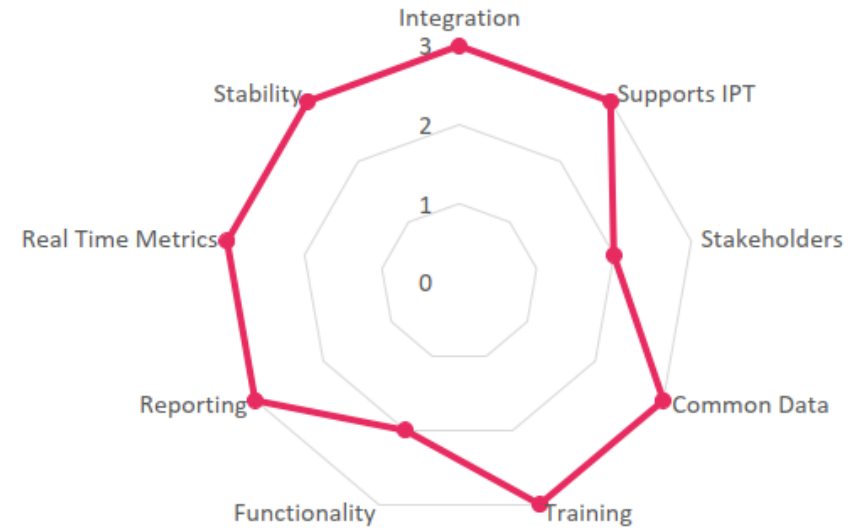


BAM Performance Index

- *An Objectives Focused Control System*



Speaker – Adam Stamfield

14 years experience in civil engineering

Roles undertaken

- Project Controls Manager
- Digital Transformation Lead
- Senior Planner
- Site Management
- Civil Engineer

Principle Sector – Highways



Speaker – Sarah Jolliffe

19 years experience in construction industry

Roles undertaken

- General Builder
- Site Engineer
- Environment Adviser
- Sustainability Manager
- Carbon Reduction Lead

