

CERTAINTY OR PREDICTABILITY?

Lessons from Cardiff Crossrail

NEC Conference Wales 2026

Steffan Davies | Regional Director - Commercial & Procurement

AtkinsRéalis - Sensitive / Sensible (FR)



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OPENING QUESTION

What do public authorities really need?

Cost

Programme

Outcome

CERTAINTY

A fixed answer today



PREDICTABILITY

An honest view of tomorrow

Clients say they want certainty. What they actually need is predictability.

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UNCERTAINTY WAS REAL

The Cardiff Crossrail challenge

Design

not fully mature

Risks

still emerging

Opportunities

not yet tested

Knowledge

still developing

You cannot meaningfully fix the cost of something you do not yet fully understand.

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WHAT WE DID

A two-stage NEC4 route

STAGE 1

ECC Option E

Early Contractor Involvement
Learn • test • de-risk • develop



STAGE 2

ECC Option C

Agree a robust target
Deliver • manage • forecast

Stage 1 was not about producing a target. It was about earning the right to set one.

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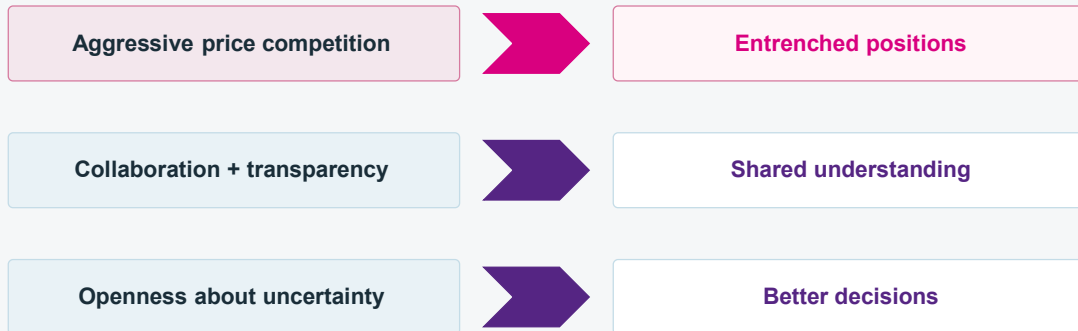
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THE CONTRACT MATTERS. PROCUREMENT MATTERS MORE.

Procuring the right behaviours



The behaviours you procure become the behaviours you get.

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COMPETE ON CREDIBILITY, NOT THE SMALLEST PROMISE

Why we used average price



We were not procuring a price. We were procuring confidence.

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RESTRAINT WAS A PROCUREMENT DECISION

What we deliberately did not do



early target



premature commitment



artificial funding target

The earlier you force a target, the earlier people start protecting it.

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BOARDS RARELY ASK FOR CERTAINTY

The governance myth

Do we understand our risks?

Are emerging issues visible?

Can we forecast the likely outcome?

Do we have time to respond?

That is not certainty. That is predictability.

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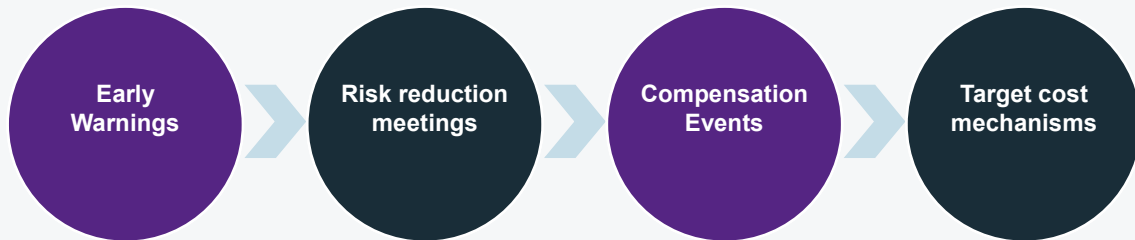
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MAKE UNCERTAINTY VISIBLE

Why NEC4 aligns with predictability



NEC4 does not eliminate uncertainty. It creates transparency, understanding and predictability.

