

PROJECT

SL-DEMO

2026-06-14

TOTAL NET DELAY (OBSERVED)

+10 working days

Difference between first and latest project finish.

<p>UPDATES ANALYSED</p> <h2>4</h2> <p>Across 3 update periods.</p>	<p>TRAJECTORY</p> <h2>2 / 3</h2> <p>Periods that slipped (1 recovered, 0 flat) — consistently deteriorating.</p>	<p>WORST PERIOD</p> <h2>+10 work- ing days</h2> <p>Largest single-period slip — SL-DEMO.</p>	<p>CRITICAL-PATH ACTIVITIES</p> <h2>76</h2> <p>On the latest update's critical path.</p>
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FIRST UPDATE
2026-01-05

LATEST UPDATE
2026-04-09
66 calendar days ago — stale snapshot.

LATEST PROJECT FINISH
2028-06-22

Analytical aid for schedule review — not an expert determination or legal advice. Findings should be reviewed by a qualified delay analyst before being relied upon in formal contract correspondence.

CONTENTS

Update Series

– Disclosures

BRIEF

01 Executive summary

02 Cumulative delay profile

03 What happened · Why · Where to investigate (series)

NARRATIVE

04 Period 1: What happened · Why · Where to investigate

05 Period 1: Float-path risk

06 Period 1: Delay and change register

07 Period 1: Delay timeline

08 Period 1: Concurrent delay

09 **Period 2: What happened · Why · Where to investigate**

10 **Period 2: Scope changes**

11 **Period 2: Float-path risk**

12 **Period 2: Completion forecast and PF scenarios**

13 **Period 2: Delay and change register**

14 **Period 2: Delay timeline**

15 **Period 2: Concurrent delay**

16 **Period 3: What happened · Why · Where to investigate**

17 **Period 3: Float-path risk**

18 **Period 3: Completion forecast and PF scenarios**

19 **Period 3: Delay and change register**

20 **Period 3: Delay timeline**

21 **Period 3: Concurrent delay**

Full activity listings and the complete delay register are in the accompanying Excel

appendix
APPENDIX

DISCLOSURES**Analytical tool output — not expert determination**

This report is automatically generated from the uploaded schedule file(s). It is an analytical aid — not an expert determination, legal advice, or a certified forensic delay analysis.

The tool does not perform a full critical-path method recalculation and cannot determine contractual excusability.

Figures should be reviewed by a qualified delay analyst before being relied upon in formal contract correspondence or dispute proceedings. Nothing in this report should be construed as a legal opinion or expert witness statement.

Series-level as-built critical path not produced — V1.1 deferral

This series report does not emit a single stitched as-built critical path across the update series. Per-period delay registers (in the Appendix) flag critical events with the Critical column; reading those across successive periods is the V1 substitute for as-built CP synthesis. The dedicated Brief-layer as-built CP section is on the V1.1 roadmap.

FOR THE PROJECT DIRECTOR

Brief

Severity-coded status headlines, top risks, what to act on.

01 Executive summary

The project finish date has moved forward by ten working days across the update series, driven by a net reduction in critical path durations, with the largest shift occurring in a single update period. This movement represents a meaningful acceleration relative to the remaining programme duration, and the consistent forward trajectory across two out of three update periods indicates sustained improvement rather than an isolated adjustment. However, a critical-path divergence on 68 activities raises concerns about the reliability of the schedule logic, which may affect confidence in the reported finish date. The reader should review the timeline of project finish dates across updates to verify the observed acceleration trend.

02 Cumulative delay profile

Project completion trajectory across the update series. The observed cumulative delay column is the authoritative measure — it reflects the actual movement of the project finish date between the first schedule and each subsequent update. The pairwise cumulative column sums the engine's per-period net delay figures; it is shown for period-level attribution but should not be used as a headline figure where it diverges from the observed column.

