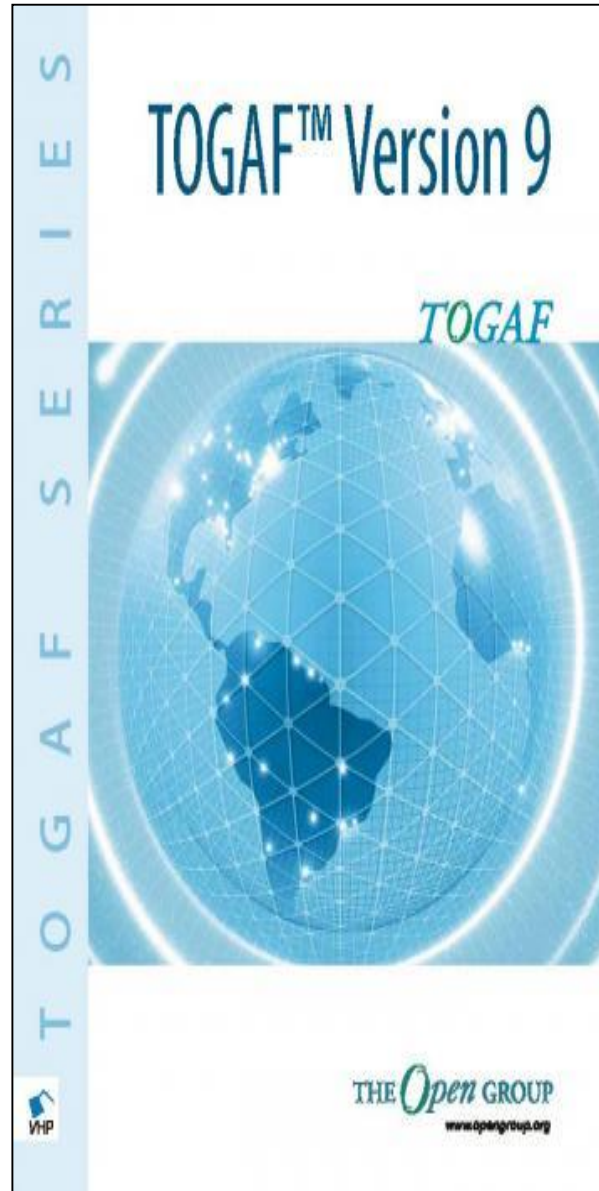
| Part I - Introduction |
|---|
| Preface, Executive Overview, Core Concepts, Definitions and Release Notes |
| **Part II – Architecture Development Method** |
| Introduction to ADM |
| ADM Phase Narratives |
| **Part III – ADM Guidelines and Techniques** |
| Guidelines for Adapting the ADM Process |
| Techniques for Architecture Development |
| **Part IV – Architecture Content Framework** |
| Content Metamodel |
| Architectural Artifacts |
| Architecture Deliverables |
| Building Blocks |
| **Part V – Enterprise Continuum and Tools** |
| **Enterprise Continuum** |
| Architecture Partitioning |
| Architecture Repository |
| Tools for Architecture Development |
| **Part VI – TOGAF Reference Models** |
| Foundation Architecture: Technical Reference Model |
| Integrated Information Infrastructure Reference Model |
| **Part VII – Architecture Capability Framework** |
| Architecture Board |
| Architecture Compliance |
| Architecture Contracts |
| Architecture Governance |
| Architecture Maturity Models |
| Architecture Skills Framework |

ADM

Architecture Content Framework
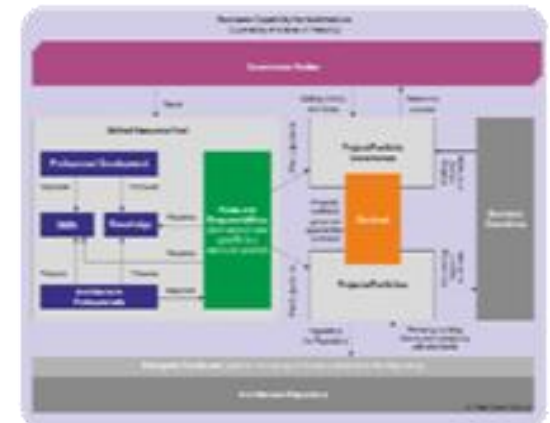
Reference Models