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GOOD GOVERNANCE CAN MANAGE BAD NEWS

The enemy is surprise

BAD NEWS

Visible early
Forecastable
Time to respond

SURPRISE

Hidden late
Unexplained
No room to act

Most boards can manage bad news. What they cannot manage is unexpected bad news.

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ALIGN PROCUREMENT WITH THE BEHAVIOURS YOU WANT

The bigger lesson

Tell the market to collaborate

BUT

Reward aggressive competition

Ask contractors to be open

BUT

Compete against uncertainty

Invite innovation

BUT

Lock in premature targets

NEC4 cannot solve a contradiction created by the procurement strategy.

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CONCLUSION

Certainty or no surprises?

“

Do you want certainty? Or do you want no surprises?

Predictability gives us a framework to understand tomorrow.

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THANK YOU

Certainty or Predictability?
Lessons from Cardiff Crossrail

Steffan Davies

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WORKING BETTER TOGETHER

What Banwell Bypass taught me about lifting NEC4 off the page

NEC Conference Wales 2026

Gareth Williams | Major Projects Delivery Director



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A RECURRING SURPRISE

Big projects rarely struggle because the contract has no process

The symptoms

Late surprises
Defensive correspondence
Siloed teams
Unresolved submissions
Escalation after positions harden

The usual diagnosis

"The contract is not working"
"The other party is not collaborating"
"We need tighter governance"

The underlying issue

Expectations not explicit
Forums without purpose
Problems raised without options
Leadership absent until escalation

The contract is often blamed for outcomes created by the way people are using it.

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BANWELL BYPASS

A procurement reset, but not a history lesson

The delivery arrangements changed. The funding constraints did not.

RESET

Return to the market with a deliverable proposition

REBALANCE

Have grown-up conversations about risk allocation

PRIORITISE

Separate must-haves from nice-to-haves

ATTRACT

Create a project the market could engage with confidently

Procuring a collaborative contract was only the beginning.

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WE DID NOT LEAVE BEHAVIOUR TO CHANCE

Intent was translated into routines, expectations and leadership

LISTEN Ask the Contractor what has worked on successful projects

SET Good news often. Bad news early. Bring options.

STRUCTURE Define forums, audiences, inputs, outputs and records

REVIEW Discuss programmes and CEs before formal submission

MAINTAIN Senior leaders reinforce the tone and intervene early

The Project Management Plan became the project operating rhythm, not a document on a shelf.

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GOOD NEWS OFTEN. BAD NEWS EARLY.

Bring the problem, its context and realistic options

SURFACE

What is emerging?

EXPLAIN

How does it affect construction?

OFFER

What can be avoided or reduced?

DECIDE

Which option best serves the objectives?

“Over to you, instruct us” wastes the construction expertise already in the room.

Time • Cost • Quality • Stakeholders • Funding

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DISCUSS, IMPROVE, THEN FORMALISE

Use dialogue to improve the contractual record, not bypass it

DRAFT

Programme

Logic and sequence
Critical path and constraints
Time risk allowance
Mitigation and decisions required

CONVERSATION

Compensation event

Entitlement and assumptions
Defined Cost build-up
Risk and supporting evidence
Programme effect

IMPROVE

FORMAL

Formal assessment

No changed authority
No informal acceptance
Clearer submission
Fewer avoidable review cycles

Soft review is preparation for compliance, not an alternative to compliance.

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EAST STREET TIE-IN

A ten-week closure was the first answer, not the final answer

THE CHALLENGE

A368 strategic route
HGV, buses, schools and commuters
Initial ten-week closure
Public, political, cost and programme exposure

CHALLENGE THE ANSWER

Programme workshops
Revisit design and pavement evidence
Reduce reconstruction
Select lower-impact timing
Plan stakeholder mitigations

10 WEEKS

TO

5 WEEKS

Challenge the original answer early enough and the project still has choices.

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A SUCCESSFUL OUTCOME

Collaboration converted uncertainty into a decision the Client could support

5 WEEKS

Closure duration
halved

ON SCHEDULE

Tie-in completed as
planned

MORE DELIVERED

Additional works
under the closure

ACCESS

Residents and waste
collection maintained

LOW DISRUPTION

Few complaints and
limited HGV issues

No single party could have produced the outcome in isolation.