Principle Sector – Civils



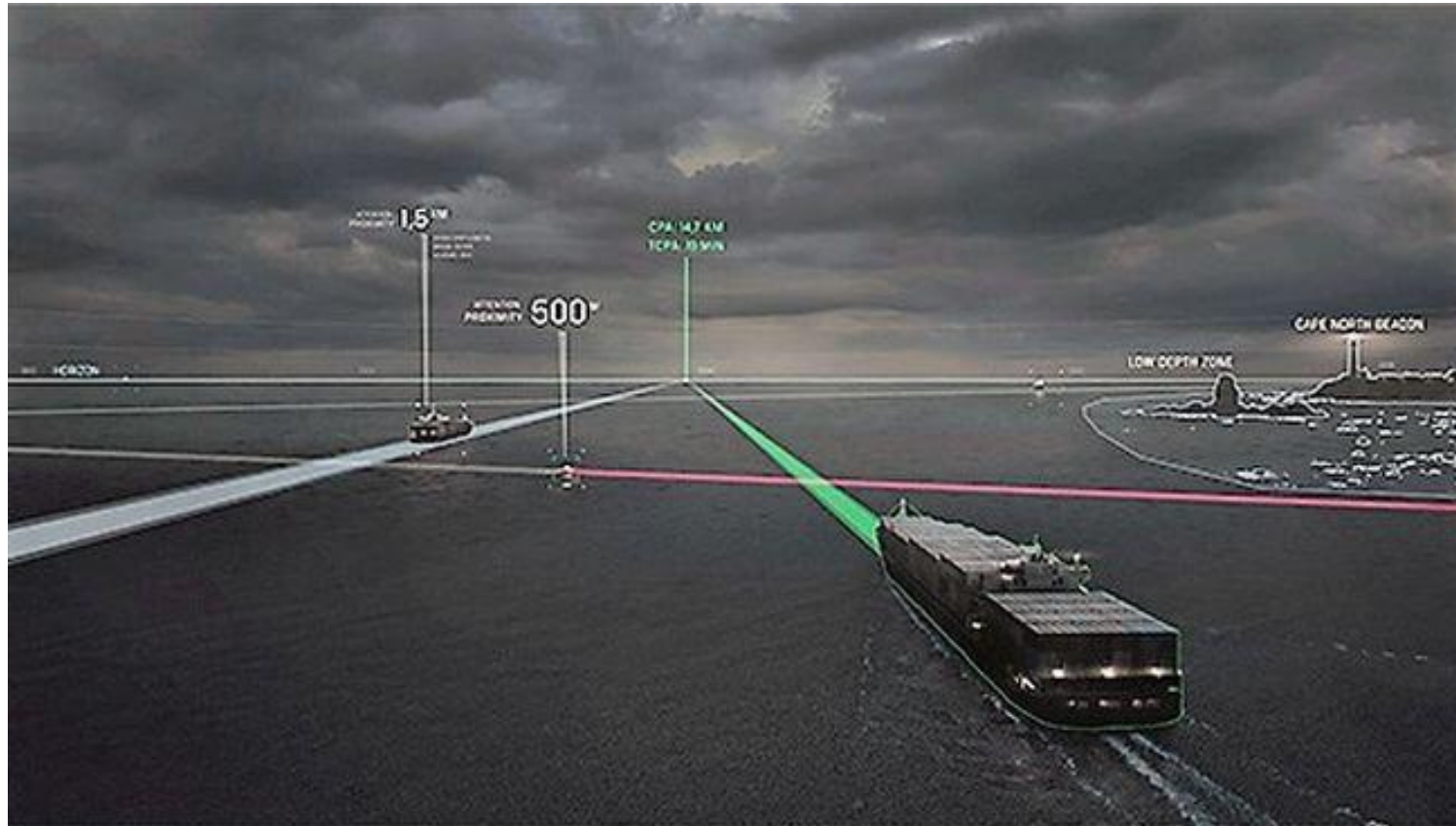


Our Organisation – BAM Nuttall Ltd

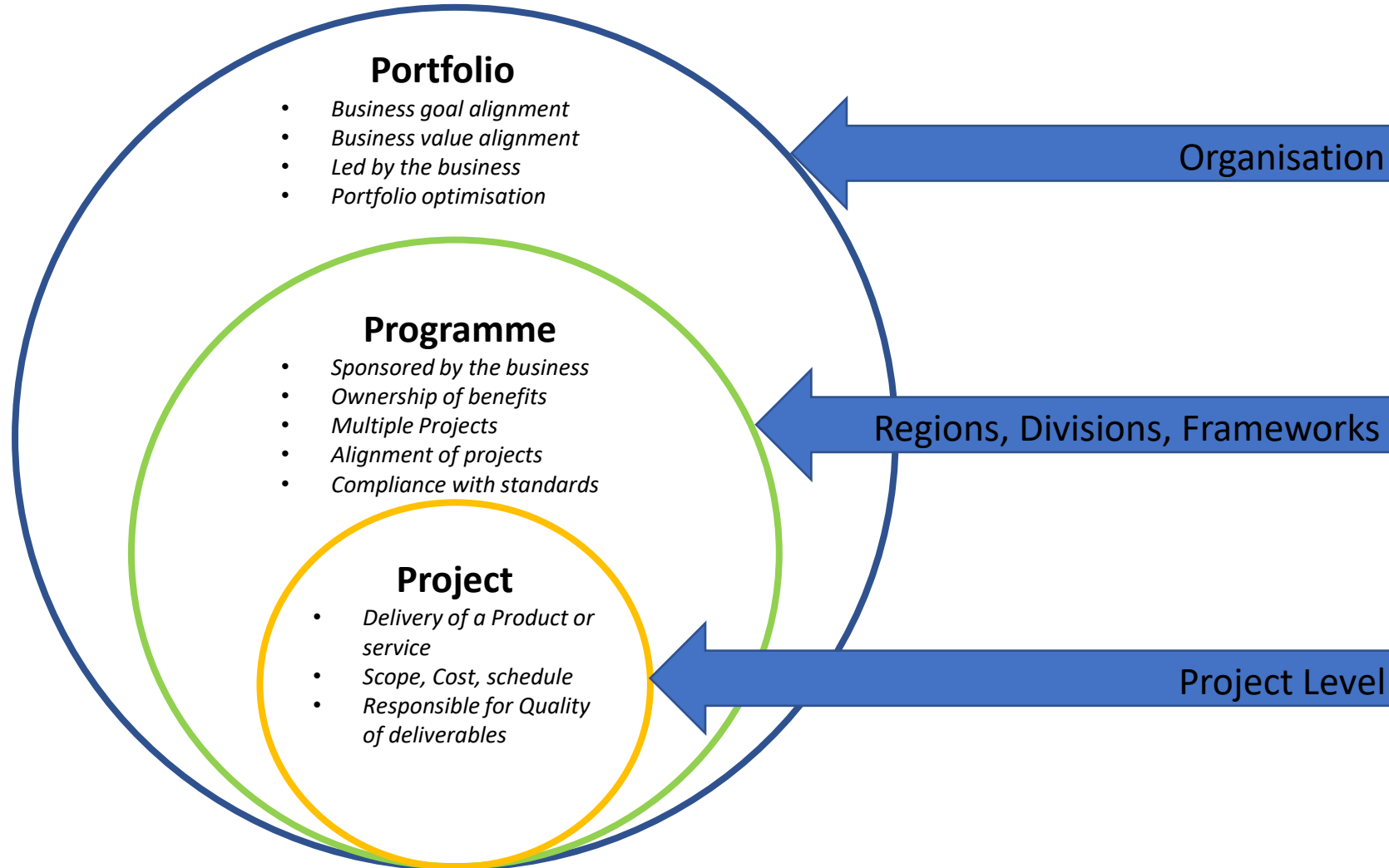
CREATING SUSTAINABLE ENVIRONMENTS, ENHANCING PEOPLE'S LIVES



