



CPQP

CONSTRUCTION PRODUCT
QUALITY PLANNING

Exploring how we will create
a future built on quality

#FutureQuality

Inside CPQP

The CPQP Framework has been developed to ensure consistency of quality and safety across the future of UK construction manufacturing.

Through this 5-part series 'Inside CPQP' we will explore some of the key technical tools that are at the core of the CPQP Framework and how they can benefit enterprises that design, manufacture and use construction products through manufacturing-led approaches.

Explore CPQP

#1. Quality Function Deployment (QFD)

#2. Failure Mode Effect Analysis (FMEA)

#3. Control Plan

#4. 8 Disciplines of Problem Solving (8D)

#5. Verification & Validation Guide (VV)

#5

VERIFICATION & VALIDATION (V&V) GUIDE

What is it?

The V&V Guide is designed to help constructors efficiently and effectively navigate the verification and validation processes in line with shifting regulatory landscapes

1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV

What is V&V?



VERIFICATION

Testing to ensure systems and/or products meet all specified requirements during the development process.



VALIDATION

Testing that ensures developed systems and/or products are fit for purpose and intended usage.

Why do we need it?

The introduction of Modern Methods of Construction, albeit a positive evolution for industry, does bring about new challenges and ways of working that constructors must adapt to.

Contractors are under increasing pressure to provide transparency to their practices and processes, whilst also evidencing that satisfactory attempts to mitigate risk have been taken.

This is where V&V can add real value. However, it's not always a simple process to follow...

Why do we need the V&V Guide?

The V&V Guide aims to make the often complex process of verification and validation testing simpler, more efficient and more effective for constructors to implement.

The role of the V&V Guide

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- 1** Guidance through the development process to verify and validate building systems.
 - 2** Helps identify client regulatory & performance requirements.
 - 3** Reduces uncertainty in the identification of standards and test methods.
 - 4** Assesses requirements of building systems and component.
 - 5** Aids compliance with previous and future life-cycle phases.
 - 6** Evidences that best practice, procedures, policies, standards and regulations are met.
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1. QFD

2. FMEA

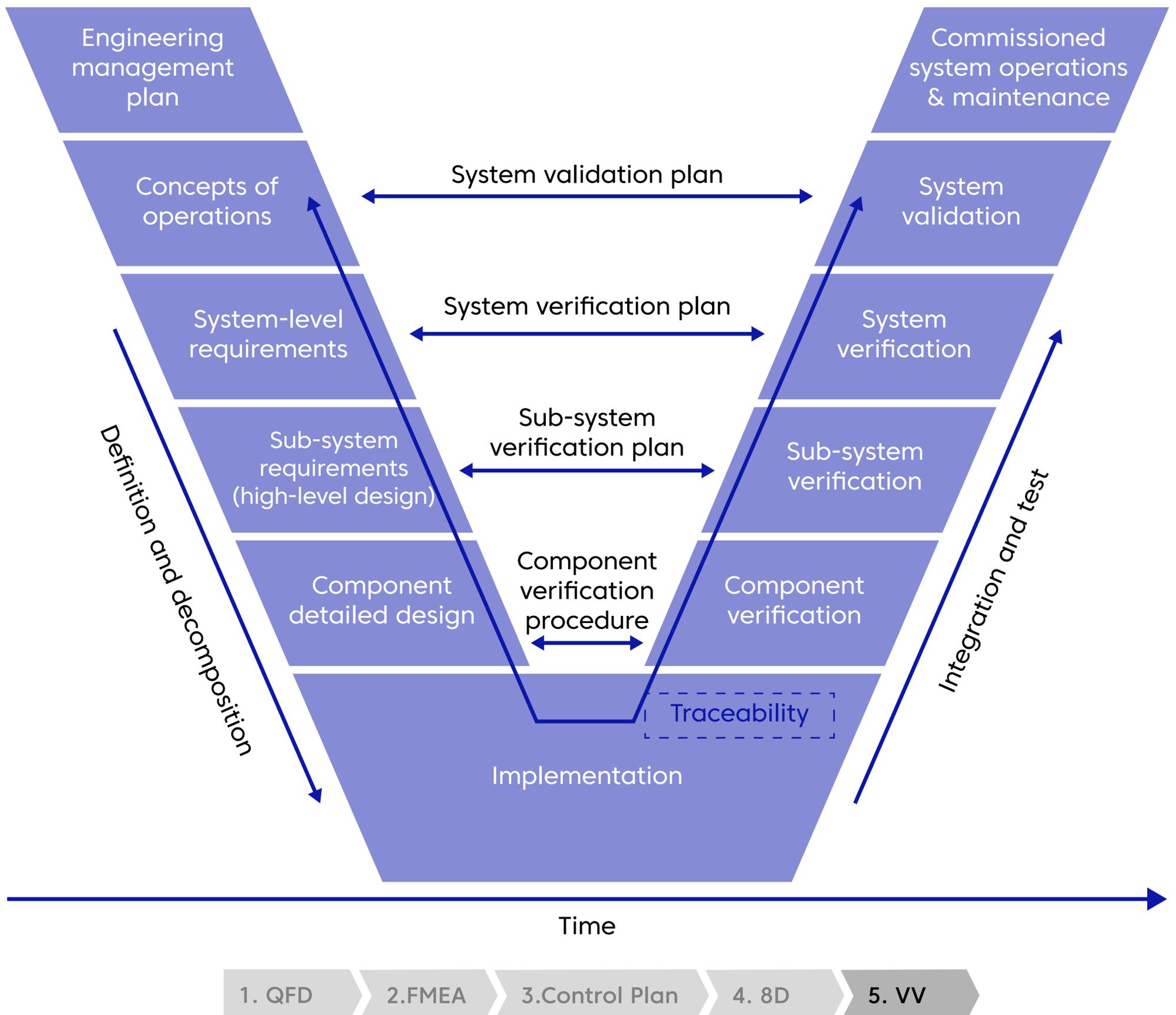
3. Control Plan

4. 8D

5. VV

How does it work?