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COLLABORATION HAS TO BE INTENTIONAL.

Set it from the top.

Translate it into everyday routines.

Maintain it when the project becomes difficult.

The contract cannot collaborate for us.

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Prince Charles Hospital Refurbishment Programme

Presented by: Jeremy Holifield
(CTMUHB Responsible Officer)



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- 400+ bed acute hospital
- FEN 2010
- Asbestos remediation
- 4 Phases (2017 – 2028)
- £303 million
- NWSSP - Designed for Life
- NEC ECC Option C
- Tilbury Douglas

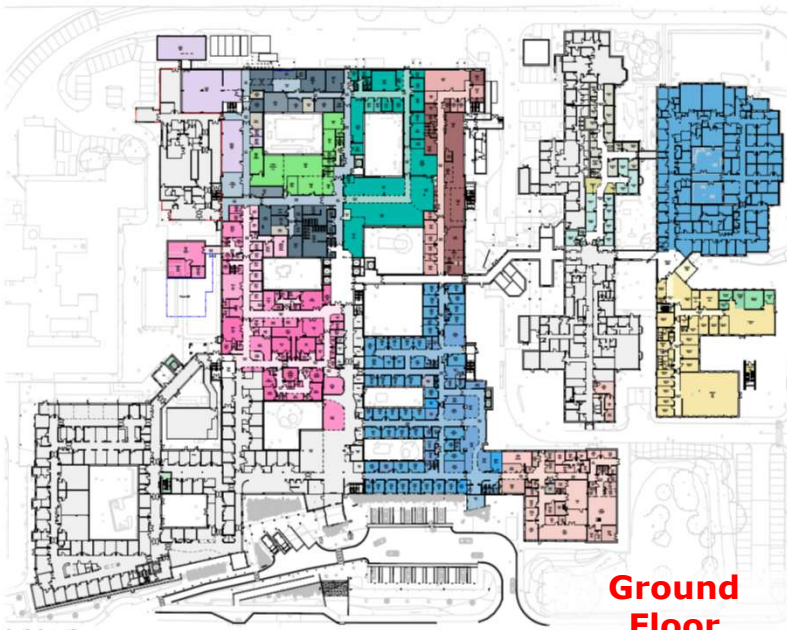


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NEC Case Study – PCH Refurbishment Programme – Client Perspective

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• Construction

- 54 individual live workstreams
- 23,750m² refurbishment footprint
- Creation of decant space crucial
- Multiple moves of operational services
- Flexibility to bring forward key elements (e.g. Trauma Lift, Pathology).

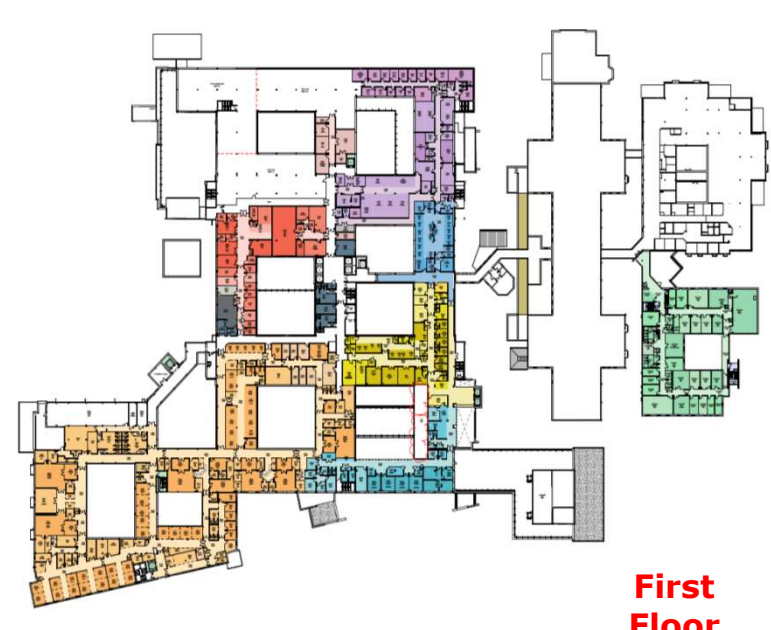
Ground Floor

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NEC Case Study – PCH Refurbishment Programme – Client Perspective

