

BRIEFING · AUGUST 2026

Artificial Intelligence in *UK Construction & Building Safety*

What the evidence actually says, what the regulator expects, and
what can safely be done now.

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Prepared as a market briefing. Every figure is traced to a regulator, a trade body,
published legislation, a standards catalogue, or an operator speaking on its own record.

A note on the numbers

Almost every published statistic about AI in construction is produced by a company selling AI into construction. This briefing uses none of them.

That discipline is the point of this document. A senior executive who has just picked up an AI programme will already have been shown adoption curves, accuracy percentages and productivity multiples, most of which cannot be traced to anything. Repeating them would make this briefing indistinguishable from the vendor material already in the inbox.

So the rule applied throughout is simple. If a figure cannot be traced to a regulator, a trade body, an ombudsman, published legislation, a standards catalogue, named research, or an operator speaking on its own record, it is not here — however useful it would have been.

What is included

The Building Safety Regulator's strategic plan and its monthly building control data. HSE's fatal injury statistics. MHCLG's construction products white paper and building safety remediation releases. Legislation read directly on legislation.gov.uk. The ISO and BSI catalogues. CITB's workforce outlook, produced with Oxford Economics. RICS and NBS survey data. And nima, the not-for-profit that maintains the UK BIM Framework with BSI.

What is excluded, on the record

EXCLUDED

Golden thread software vendor claims. A substantial market exists in AI-enabled golden thread compliance products. None is named or cited here. This briefing names the standard and the certification route, never a product.

EXCLUDED

Aggregator statistics. Figures circulating widely — 52% BIM-AI adoption, 94% clash-detection precision, "10,000 generative design options versus 50 manually" — trace to statistics-aggregator sites with no primary source. Also excluded: trade-blog claims of 95% accuracy in AI defect detection cutting snagging from weeks to days, with no named operator behind them.

EXCLUDED

A document-fraud vendor's report. Frequently cited findings that AI-generated document fraud rose fivefold and that one in sixteen documents is fraudulent come from a company selling AI fraud-detection software into financial services. The research concerns bank statements and pay stubs, not buildings.

What is flagged

One figure deserves particular care because it is quoted almost everywhere in a form the government did not use. Commentary states that around one third of construction products are covered by a designated standard, and that two thirds are unregulated. The white paper itself reports a range of 29% to 61%, with a central estimate of 37%, attributed to named research by the Adroit Consortium. The uncertainty is the government's own, and it is more persuasive than the rounded number.

Two dating errors were caught during research and are worth naming, because both would otherwise have reached this page. A widely-ranked NBS press release describing "the annual Digital Construction Survey" is the eleventh edition, from 2021, and reads as current. And the Information Management Mandate is universally attributed to the Infrastructure and Projects Authority, which ceased to exist on 1 April 2025.

Sources: MHCLG, Construction Products Reform White Paper, 26 February 2026, paragraphs xii and 1.3.3 · BSR Strategic Plan 2026 to 2027 · NBS Digital Construction Report 2025.

The wider market

An industry of real scale, entering a year of flat output with a new cost arriving in the autumn.

£230bn

UK construction output in the latest full year. Around 41% is repair and maintenance rather than new build.

2.61m

People in the UK construction workforce in 2025, forecast to reach 2.68m by 2030.

41,200

Extra workers needed each year to 2030 — around 206,000 over five years, or 1.6% of the 2025 workforce.

CITB forecasts output growth of -0.2% in 2026, recovering to 1.8% in 2027 and peaking at 2.8% in 2028. The strongest growth sectors over the period are public new housing at 3.6% a year, with infrastructure and private new housing both at 2.5%. This is a sector expected to grow, but not this year.

The cost arriving on 1 October 2026

The Building Safety Levy commences on 1 October 2026 in England. It is charged per square metre of new residential floorspace and collected by local authorities. Rates are set for each authority in Schedule 3 of the regulations and vary considerably: County Durham is the lowest at £12.70 per square metre, Kensington and Chelsea the highest at £100.35, with Westminster at £98.01 and the City of London at £87.04.

Three features matter commercially. The levy applies to schemes of more than ten dwellings, including purpose-built student accommodation — it is not confined to tall buildings or higher-risk buildings. Development on previously developed land attracts a rate exactly half the standard rate, provided at least 75% of the land within the planning redline qualifies. And building control applications submitted before 1 October 2026 fall outside the charge altogether.