The Value is in the Future

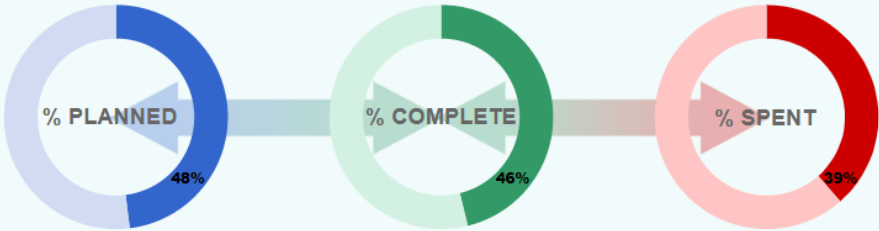


Terminology



Project Led Controls: Dashboards

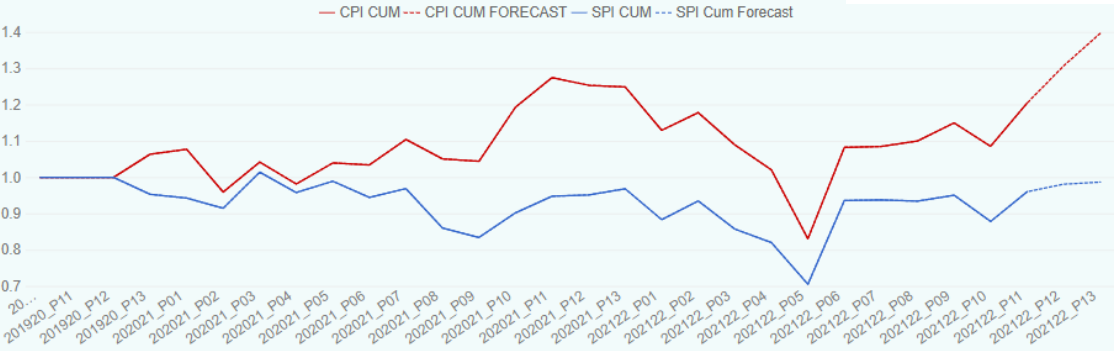
EARNED VALUE ANALYSIS



BUDGET AT COMPLETE : £434,429K	COST VARIANCE : £33,192K	COST PERFORMANCE INDEX (CPI): 1.20
ESTIMATE AT COMPLETE : £434,046K	SCHEDULE VARIANCE : -£8,011K	SCHEDULE PERFORMANCE INDEX (SPI): 0.96
VARIANCE AT COMPLETE : -£383K		