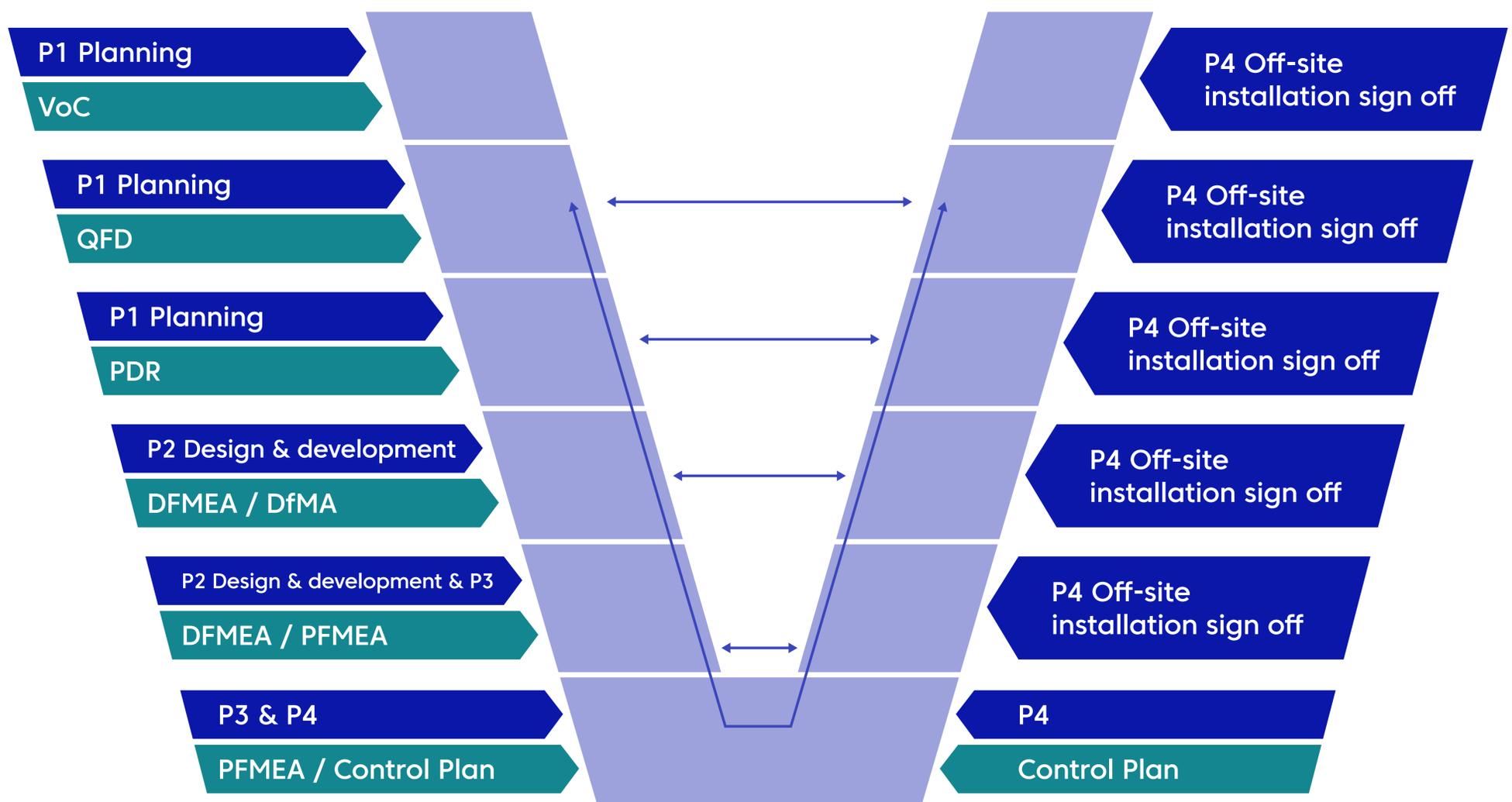
Below is an illustration of the V&V Guide which highlights how and when V&V tests are conducted.



How does it fit within the CPQP Framework?

The CPQP Framework aligns with the V&V Guide to support constructors through the verification and validation phases.

This support consists of a structured management web tool and handbook to provide a visual aid for a product quality journey as well as an electronic data trail.



The benefits of the V&V Guide

1

Guidance in successfully navigating the regulatory standards of MMC

2

Alignment with the CPQP Framework

3

Provides evidence of compliance to a set of standards

4

Enables proactive steps to be taken towards combating uncertainty in standards

5

Improves successful integration from components to systems and ensuring their compliance

6

Provides documentation for incorporating into regulatory awards

The V&V Guide combined with the CPQP Framework exceeds the ability of other existing frameworks to ensure quality, at scale, and provide satisfactory evidence that structured processes have been followed, thereby mitigating risk.

Get in touch with the Construction Innovation Hub to learn more how the CPQP Framework and the V&V Guide can help your business.

Please contact:

cpqp@constructioninnovationhub.org.uk

1. QFD

2. FMEA

3. Control Plan

4. 8D

5. VV