Social housing, supported housing and housing built by non-profit registered providers are exempt. Payment is due before the earlier of occupation and completion, and the collecting authority has five weeks from application to issue a levy liability notice. Scotland has announced a separate levy from 1 April 2027.

WHY THIS IS IN AN AI BRIEFING

The levy is calculated on chargeable floorspace, communal area apportionment and previously-developed-land status — three determinations that depend entirely on the quality of the information a developer holds about its own scheme.

Sources: CITB Construction Workforce Outlook 2026-2030, produced with Oxford Economics · MHCLG, Building Safety Levy Guidance, chapters 4.1 to 4.5 and Schedule 3, published 10 July 2025, updated 2 July 2026 · The Building Safety Levy (England) Regulations 2025.

The sector's pressure point

The information discipline is expected where the client is the taxpayer, and optional where the risk is a resident.

Section 88 of the Building Safety Act 2022 requires an accountable person for a higher-risk building to keep prescribed information in accordance with prescribed standards, keep it up to date so far as possible, keep copies of prescribed documents, and obtain anything they do not hold except where it is impracticable. It has been in force since 16 January 2024.

What section 88 does not do is name a technical standard. The prescribed standards are set by regulations, and ISO 19650 — the international standard built precisely for this purpose — appears nowhere in the Act.

The standard the duty needs already exists

The ISO 19650 series runs to six parts: concepts and principles, the delivery phase, the operational phase, information exchange, security-minded information management, and health and safety information. The last of these, ISO 19650-6, was published on 13 January 2025 and was written with the golden thread explicitly in view. Its author, Nick Nisbet of buildingSMART UK and Ireland, described its purpose as ensuring "that the information isn't lost or overlooked", structuring information about risks, incidents and mitigations so that principal designer, principal contractor and owner can all reach it.

Who is actually obliged

There is a mandate, and it is worth stating precisely because it is frequently overstated in both directions. Annex B of *Transforming Infrastructure Performance: Roadmap to 2030*, published by the Infrastructure and Projects Authority in September 2021, sets out a refreshed Information Management Mandate delivered through the UK BIM Framework. Its own wording: the mandate is "applicable immediately", sets out requirements for clients including the definition of information concerning assets and projects, and "public sector clients should comply with the Mandate as part of their implementation of the Construction Playbook."

"Should comply", not "must" — and the Construction Playbook itself binds central government departments and their arm's-length bodies on a comply-or-explain basis. This is an expectation, not a hard obligation. But it is an expectation that exists at all only where public money is being spent.

THE ASYMMETRY

A contractor bidding for government infrastructure work is expected to demonstrate ISO 19650 information management. A private developer building a higher-risk residential block, carrying the section 88 duty and housing several hundred people, faces no equivalent expectation at all.

The mandate's owning body no longer exists under that name. The IPA merged with the National Infrastructure Commission on 1 April 2025 to form the National Infrastructure and Service Transformation Authority. Whether NISTA restates, replaces or quietly retires the mandate is an open question worth watching.

Sources: Building Safety Act 2022 s.88, legislation.gov.uk · IPA, *Transforming Infrastructure Performance: Roadmap to 2030*, Annex B and section on improved information management, 13 September 2021 · Cabinet Office, *The Construction Playbook* · ISO 19650-6:2025 · nima news, 21 January 2025.

What the sector is facing

Determination times measured in months, applications failing on information rather than engineering, and a regulator improving faster than its reputation.

The Building Safety Regulator became a standalone non-departmental public body on 27 January 2026, sponsored by MHCLG, having previously sat inside HSE. Its board was established the same day under Lord Andrew Roe, with Charlie Pugsley as Acting Chief Executive. It publishes its building control performance monthly, which makes this one of the better-evidenced regulatory pictures in any sector.

Gateway 2, as at 28 June 2026

APPLICATION TYPE	APPROVAL RATE	MEDIAN	IN PROGRESS
New HRBs and conversions	89%	22 weeks	138
External remediation	85%	35 weeks	342
HRB internal works	73%	28 weeks	952

Total gateway 2 applications in progress stand at 1,505. Internal refurbishment accounts for around 64% of all gateway 2 decisions — the volume sits in works to existing buildings, not new towers. Complex new-build cases are now tracked separately, at a 32-week median. London carries around 59% of in-progress new build applications, with a 91% approval rate.