GIG NHS
Glasgow Integrated Partnership
Glasgow Health Board

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• Operational

- A&E – 59,286 attendances
• (162 / day)
- Outpatients – 97,139
• (372 / day)
- Inpatients – 28,110
• (77 / day)
- Babies born – 2,483
• (7 / day)

First Floor

4

NEC Case Study – PCH Refurbishment Programme – Client Perspective

GIG NHS
Glasgow Integrated Partnership
Glasgow Health Board

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- Ethos
 - 'Spirit of mutual trust and co-operation'
 - 'Stimulates good management of the relationship between the parties'
 - People performing

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NEC Case Study – PCH Refurbishment Programme – Client Perspective

GIG NHS
Based on the NHS
Core 1st Management
University Health Board

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- Target Cost
 - Cost assurance
 - Pain / gain
 - Actual cost

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NEC Case Study – PCH Refurbishment Programme – Client Perspective

GIG NHS
Based on the NHS
Core 1st Management
University Health Board

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• Early Warning

- Risk identification
- Risk mitigation
- Not a pre-cursor to Compensation Event

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NEC Case Study – PCH Refurbishment Programme – Client Perspective



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• Compensation Events

- Timeliness
- Loss of entitlement
- PM Assessment

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NEC Case Study – PCH Refurbishment Programme – Client Perspective



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Agenda

1. Introductions
2. Overview of DCWW's AMP8 Determination
3. Introduction to DCWW's Capital Programme and our supply chain
4. Capital Delivery Model and Gateway Process
5. Contract Strategy and NEC
6. Works allocation and commercial governance



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ABOUT WELSH WATER

The company

- Not for Profit, no shareholders
- 4th largest company in Wales
- Over 3,000 employees work for Welsh Water
- £4.5 billion investment programme 2025-2030

In the community

- 1 million visitors to our reservoir sites and visitor centres each year
- Looking after 40,000 hectares of land

Our assets

- Maintaining over 26,500km of water mains
- Over 30,000km of sewers
- Managing over 800 wastewater treatment works
- Looking after 92 reservoirs



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Highlights of our PR24 plan

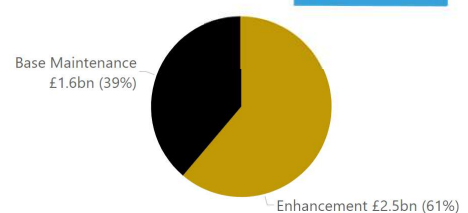
- Largest ever capital delivery enhancement programme at £2.2bn – 120% bigger than AMP7
- £1.8bn NEP programme 6 times larger than PR19
- Highest customer acceptability across the sector at 84%
- Return to 4 Star Environmental Performance Assessment (EPA)
- Elimination of all ecological harm from operation of storm overflows by 2040
- Pollution incidents cut by 13% - 78 to 68 per annum
- 10% reduction in leakage levels
- Drinking water quality contacts reduced by 43%
- Underpinned by principles of being balanced, affordable and deliverable
- Stretching Performance Commitment targets, particularly where lagging



Business Plan
2025-30:
Stepping up to
the challenge

Welsh Water
PR24 2025-30

October 2023



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Capital Delivery



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What does AMP8 Look like for Capital Delivery?

- We will be delivering on a circa £2.2bn programme of schemes - average £440m of schemes / annum in AMP8 compared to circa £200m / annum in AMP7
- Big increase in the environment programme – spills, pass forward flow and nutrient removal – NEP (National Environment Programme)
- Water programme broadly similar to AMP7
- We will have circa 400 projects live at any time
- PCDs (Price Control Deliverables) – programme committed to the regulator at a high degree of granularity