ADM Guidelines & Techniques
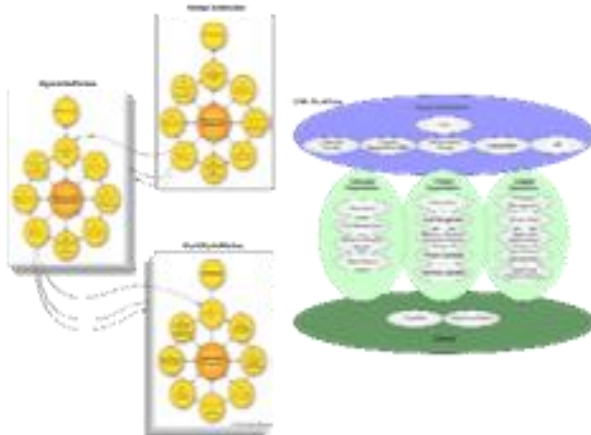
Enterprise Continuum
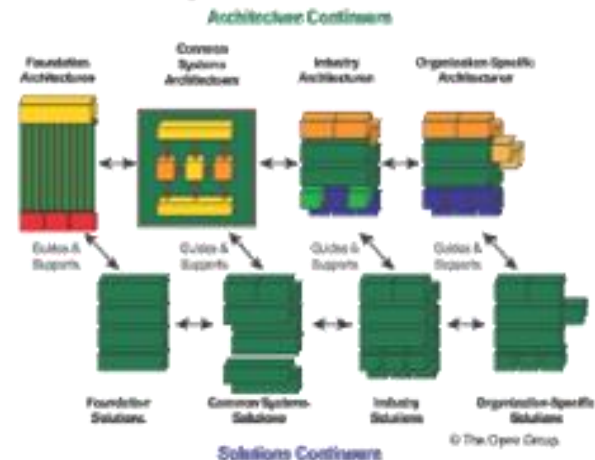
Architecture Capability Framework

The Open Group Architecture Framework

An architecture framework is a foundational structure, or set of structures, which can be used to develop a broad range of different architectures. It should describe a method for designing a target state of the enterprise in terms of a set of building blocks, and for showing how the building blocks fit together.

It should contain a set of tools and provide a common vocabulary. It should also include a list of recommended standards and compliant products that can be used to implement the building blocks

The Open Group Architecture Framework (TOGAF) is a method and tool for assisting in the acceptance, production, use, and maintenance of enterprise architectures

It is based on an iterative process model supported by best practices and a re-usable set of existing architectural assets.
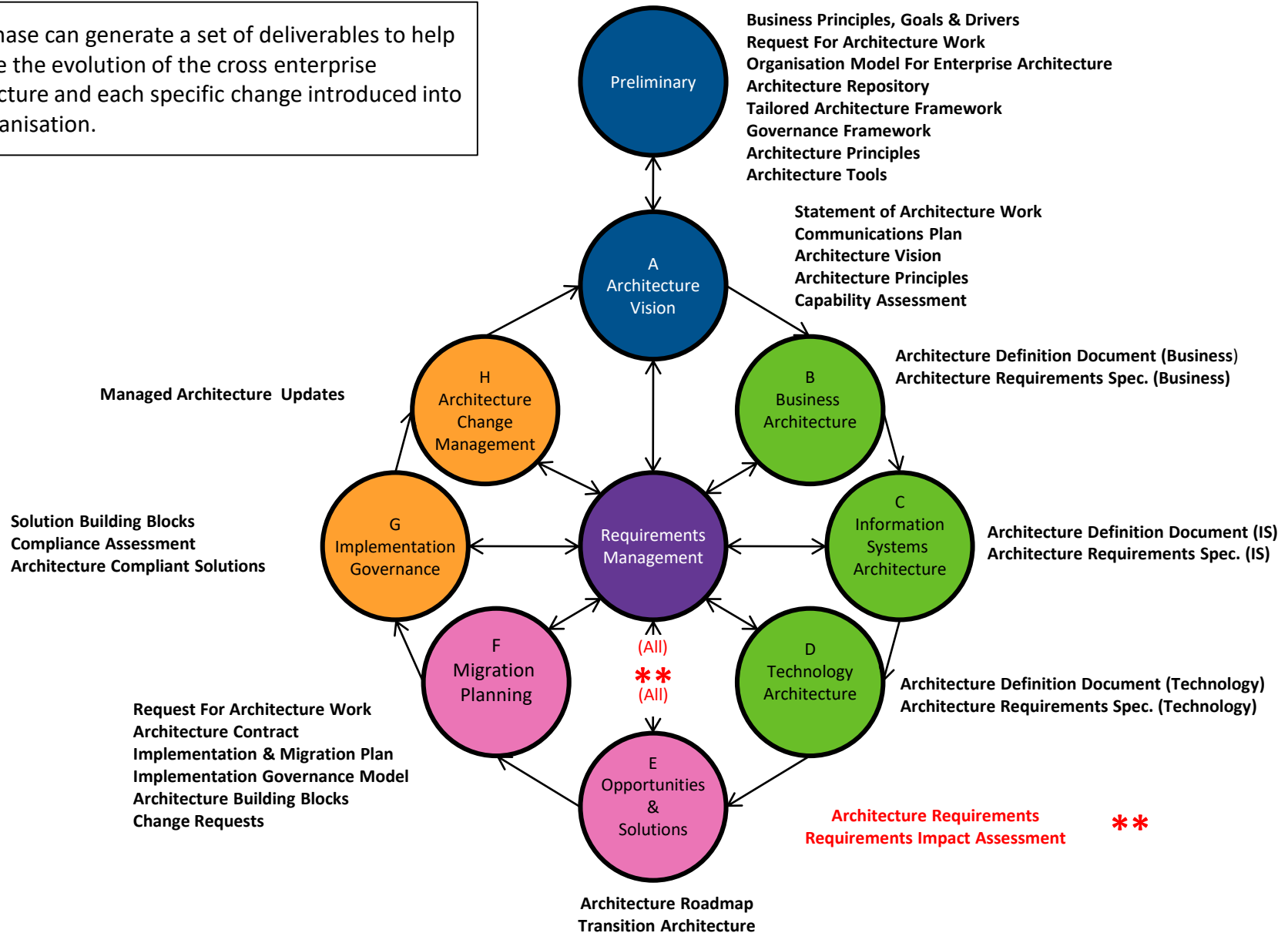
It is developed and maintained by The Open Group Architecture Forum.