Remediation approvals at 85% nationally already exceed the 65% target BSR set for 2026, and legacy 2024 applications are down to 14 from 42 at the start of the year. The 35-week median is skewed upward precisely because those old cases are being cleared.

Why applications fail

BSR has published the causes, and they are almost entirely informational rather than technical. On the technical side: insufficient evidence of fire-resistant properties for replacement cladding and membranes; missing structural loading calculations including wind loading and load transfer; insufficient evidence for cavity ventilation; incomplete thermal performance data.

On the non-technical side, the list is starker. Incomplete design information relying on statements of future intent — "design details will come later". Unsupported non-worsening claims with no comparative analysis. Poorly organised documents failing to use clear folder structures, indexes or correct linking. Ambiguity about retained combustibles.

A regulator publishing "poorly organised documents" as a named cause of delay on safety-critical applications is describing an information management failure, not an engineering one.

Source: BSR, Building control approval application data April to June 2026, published 1 July 2026, data correct as at 28 June 2026 · BSR external remediation improvement plan, 8 April 2026 · BSR Strategic Plan 2026 to 2027, published 31 March 2026.

The record you would be training on

Government has now described the sector's data problem in its own words. This is the constraint every AI business case in construction rests on.

The Construction Products Reform White Paper, published 26 February 2026, responds to the Grenfell Tower Inquiry, the Hackitt review and the Morrell-Day review. Its diagnosis of the sector's information position is unusually direct for a government document, and it should be read by anyone building an AI case here.

"Lack of digitalisation and poor product traceability: Digitalisation is fragmented, with poor access to reliable, standardised product data and varied digital competence across the sector. There is also limited product traceability from manufacture to installation, impeding accountability across the chain."

Its evidence chapter, summarising consultation responses, goes further: "the quality of digital product information can be poor or untrustworthy", with "inadequate access to standardised, evidence-based digital information in the sector". And critically — "designers, construction professionals, manufacturers and others lack the data and competence to interpret digital product information, which creates issues applying claims about a product to the 'real world'".

The regulatory gap beneath the data gap

Only products covered by designated standards or technical assessments are regulated at all. Research undertaken for government by the Adroit Consortium puts the proportion of UK products falling under a designated standard at between 29% and 61%, with a central estimate that around 37% of the market is regulated. Where there are known issues with the remainder, the national regulator cannot act.

Enforcement history gives the scale. The Morrell-Day review could identify no prosecutions under construction products regulations since they were enacted. Since that review, one prosecution has been brought.

Where reform is heading

A risk-based general safety requirement will apply to all products not covered by designated standards, with criminal offences for companies and individuals punishable by unlimited fine or imprisonment. Regulations are intended by the end of 2026 with implementation in late 2027, subject to parliamentary time.

The direction on information is explicitly digital. Government wants digital information systems "as the norm", with digital product records, digital identifiers and QR-accessible product information supporting traceability — and states plainly that this "will allow for easier identification of issues, foster accountability among manufacturers and support the golden thread."

Source: MHCLG, Construction Products Reform White Paper, 26 February 2026 — executive summary paragraphs xii, xvi, xxii, xxvii, xxviii, and evidence paragraphs 1.3.3, 2.6.4, 2.6.5 and 2.7.1. Consultation ran 25 February to 20 May 2026.

The challenges of using AI here

The sector's own standards body has published guidance that is more sceptical, and more useful, than most consultancy material on the subject.

In February 2026, nima's think tank the GIIG published *Artificial Intelligence considerations for Information Managers in the built environment*. It is a fifteen-factor position paper aimed at information managers, asset managers, technologists and product specifiers. It is not a vendor document, and it does not read like one.

FACTOR 2 – SEQUENCE

"For AI to provide suitable benefit to organisations, its use needs to be based on well-planned and defined information strategies and processes. **Adding AI to chaotic, unpredictable situations is unlikely to provide stability.**"

FACTOR 3 – WHEN AUTOMATION IS DEFENSIBLE

Five criteria: complexity, uncertainty, novelty, criticality, and ethical and security risks. "Where the levels of the following criteria are all 'low', then AI is probably suitable and potentially viable for automated decision-making; however, if one or more criteria are higher than 'low', then AI should be used to inform expert judgement."