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Working With

Capital Delivery Partners

Engineering Consultancy Services

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Working With

Capital Delivery Partners

Engineering Consultancy Services

NEC Main Framework Agreement

Option A

Option C

Option E

PSC

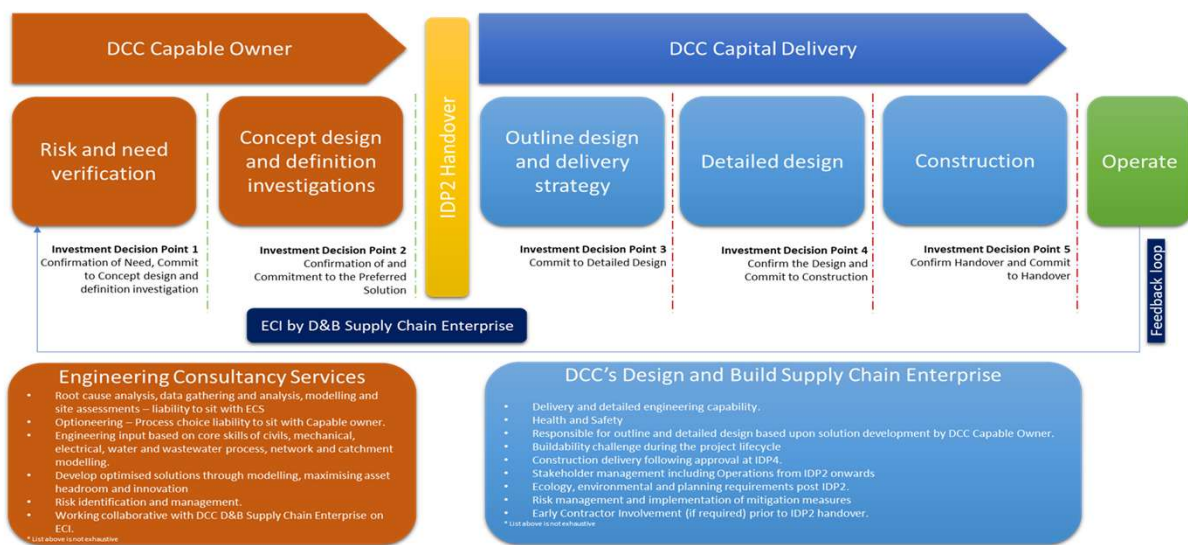
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Delivery Models and Gateways



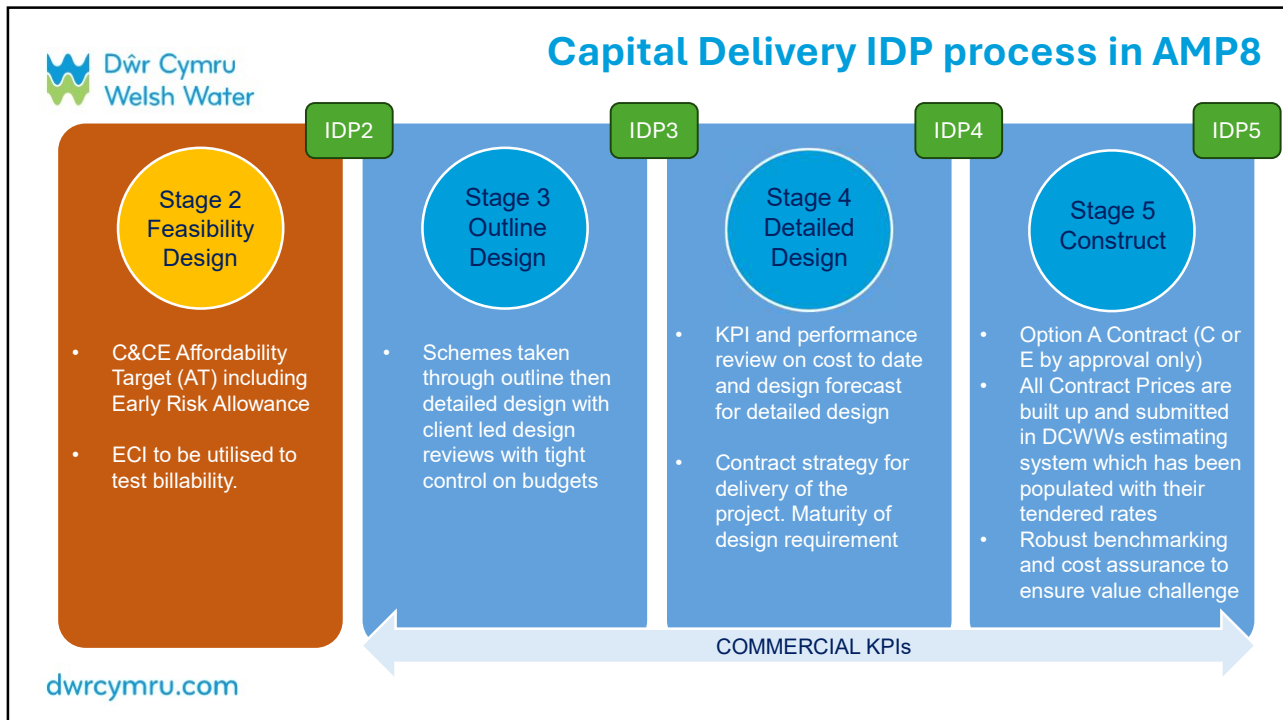
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Capable Delivery will use a wider supply chain than the current Alliance to undertake design and build of the solutions identified by Assets