COMMENTARY

PERFORMANCE INDEX TRACKER



PERFORMANCE BY SECTION

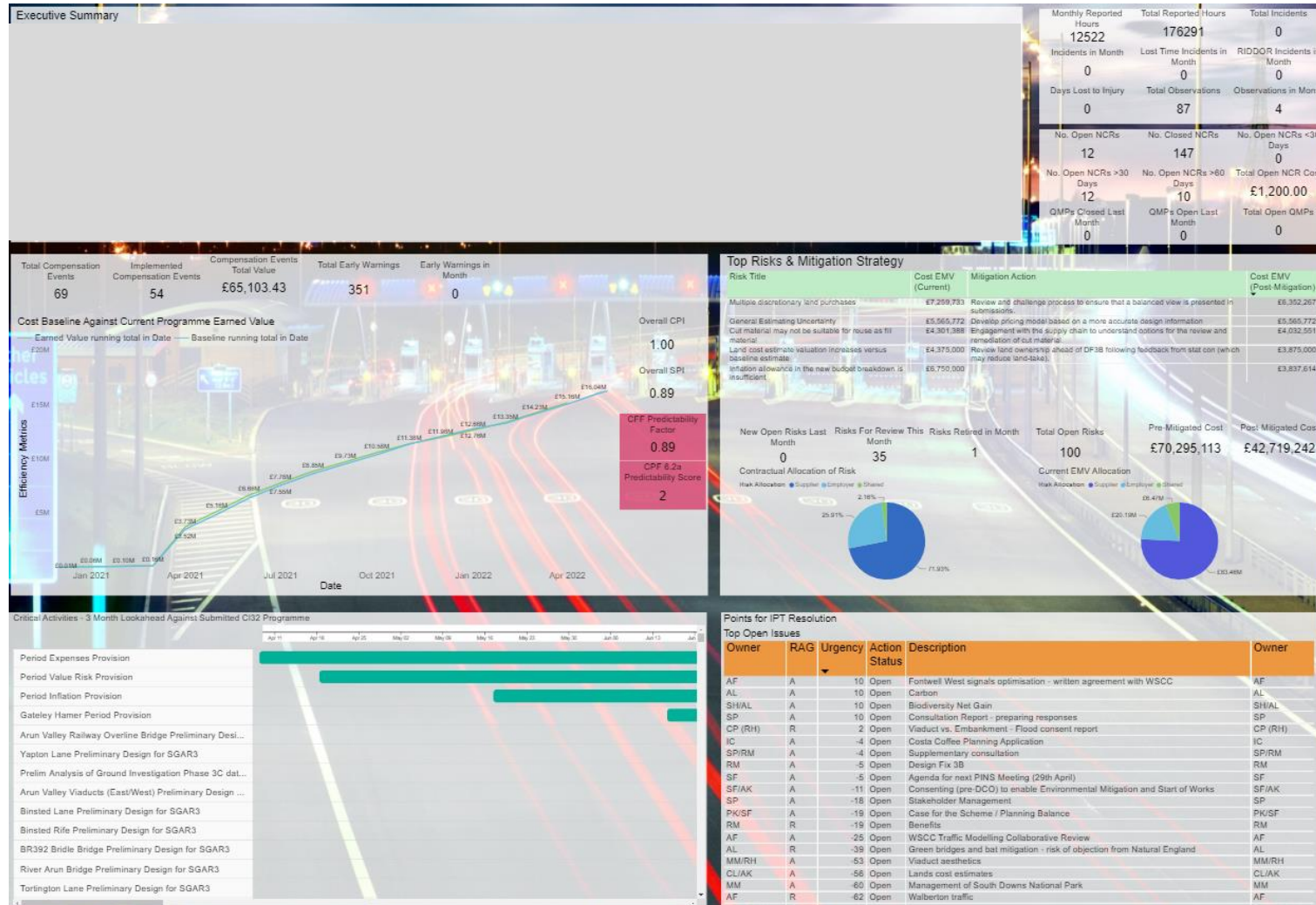
SECTION	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	ETC	BAC	EAC	VAC
SECTION 04-1	£25,391,103	£25,391,103	£25,183,105	£0	£207,998	1.00	1.01	£0	£25,391,103	£25,183,105	-£207,998
SECTION 04-2	£16,373,285	£16,394,166	£17,822,067	£20,901	-£1,427,901	1.00	0.92	£796,227	£19,898,471	£18,818,294	-£1,280,177
SECTION 06	£180,992,419	£153,780,113	£122,015,671	-£7,232,305	£31,744,442	0.96	1.28	£255,544,449	£378,749,124	£377,560,120	£810,996
SECTION 07	£5,914,656	£5,114,903	£2,447,577	-£799,754	£2,667,326	0.86	2.09	£10,237,262	£12,390,743	£12,684,839	£294,096
Total	£208,671,443	£200,660,285	£167,468,420	-£8,011,158	£33,191,866	0.96	1.20	£266,577,938	£434,429,441	£434,046,358	-£383,084