FACTOR 6 – ACCOUNTABILITY

"Regardless of the way that decisions are made, the asset owner or service provider will remain accountable for the decisions made, the output of those decisions and the outcomes delivered. **Use of AI tools does not remove this accountability.**"

Three further factors that bite hardest in construction

Skills erosion. The paper asks questions most vendors avoid: if AI generates knowledge, do the human experts lose it? When AI systems are trained by humans and other AI systems, what is the appropriate training for the humans? Where experts are used to train tools, how is that done once the expert knowledge is no longer available?

Asset lifetimes against vendor lifetimes. Buildings last decades. Suppliers withdraw models, change pricing drastically, or cease to exist. Organisations need a plan for maintaining skills, diversifying from a single approach, and keeping tools interoperable across timescales no software contract contemplates.

Explainability. In tightly regulated environments the basis of decisions must be demonstrable. Different kinds of AI support different approaches to explainability, and the paper asks whether the tool chosen actually aligns with the explainability the regulatory context demands – and whether the reasoning will be retained in a form that supports later review.

FACTOR 15

"Many of those developing, selling and implementing AI tools have unrealistically positive views of what their technology can achieve. In some cases, they could be accused of 'magical thinking'. Before implementing AI tools, be sceptical about the claims being made about them."

Source: nima (GIIG), *Artificial Intelligence considerations for Information Managers in the built environment*, February 2026. nima maintains the UK BIM Framework with BSI and leads the Information Management Initiative supported by the Construction Leadership Council.

The threat side

The golden thread is simultaneously the sector's greatest safety asset and its most concentrated security liability.

Consider what the duty actually creates: a complete, current, digital record of a building's fire strategy, structural design, material specification, maintenance history and known defects — for a building housing several hundred people. Held digitally, kept up to date, and accessible to those who need it.

That is exactly what residents deserve. It is also, viewed from the other direction, a single document set describing precisely how a building would fail.

The standards anticipated this

ISO 19650-5, published in June 2020 and reviewed and confirmed as current in October 2025, exists for this reason. Its scope covers "the security-minded management of sensitive information that is obtained, created, processed and stored" and it addresses "the steps required to create and cultivate an appropriate and proportionate security mindset and culture across organizations with access to sensitive information, including the need to monitor and audit compliance."

The reason it exists is that sharing information through the ISO 19650 processes can itself expose sensitive detail about an asset. Add AI retrieval across that record — the obvious and genuinely valuable use case — and two questions become board-level: who can query it, and what can a well-phrased query assemble from fragments that are individually innocuous?

nima's factor 14 makes the same point about training data: users should "consider what information the AI tool is or was trained on and the extent to which it may contain security-sensitive information or enable the drawing of security-sensitive inferences from both training data and material uploaded by users."

This is a risk the standards anticipate, not an event that has occurred. No case of a golden thread dataset being breached or exploited was found in preparing this briefing, and none is implied.

The verified case, and its date

JANUARY 2024

An employee of Arup, the London-headquartered engineering firm, joined a video conference call. Every other participant — including the person appearing as the group's chief financial officer — was an AI-generated deepfake of a real colleague. Access had begun with a spear-phishing email. The employee set aside initial doubts because the people on the call looked and sounded like colleagues he recognised, and authorised fifteen transfers totalling \$25.6m in a single day.

Hong Kong police confirmed the case in February 2024; Arup identified itself as the victim in May. No perpetrator has been identified and the funds remain unrecovered.

This case is over two years old, and it is included because it remains the most expensive verified AI-enabled loss in this sector — not because it is recent. No comparably evidenced UK construction or engineering case has emerged since. That itself is worth noting: the sector's demonstrated AI exposure to date has been human impersonation in a finance process, not a failure of a design or site system.

Sources: ISO 19650-5:2020, ISO catalogue, confirmed 24 October 2025 · CNN Business, 16 May 2024, corroborated by Hong Kong police statements and Arup's own confirmation · nima (GII6) position paper, factor 14 · NPSA publishes UK guidance on AI security risks.

The UK legal position

A statutory duty with no named standard, a mature standard with no duty attached, and one compulsory register in the whole chain.