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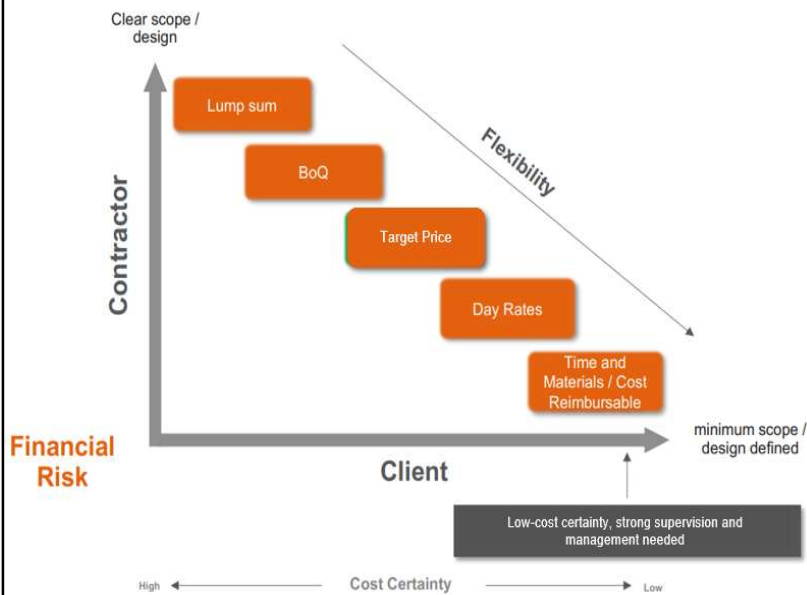
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Contract Model Approach



- Previous AMP delivery has been based on Option C or E with different design maturity
- Lump Sum Contracts provide higher cost certainty
- Increased design maturity to establish and define scope and cost certainty
- Expectation is for minimal or no change post contract