PER-PERIOD SUMMARY

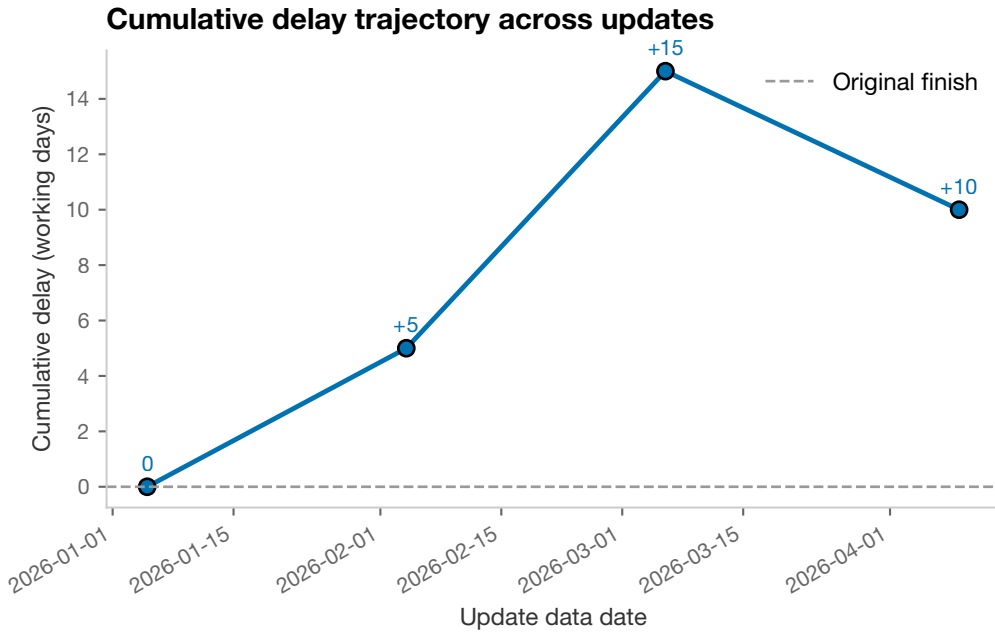
Period	Schedules	Observed Δ	Net delay	Critical events	Concurrent periods
P1	SL-DEMO → SL-DEMO	+5 working days	+5 working days	1	0
P2	SL-DEMO → SL-DEMO	+10 working days	+10 working days	3	0
P3	SL-DEMO → SL-DEMO	-5 working days	-2 working days	1	0

Observed Δ is the project-finish movement within the period (working days). Net delay is the engine-attributed figure after concurrency. Critical events and concurrent periods read off the delay engine.

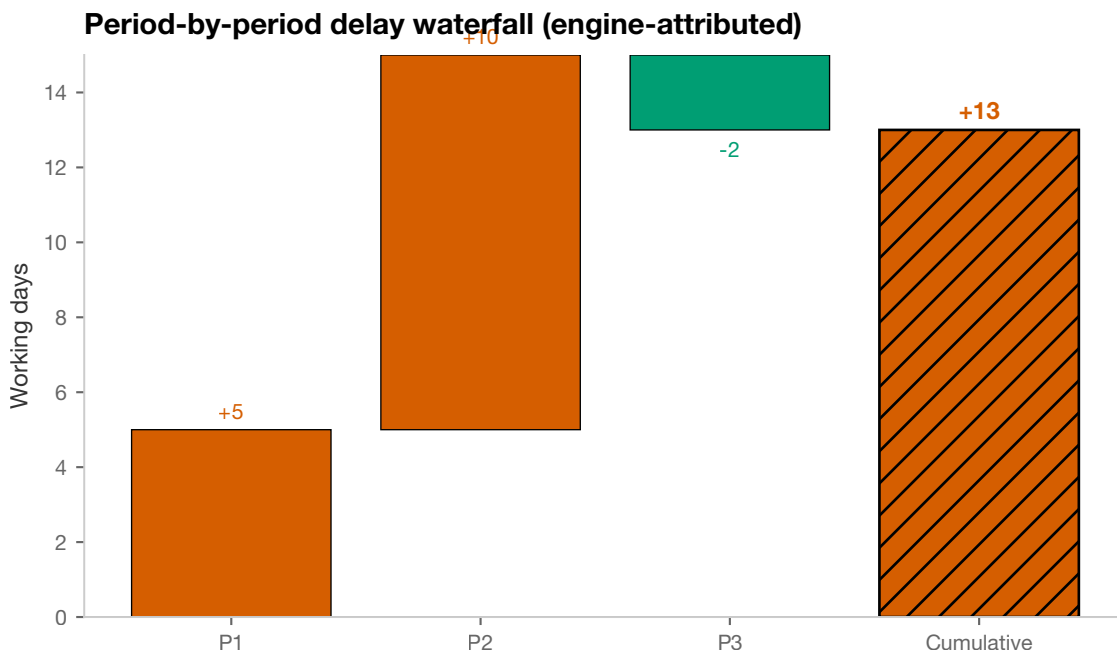
PER-UPDATE PROGRESSION

Seq	Name	Data date	Project finish	Observed cum. delay	Pairwise cum. delay
1	SL-DEMO	2026-01-05	2028-06-08	0 working days	—
2	SL-DEMO	2026-02-04	2028-06-15	+5 working days	+5 working days
3	SL-DEMO	2026-03-06	2028-06-29	+15 working days	+15 working days
4	SL-DEMO	2026-04-09	2028-06-22	+10 working days	+13 working days