INSTRUMENT	WHAT IT DOES	STATUS
Building Safety Act 2022, s. 88	Golden thread duty. Keep prescribed information to prescribed standards, up to date. Names no technical standard.	In force 16 Jan 2024
HRB Regulations 2023	Safety case approach, golden thread information schedule, mandatory occurrence reporting.	In force Oct 2023
ISO 19650-1 to -6	The information management standard the duty implies. Part 6 written for health and safety information.	Part 6 pub. Jan 2025
ISO 19650-5	Security-minded information management. Protects the record from exposure through its own sharing.	Confirmed Oct 2025
BS 8644-1	Digital management of fire safety information. Introduces the FIREie exchange. Works with or without ISO 19650.	Published Jul 2022
BS 8670-1	Competence frameworks for building safety, core criteria. Governs human judgement.	Published 2024
DUAA 2025, s.80	Replaced UK GDPR Article 22 with Articles 22A–22D. Automated significant decisions permitted with four safeguards.	In force 5 Feb 2026

On the data protection point, plainly

Section 80 of the Data (Use and Access) Act 2025 lands more lightly in construction than in most sectors, and it is more useful to say so than to stretch it. Gateway determinations, remediation approvals and duty-holder obligations run against organisations, not identifiable individuals, so the automated-decision safeguards do not bite as they do in insurance claims or benefit determinations.

The compulsory register, and what it reveals

Building control professionals carrying out any building control work in England or Wales must be registered with BSR, across four classes, and are accountable under a Code of Conduct requiring them not to act beyond their individual competence. That is the only mandatory individual registration anywhere in this chain. Every route to demonstrating information management competence, by contrast, is voluntary: BSI's Kitemark for BIM, buildingSMART's professional certification, and nima's Information Management Initiative, which invites organisations to assess their own maturity and write their own internal mandate.

THE SHAPE OF IT

The person who signs off the building is compulsorily registered and competence-assessed. The information system that sign-off depends on is governed entirely by standards nobody is required to meet.

One further confusion is worth naming. Two Principal Designer roles now exist under one title — the CDM 2015 role covering health and safety during construction, and the Building Regulations role introduced on 1 October 2023 covering compliance. They are separate appointments with separate duties. If a sector cannot reliably say which Principal Designer owns a decision, it will struggle to say who owns an AI-assisted one.

Sources: [legislation.gov.uk](#) · ISO and BSI catalogues · HSE, building control registration · nima, Information Management Initiative · RIBA guidance on the two Principal Designer roles.

Beyond the UK

The standard itself is being rewritten, and sooner than most of the sector expects.

ISO 19650-1:2018 currently sits at stage 90.92 in the ISO catalogue — "International Standard to be revised". A draft, ISO/DIS 19650-1, is under development, and ISO's own record states that the published standard is "expected to be replaced by ISO/DIS 19650-1 within the coming months."

That is materially sooner than the 2027 date circulating in commentary. Anyone planning an information management investment on the assumption of a comfortable runway should check the catalogue rather than the trade press.

The word "BIM" is being retired

The draft's title tells the story. Where the published series reads "Information management using building information modelling", the draft reads simply "Information management". The change is not cosmetic — it reflects a decade in which practitioners have argued that treating this as a modelling technology rather than an information discipline is precisely what has limited its value.

The restructuring goes further. Under the revision, Part 2 covers both the delivery and operational phases, and Part 3 is repurposed entirely as implementation guidelines: common data environment, aggregating information models into the asset information model, federation and information container breakdown structure, information production standards and methods, and level of information need. Consultation on Parts 1 and 2 ran from 10 March to 3 May 2026; Part 3 closed on 6 July 2026.

The European position

The UK's construction products white paper commits to retaining consistency with the revised EU regime where it meets UK objectives, noting that the EU reforms enhance safety, improve enforcement and market surveillance, and introduce information requirements including digitalisation. On products, the two regimes are converging rather than diverging.

On AI specifically, the EU AI Act's high-risk category for critical infrastructure names safety components in critical digital infrastructure, road traffic, and the supply of water, gas, heating and electricity. Buildings are not named in that category. High-risk obligations under Annex III apply from December 2027.

THE PLANNING POINT

An organisation building an information capability now should build it against where the standard is going, not where it has been. The vocabulary, the phase structure and the implementation guidance are all about to change.