Other Focus Area

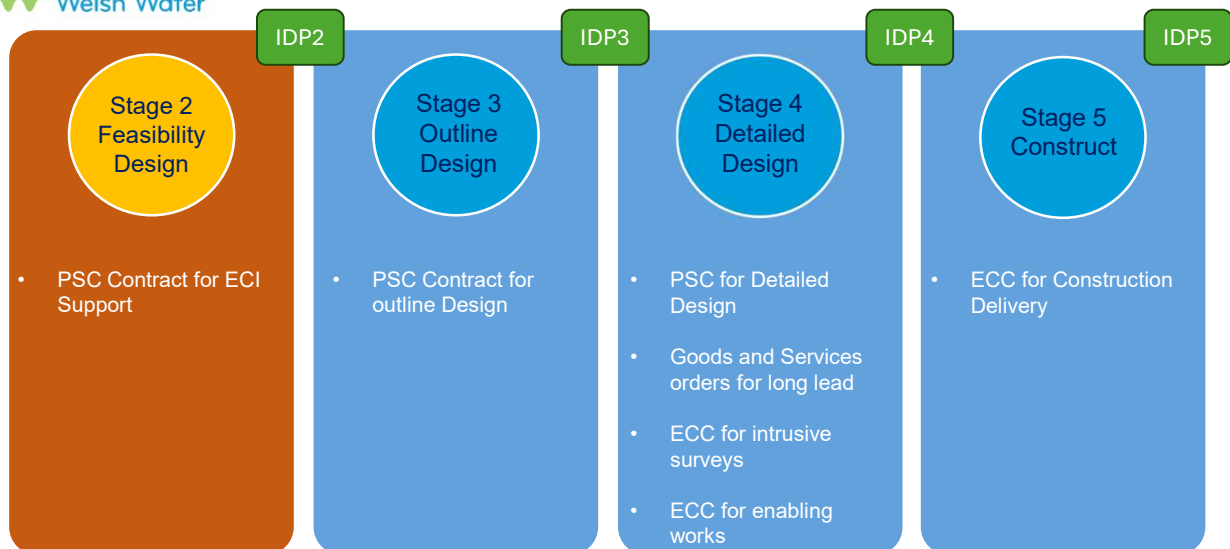
- Rapid and governed closure of AMP7 to allow focus on AMP8



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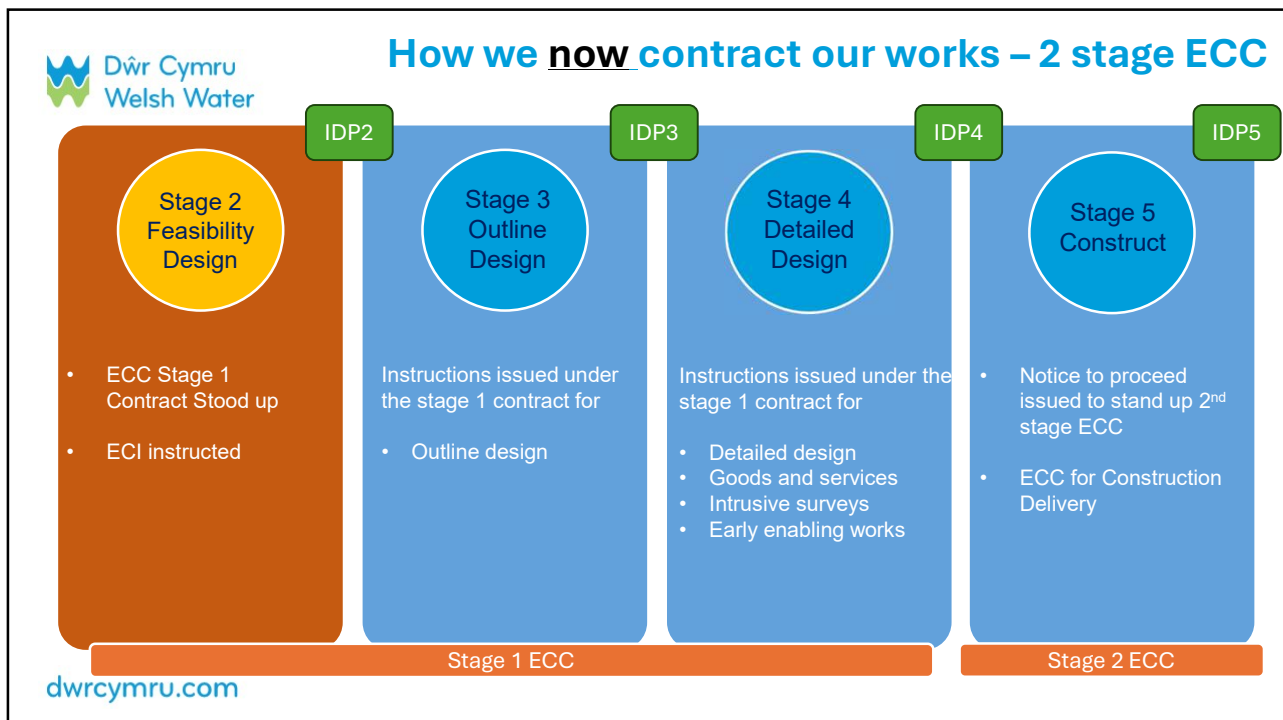
How we contracted our works