The first version of TOGAF, was developed in 1995, and has incorporated elements from most of the other major architecture approaches from across the industry (e.g. TAFIM, Zachman, DODAF, MODAF, FEAF) into an overall consistent framework and development process.
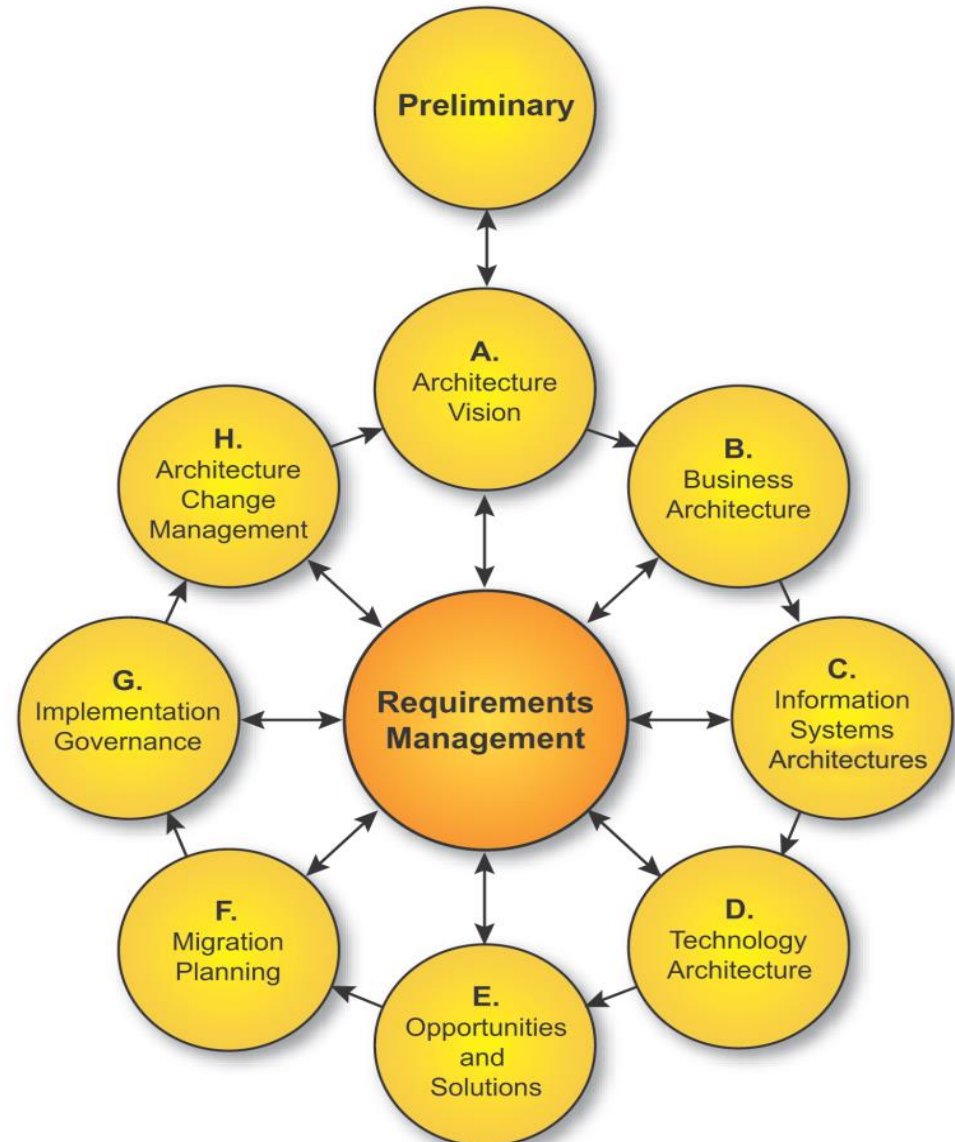
The Architecture Framework Key Document Deliverables