Sources: ISO catalogue entries for ISO 19650-1:2018 and ISO/DIS 19650-1 · nima consultation notices, March and May 2026 · BSI standards development portal, project 2025-00303 · MHCLG Construction Products Reform White Paper, paragraph xxi · EU AI Act, Annex III.

Today

Seven applications that are defensible now, because a competent person still decides and accountability does not move.

Each of these sits at the assistive level. Each addresses a problem the regulator has itself described. And each is worth doing whether or not the AI element ever matures, because the underlying discipline is the point.

- **Gateway application assurance.** Check submissions against BSR's published failure causes before lodging rather than after rejection. Given median determination times of 22 to 35 weeks, a single avoided resubmission is worth more than the tool.
- **Document structure and indexing.** BSR names poorly organised documents, missing indexes and broken linking as delay causes. The golden thread must be navigable, not a folder of attachments. This is the cheapest compliance improvement available in the sector.
- **Product data reconciliation.** Flag where specified products lack a designated standard or traceable test evidence — material when the government's own central estimate is that 37% of the market is regulated.
- **Inspection and test plan review.** The pattern Balfour Beatty has deployed: identify common issues such as incorrect or outdated templates before they reach technical experts, freeing engineers for design assurance.
- **As-built versus design comparison.** Surface deviations for a competent person to judge. The judgement, and its reasoning, are recorded — which is also what gateway 3 will ask for.
- **Safety case drafting support.** Assemble and summarise evidence, with authorship and review remaining unambiguously with the accountable person.
- **Levy and floorspace calculation checks.** Chargeable floorspace, communal area apportionment and previously-developed-land status, before 1 October 2026.

The named deployment, and what it actually is

Balfour Beatty announced a £7.2m investment in Microsoft 365 Copilot on 31 July 2025 — a four-year commitment running to at least 2029, described as one of the largest AI investments of its kind in UK construction and infrastructure. Alongside it, the company is developing AI "smart agents" with Microsoft for quality, health and safety and assurance processes. The first trial, on the A9 Dualling: Tomatin to Moy project in Scotland, automates early-stage review of inspection and test plans.

It is worth being precise about what that first agent does: it identifies common issues such as incorrect or outdated templates reaching technical experts. The most prominent named AI deployment in UK construction is a document-review agent checking whether the right version of a form was used. That is an information management problem, and it is the argument of this briefing in a single example.

Sources: BSR external remediation guidance, April and June 2026 · Balfour Beatty press release, 31 July 2025 · MHCLG Building Safety Levy Guidance. A McKinsey productivity figure cited within Balfour Beatty's release is attributed there and not independently verified here.

Tomorrow

Three levels, defined by where accountability sits rather than by how capable the system is.

This distinction is the one a board can actually govern against, and it maps closely onto the criteria nima has already published. Capability descriptions age badly; accountability descriptions do not.

ASSISTIVE

The person decides

The system prepares, summarises and surfaces. Accountability is unchanged. Almost all defensible value in UK construction sits here today, and will for some time — every application in the previous section is at this level.

AUGMENTIVE

The person confirms

The system recommends within defined bounds, showing its reasoning and its confidence. The person confirms or overrides, and the override is recorded. The critical test is whether the review is demonstrably meaningful — a confirmation rate approaching 100% is evidence that it is not.

ADAPTIVE

The envelope decides

The system decides within a defined envelope. Oversight moves to the envelope rather than the decision, and accountability moves to whoever sets and monitors it. This is a reasoned projection, not an observation: no UK construction deployment at this level was identified in preparing this briefing.

Four dates that are already fixed

- **September 2026.** Guidance requiring a second staircase in residential buildings of 18m and over comes into force.
- **1 October 2026.** The Building Safety Levy commences.
- **End 2026 into late 2027.** Construction products general safety requirement regulations intended, then in force — subject to parliamentary time.
- **2027.** ISO 19650 Parts 1, 2 and 3 republish, with the phase structure and terminology changed.

Two further items are intentions rather than commitments and should be treated as direction of travel: the Construction Playbook refresh covering AI and information management, expected but unpublished, with the current version dating from 2022; and the government response to the Single Construction Regulator consultation, due in summer 2026.