SCHEDULE PERFORMANCE BY EXCEPTION (SPI < 0.95)

SECTION	BCWS	BCWP	ACWP	SV	CV	SPI	CPI	ETC	BAC	EAC	VAC
SECTION 06											
DESIGN	£28,848,159	£24,093,299	£17,999,326	-£2,754,860	£6,093,972	0.90	1.34	£9,041,828	£29,847,832	£27,941,154	-£1,906,478
SECTION 07											
DESIGN	£2,617,412	£1,969,955	£1,892,324	-£947,458	-£222,369	0.64	0.88	£3,245,954	£5,386,405	£5,138,277	-£248,128



Project Led Controls: Dashboards



Project Controls: Do We Have the Full Picture?

Do we need a plan?

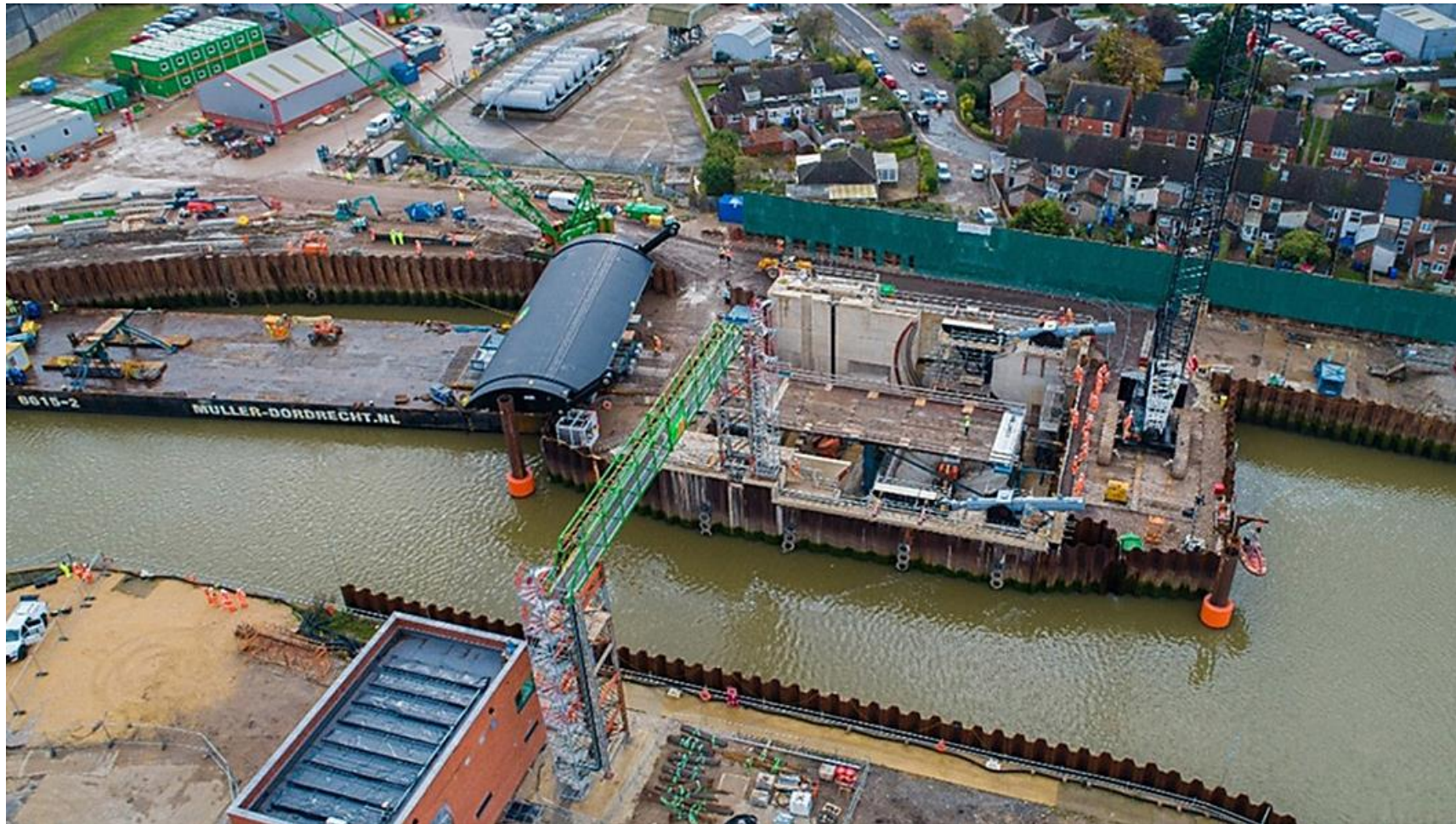


Sustainability Excellence

BAM SI



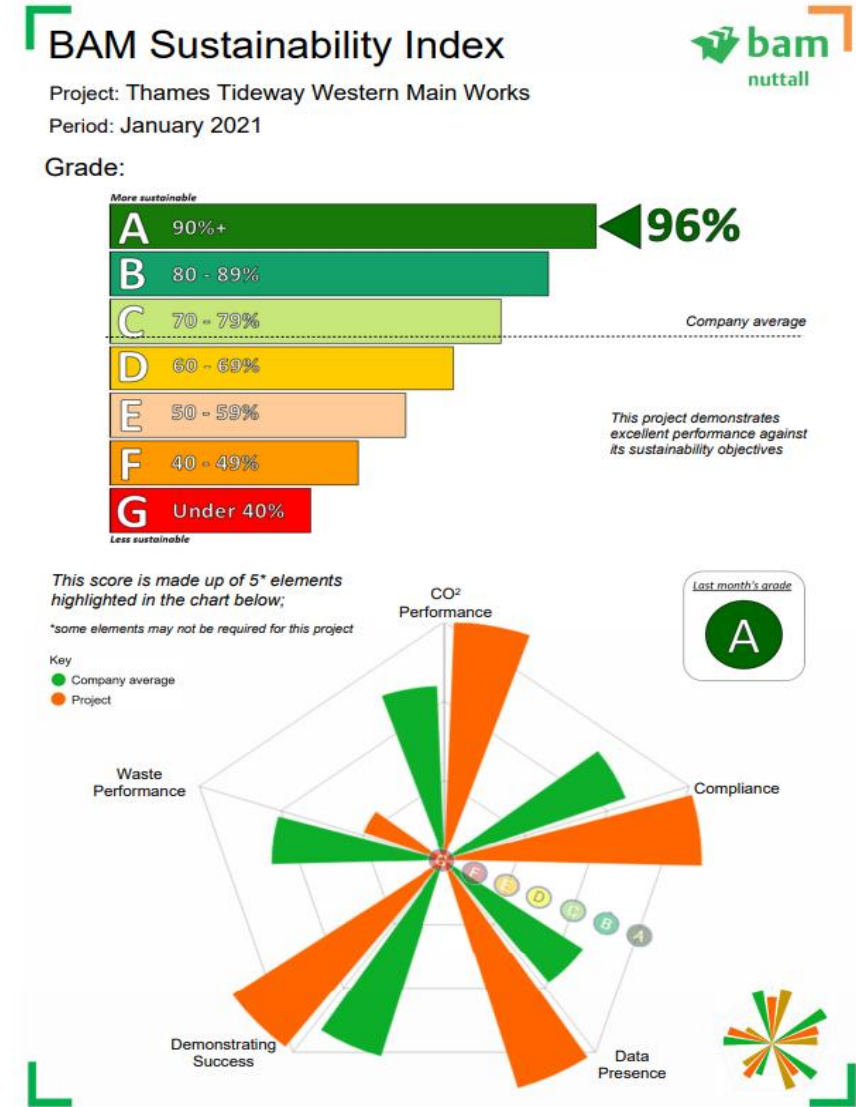
How can we demonstrate sustainability excellence?





BAM Sustainability Index

- Uses existing data
- Score is made up of 5 elements – CO2 performance, waste performance, data presence, compliance and demonstrating success
- Each element has 2-3 measures that are weighted to take project size and scope into account to create a level scoring system
- ‘EPC style’ certificate ranking from A – G
- Power BI model allows ease of analysis by all





“BAM Sustainability Index allows us to measure how what we do impacts our footprint and enables us to compare our performance between projects and across Divisions. It’s getting attention from outside our organisation and on our journey to net zero carbon it’s a great tool for us to use.”