Each phase can generate a set of deliverables to help manage the evolution of the cross enterprise architecture and each specific change introduced into the organisation.

Preliminary

Business Principles, Goals & Drivers
Request For Architecture Work
Organisation Model For Enterprise Architecture
Architecture Repository
Tailored Architecture Framework
Governance Framework
Architecture Principles
Architecture Tools

A Architecture Vision

Statement of Architecture Work
Communications Plan
Architecture Vision
Architecture Principles
Capability Assessment

H Architecture Change Management

Managed Architecture Updates

B Business Architecture

Architecture Definition Document (Business)
Architecture Requirements Spec. (Business)

G Implementation Governance

Solution Building Blocks
Compliance Assessment
Architecture Compliant Solutions

Requirements Management

C Information Systems Architecture

Architecture Definition Document (IS)
Architecture Requirements Spec. (IS)

F Migration Planning

(All)

**

(All)

D Technology Architecture

Architecture Definition Document (Technology)
Architecture Requirements Spec. (Technology)

Request For Architecture Work
Architecture Contract
Implementation & Migration Plan
Implementation Governance Model
Architecture Building Blocks
Change Requests

E Opportunities & Solutions

Architecture Requirements
Requirements Impact Assessment

**

Architecture Roadmap
Transition Architecture

The Extent And Coverage Of TOGAF

- TOGAF 9.1 is some 700 pages of detail including literally hundreds of potential tasks, documents and other deliverables

- This course focuses on the elements that will best:
  - Help you understand and in future start to apply TOGAF
  - Pass the exam/s

- The course exercises will give you a flavour of working on some of the deliverables, enough to pass the exam.

- You will need to review the whole book and look at the detail, but you should be able to pass the exam with the contents of this course, a good knowledge of the shorter guide (around 100 pages) and an appreciation of some of the detail in the main text.

- You are not expected to learn all of TOGAF in detail and you would rarely if ever use all of it in you day to day work.

- However as you tailor and adapt TOGAF for your organisation and define and manage its enterprise architecture you will select and apply the elements that are most relevant and useful for your situation and you will need to develop your skills in the chosen areas.

TOGAF 9 Accreditation

TOGAF 9 accreditation is based on two exams.

Foundation:
The acquisition of knowledge about the terminology and concepts of TOGAF 9 and the core principles of Enterprise Architecture and TOGAF

Certified:
The ability to apply TOGAF in real world architecture activities.