Sources: BSR Approved Document B consultation, 25 March to 1 July 2026 · MHCLG Building Safety Levy Guidance · Construction Products Reform White Paper · ISO catalogue · King's Speech, 13 May 2026 · nima (GIIG) position paper, factors 3 and 6.

Benefit realisation

Measure the outcome the business cares about, not the accuracy the vendor quotes.

The single most common failure in AI business cases is measuring the tool rather than the process. An accuracy figure is not a benefit. Weeks removed from a determination is a benefit, and in this sector it is the one that pays for everything else.

A worked example: gateway application assurance

Establish the baseline before anything is deployed. Three numbers: your current rejection and invalidation rate, your median weeks from submission to determination, and the hours spent on rework per application. Most organisations do not hold the third of these, which is itself informative.

Use the published comparators. BSR publishes sector medians monthly: 89% approval and 22 weeks for new higher-risk buildings, 85% and 35 weeks for external remediation, 73% and 28 weeks for internal works. Few sectors give you a regulator-published benchmark to measure against. Use it.

Then measure four things, tracked from day one.

MEASURE	WHY IT MATTERS
Rejection and invalidation rate	The direct financial effect. In the last published quarter, 299 internal works applications were invalidated or withdrawn against 237 decisions made — the failure rate before assessment is a real and under-examined cost.
Median determination time	Measured on your own applications against BSR's published medians. This is the programme benefit, and on any scheme of size four weeks of programme is the whole business case.
Override rate	How often a competent person disagrees with the tool — and whether a falling rate reflects genuine improvement or a review becoming a formality. This is the governance measure, and it is the one most often omitted.
Time to trustworthy answer	How long it takes to answer, with evidence, what a building actually contains. This is the golden thread working or not working, and it is the measure that survives every change of tool.

THE TEST

If the only benefit an initiative can demonstrate is that the tool is accurate, it has not yet been connected to anything the business is accountable for.

Comparators from BSR, Building control approval application data April to June 2026. The measurement framework is applied across this briefing series and is not specific to construction.

A way in

Eight workstreams. The first three form a natural first step that fits inside the window before the levy commences.

#	WORKSTREAM	FOCUS	DURATION
01	Readiness assessment	Against ISO 19650 specifically, not AI readiness in the abstract. Common data environment, information container structure, level of information need.	4–6 weeks
02	Use case identification and triage	Scored against complexity, uncertainty, novelty, criticality and ethical or security risk — the criteria the sector's own standards body has published.	3–4 weeks
03	Regulatory and legal position paper	Golden thread duty, the products regime, both Principal Designer roles, and where DUAA section 80 does and does not apply.	3–4 weeks
04	Board and executive governance	Who owns an AI-assisted decision, how the override is recorded, and what the board sees. Grounded in the accountability levels.	4 weeks
05	Threat and integrity response	Golden thread security under ISO 19650-5, payment and identity verification controls, and query governance over the record.	4 weeks
06	Benefit realisation framework	Baselines captured before deployment, against BSR's published comparators. Runs in parallel with the others.	3 weeks
07	Build, buy or partner evaluation	Against a supplier market whose product information government has described as poor or untrustworthy. Evidence standards set in advance.	4–6 weeks
08	Twelve-month mobilisation roadmap	Sequenced against the fixed dates: September 2026, October 2026, and the ISO republication.	2 weeks

Workstreams 01 to 03 form a natural first step of six to eight weeks. Starting now, that completes before the Building Safety Levy commences on 1 October 2026 — which matters, because the levy is calculated on exactly the kind of floorspace and land-status determination that the information work is intended to make reliable.

CONTACT

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Sources

Every figure in this briefing traces to one of the following.

Regulators and government

- **Building Safety Regulator** — Strategic Plan 2026 to 2027, published 31 March 2026. Building control approval application data April to June 2026, published 1 July 2026. External remediation improvement plan, 8 April 2026. Approved Document B consultation, 25 March to 1 July 2026.
- **MHCLG** — Construction Products Reform White Paper, 26 February 2026. Building Safety Levy Guidance, published 10 July 2025, updated 2 July 2026. Building Safety Remediation monthly data release. Single Construction Regulator prospectus, 17 December 2025.
- **HSE** — Work-related fatal injuries in Great Britain, 2025/26 provisional, updated 30 June 2026. Building control profession registration data.
- **Infrastructure and Projects Authority** — Transforming Infrastructure Performance: Roadmap to 2030, 13 September 2021, including the Information Management Mandate at Annex B. The IPA merged into NISTA on 1 April 2025.
- **Cabinet Office** — The Construction Playbook, published December 2020, current document September 2022.