Mike O’Neill, Divisional Manager, BAM Nuttall

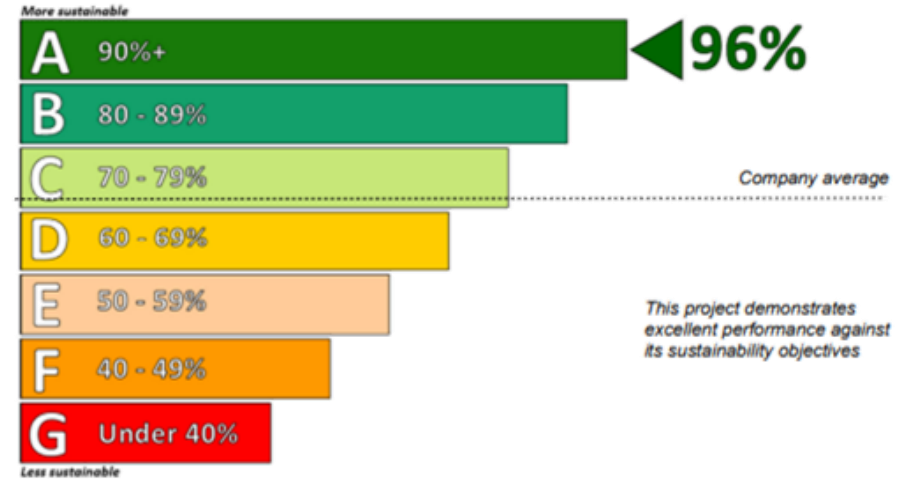
“BAM Sustainability Index has been helpful for us to understand how our project is performing. It clearly shows if we are above or below where we need to be and the areas we need to focus on to improve our performance. Sustainability certificates displayed on our notice boards for everyone to see have triggered some good conversations around what the scores mean and how they can be improved, especially in relation to carbon which is an important focus on this project”.

Richard Kent, Site Agent, BAM Nuttall - Leeds Flood Alleviation Scheme

“Some great data here – well done to Swanley Station! and the other contracts giving this area strong attention.

Let’s all, please, do all we can to increase adoption and use of this great tool.”

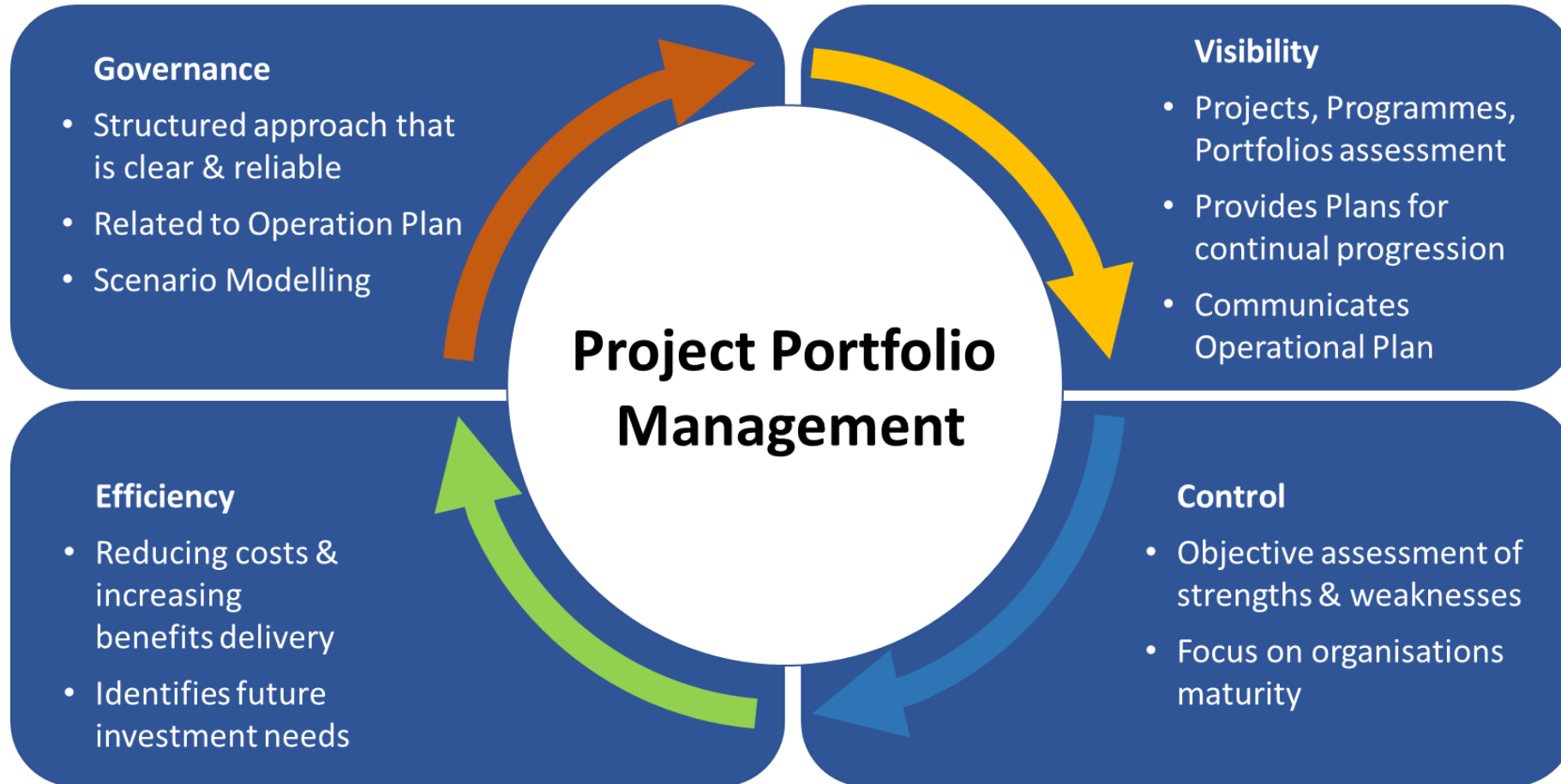
Ian Parish, Managing Director, BAM Nuttall, commenting on the increase in performance at Swanley Station from grade D to A across the reporting period.