Training

TOGAF 8-9 Advanced Bridge Exam

Sample

TOGAF 9 Course

TOGAF 9 Part 1 Exam

TOGAF 9 Part 2 Exam

TOGAF 9 Certified

TOGAF 9 Combined Part 1 & Part 2 Exam
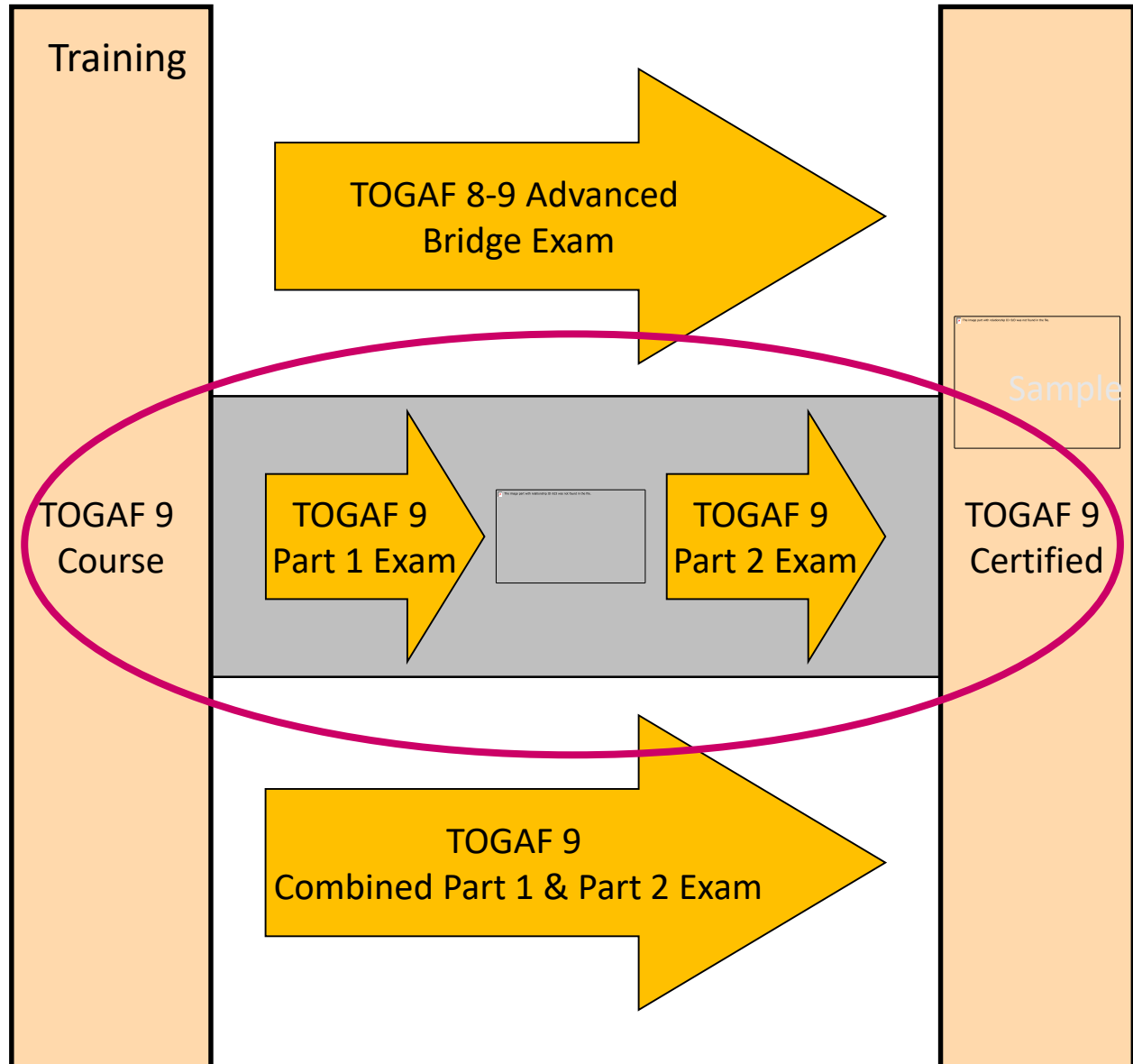
The Open Group & TOGAF Exams

- TOGAF 9 Part 1 - Foundation

- Focuses on the specific language and concepts of TOGAF

- Is specific and pedantic

- 40 multiple choice questions in 60 minutes

- Pass mark 55%
(this fairly balances the very specific nature of the questions with the development of an overall understanding of TOGAF)

- Generally considered the more difficult exam

- TOGAF 9 Part 2 – Certified

- Focuses on the application of the TOGAF approach to specific real world situations

- Is more open and based on pragmatic decisions

- 8 scenarios from which you choose the most likely in 90 minutes

- Marked on a best (score of 5), next best (score of 3) next worst (score of 1) to worst (score of 0) scoring system

- Pass mark of 60%

- Generally considered the easier exam

Accessed at http://www.opengroup.org/architecture/togaf91/downloads.htm

As an architecture forum non-member:

TOGAF 9.1 online
TOGAF 9.1 PDF version
TOGAF Self Study Pack ($60)

Accessed at http://www.opengroup.org/subjectareas/enterprise/togaf/

As an architecture forum member:

Documentation:

TOGAF 9.1 online
TOGAF 9.1 PDF version
TOGAF Version 9.1: A Pocket Guide
TOGAF 9 Templates

White Papers:

Making the Business Case in TOGAF 9
An Introduction to TOGAF® 9.1
TOGAF Version 9 Enterprise Edition: Introduction
TOGAF Version 9 Enterprise Edition: Migration Overview
TOGAF, an Open Group Standard, and Enterprise
Architecture Requirements
Motivation, Principles, and Requirements in TOGAF

Self Study:

TOGAF Self Study Pack ($60)

The End

Enterprise Architecture

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If you would like training and/or consulting services to support your enterprise architecture programme please contact:

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