Legislation and standards

- **legislation.gov.uk** — Building Safety Act 2022 s.88; Higher-Risk Buildings (Management of Safety Risks etc) (England) Regulations 2023; Data (Use and Access) Act 2025 s.80; Building Safety Levy (England) Regulations 2025.
- **ISO** — ISO 19650-1:2018 and ISO/DIS 19650-1; ISO 19650-5:2020, confirmed 24 October 2025; ISO 19650-6:2025, published 13 January 2025.
- **BSI** — BS 8644-1:2022; BS 8670-1:2024; UK BIM Framework guidance, maintained with nima.

Trade bodies, professional institutions and research

- **nima and the GIIG** — Artificial Intelligence considerations for Information Managers in the built environment, February 2026. Information Management Initiative. Consultation notices on the ISO 19650 revision, March and May 2026.
- **CITB** — Construction Workforce Outlook 2026–2030, produced with Oxford Economics.
- **RICS** — AI in Construction 2025, published 16 September 2025, based on more than 2,200 responses worldwide. Responsible Use of Artificial Intelligence in Surveying Practice.
- **NBS** — Digital Construction Report 2025, published 15 October 2025, based on 559 UK design and construction professionals.
- **Grenfell Tower Inquiry** — Phase 2 report, September 2024, and the government response, February 2025.

Operators on their own record

- **Balfour Beatty** — press release, 31 July 2025, on the Microsoft 365 Copilot investment and the A9 Dualling smart agent trial.
- **Arup** — public confirmation of the January 2024 deepfake fraud, reported by CNN Business, 16 May 2024, and corroborated by Hong Kong police statements.

Sources excluded, and the reasons, are set out in section one. Where a figure could not be traced to a source of this kind, it does not appear in this briefing.

About the author

Neil Catton

Independent technology strategist working across a fractional and advisory portfolio — fractional CTO and CIO work, non-executive and board advisory, AI board briefings, AI readiness reviews, technology due diligence, and data strategy. More than thirty-eight years of technology leadership across twenty-plus UK industry sectors.

CTO and Director-level roles at BT, Wipro, Fujitsu, Sopra Steria and Capita, including Director of Digital, Data and Integration Architecture at BT and CTO for Home Affairs and Criminal Justice at Fujitsu.

RELEVANT TO THIS BRIEFING

Two parts of that career bear directly on what this briefing describes.

At BT, a £1.5bn transformation programme covering a 27-petabyte data estate and more than 200 data platforms — an estate in which one business process required entering a postcode seventeen separate times, because no master record existed. Copies of copies, no golden records, no shared conventions. That is the problem in these pages, at national scale.

Earlier, at British Nuclear Fuels, a real-time barcode system designed and built for construction, manufacturing and inspection workflow, before any commercial equivalent existed — recording construction work as it happened and giving live visibility of engineering and construction activity across the site.

Writing

Author of four published books — *The Next Evolution*, *The Cognitive Crucible*, *The Shadow System*, and *Working as Designed: Why systems that work still fail the people inside them* — with three further books forthcoming. Writes regularly on technology, ethics and human consequence at writing.neilcatton.com.

How this briefing was produced

Research was restricted to regulators, trade bodies, ombudsmen, published legislation, standards catalogues, named academic and government-commissioned research, and operators speaking on their own record. Where a widely quoted figure could not be traced to such a source, it was excluded and named as excluded in section one. Where a government figure is a range with a central estimate, the range is given. Where a case is dated, its date is stated.

NOTICE

1. This briefing is not legal, regulatory, financial or professional advice.
2. The position is stated as at August 2026. The ISO 19650 revision, the construction products general safety requirement, the Approved Document B review, the Remediation Bill and the Single Construction Regulator response may all since have moved.
3. Third-party sources are cited in good faith. Verify before relying on any figure for a decision.
4. Named organisations appear only from regulator, government or public findings, and are used illustratively. None has been engaged or approached in connection with this briefing.
5. No advisory or client relationship is created by receipt of this document.
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