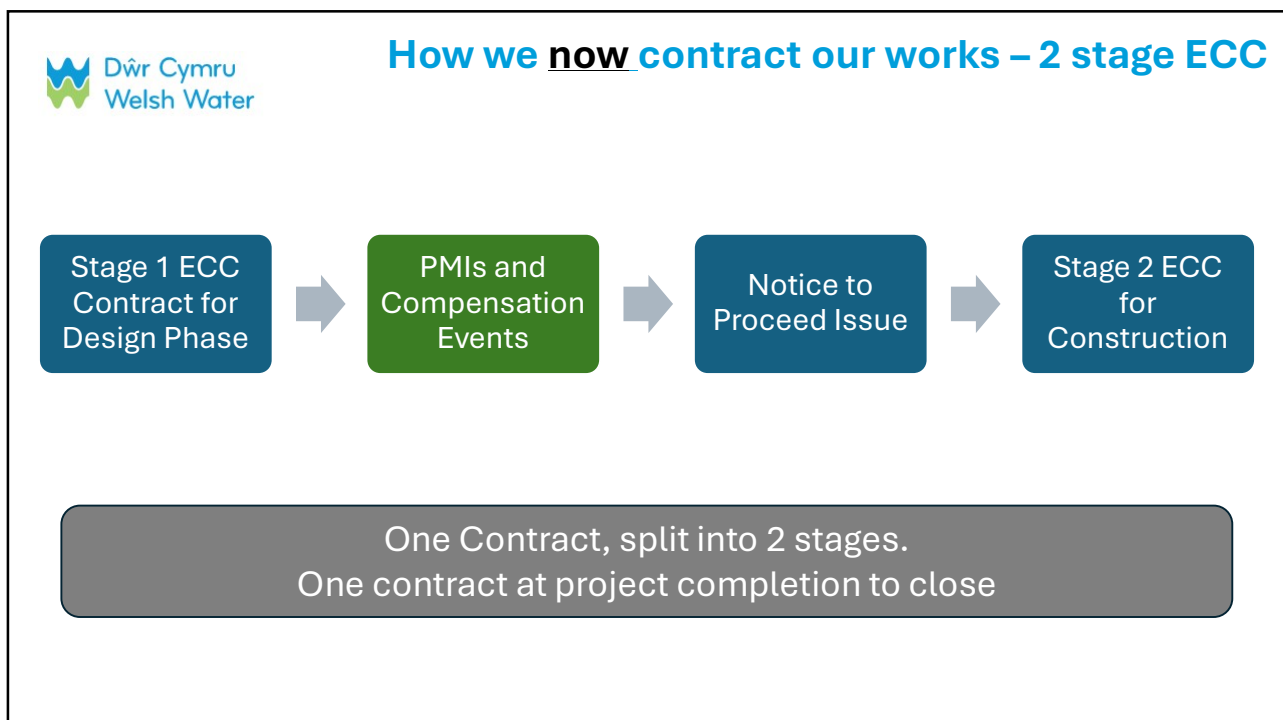
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Contractor Allocation and Contract Governance



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Strategic Work Allocation and Value Challenge



- Contract allocation is managed by our framework management and allocation committee
- Competitive tendering is available and will be used throughout the AMP
- A robust cost assurance team provides a center of excellence to ensure contract prices are market value and driving affordability
- Our Unit Cost Database is update live with actual costs and provides over 15 years worth of unit rate cost curve data to support additional benchmarking. £ in the Ground is also a metric used to monitor indirect cost performance
- DCWW are one of 6 water companies support a water sector benchmarking forum.
- Commercial performance and behavior is monitored as a performance measure supporting works allocation

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Project controls exist to give Welsh Water confidence that the Capital Investment Plan is delivered with certainty, to achieve the intended outcomes for our customers and environment.

We provide insight, analysis, and assurance to enable informed decisions, effective action, and drive accountability.

Investment is being put into improved project controls across our programme through the integration of :

- Cost Performance
- Programme Performance
- Risk allocation and contingency management
- Change, variation and control
- Earned Value Analysis
- Reporting

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