Leadership



How Does This Help?



Performance Framework Workshops



Performance Framework Outputs

BAM Nuttall Performance Framework	
Performance Indicator	Predictability Ratio
Outcome	Predictable Performance

Scope and Methodology

This metric will aim to demonstrate whether schemes in cost performance (or cost) baseline, and whether key points in timescales.

The principal data is produced by the supplier and project scope covers all costs (excluding programme risk, lands and other costs).

It covers performance throughout stages 5-8. A change of scope will be measured against the percentage tolerances within the scope by rewarding the right behaviours.

The intention of this metric is to measure the ability to deliver projects within a cost and schedule ratio of 1.00 and the variance for SPI and CPI ratio is achieved when they are measured against the percentage tolerances within the scope by rewarding the right behaviours.

Calculation 1: Predictability ratio = SPI x CPI

Calculation 2 : Average Predictability for the Quarter = Ratio

The contract targets predictability within 2% each per month inside and outside of this tolerance, both positive and negative to reflect the target of 100% predictability.

Data Source Data is entered by the project into a Cost Management system used to provide a critical ratio relative to predictability. No

Measurement frequency Data submitted monthly, scored quarterly.

BAM Nuttall Performance Framework	
Performance Indicator	Progress to Handover
Outcome	Predictable Performance
Scope and Methodology	<p>This metric will identify progress against the baseline Master Information Delivery Plan (MIDP).</p> <p>Progress will be measured against the acc. planned completed dates up to the reporting months end.</p> <p>The intention of this metric is to measure progress towards the project deliverables identified within the MIDP.</p> <p>Projects within the BAM stage gates 5-8 will be measured on this metric.</p> <p>Calculation: $\left[\frac{\text{Sum of actual completion dates within MIDP to end of reporting month}}{\text{Sum of planned completion dates within MIDP to end of reporting month}} \right] \times 100$</p>
Data Source	Master Information Delivery Plan. No return = a score of 1
Measurement frequency	Data submitted monthly, scored quarterly.

Metric	Score
No Data Submitted above or below	1
Predictability $\leq 10\%$ of 1 either above or below	2
Predictability is $\leq 5\%$ of 1 either above or below	3
Predictability is $\leq 2\%$ of 1 either above or below	4
Predictability is 0% within 1	5
Predictability ratio is 1.	5

Metric	Scoring Guidance	Score	Assessed Score
	No MIDP or Planned Percentage Complete <50%	1	
	Planned Percentage Complete $\geq 50\%$ to <75%	2	
	Planned Percentage Complete 75% to <85%	3	
	Planned Percentage Complete 85% to 95%	4	
	Planned Percentage Complete >95%	5	



Project Controls at Portfolio Level





THANK YOU