COMPLETION TRAJECTORY

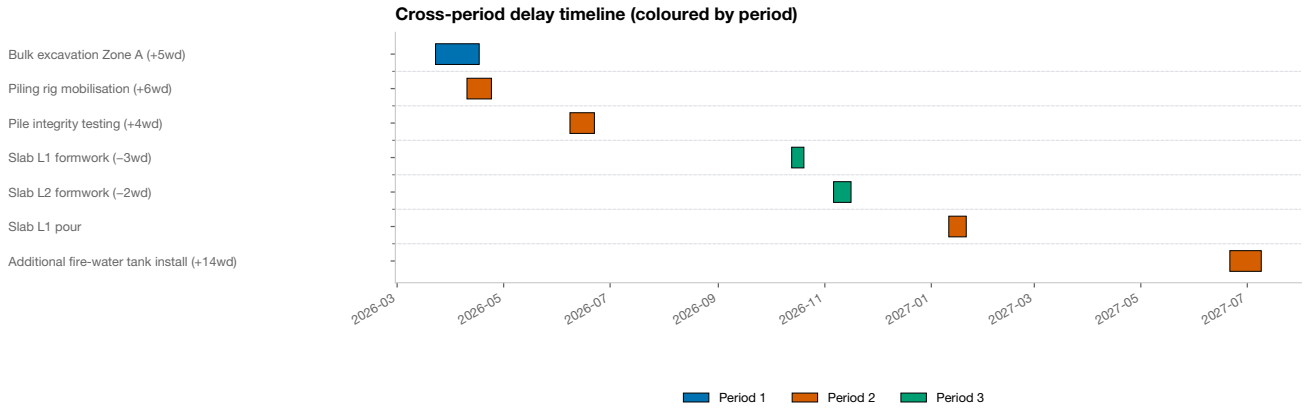


PERIOD-BY-PERIOD DELAY WATERFALL



Each bar shows that period's engine-attributed net delay starting from the previous cumulative running total. Red is delay added; green is acceleration. The hatched final bar shows the pairwise cumulative total against zero — the same figure the cumulative profile table reports in the Pairwise cum. delay column. Treat the Observed cum. delay column as authoritative where the two diverge (METHODOLOGY).

CROSS-PERIOD DELAY TIMELINE



Every datable delay event from every period plotted on a single calendar, coloured by the period the event belongs to. Reads at a glance: are delays clustered in a single bad period, or spread across the series? Capped at 25 events by criticality then magnitude — the per-period timelines in the Appendix carry the full set for each period, coloured by category.

03 What happened · Why · Where to investigate (series)

COMPLETION MOVEMENT (OBSERVED, SERIES): +10 working days Three measurements follow — they answer different questions and are not a reconciled figure.

The project finish date moved ten working days earlier than the baseline, representing the observed completion movement and serving as the authoritative top-line metric. The summed activity-level slip of +14 working days reflects the total churn within the schedule, capturing extensions, progress delays, and scope additions across all affected activities regardless of criticality or float absorption, and should be interpreted as a structural signal rather than a direct measure of project impact. This figure provides a sanity check against the finish movement and serves as the denominator for the WBS-level rollup that follows. The topology edits, which indicate where the schedule logic was altered between baseline and update, are grouped by WBS package and act as direction-of-travel signals rather than quantified day impacts due to the absence of calendar-aware Time Impact Analysis per event. Investigation should focus on the Superstructure package, where the highest concentration of logic changes occurred.

QUANTIFIED DRIVERS (WORKING DAYS BY CATEGORY, SERIES TOTAL)

Category	Events	Working days
Added scope (upper bound)	1	+14 working days
Duration changes	5	+10 working days

TOP 1 WBS PACKAGES FOR TOPOLOGY EDITS ACROSS THE SERIES

WBS package	Events	Logic	Constraint	Calendar
Superstructure	1	1	0	0

FOR THE PLANNER OR DELAY ANALYST

Narrative

Supporting analysis, schedule comparison, driving-path detail.

04 Period 1: What happened · Why · Where to investigate

COMPLETION MOVEMENT: +5 working days *Three measurements follow — they answer different questions and are not a reconciled figure.*

Traced critical path differs from stored flag on 60 activities

An independent forward/backward pass on the update schedule produced a different critical-path set to the file's stored Activity.is_critical flags on 60 activities. Common causes: stale total-float values (schedule not recalculated after the last edit), retained-logic vs progress-override calculation mode, or constraint-driven criticality the V1 trace does not model. The engine used the traced path for every delay attribution downstream of this section — divergences therefore propagate into the delay register, the criticality flags on specific events, and the Time Impact Analysis figures. Review the divergence before relying on the numbers.

What happened. The project-finish date moved out by +5 working days between the baseline and the update.

Why. The engine logged 1 activity-level event — progress behind plan, duration extensions, and scope additions — totalling +5 working days of summed activity-level slip. This figure is a measure of churn and a structural signal of the schedule, not project impact: each activity is counted independently, so parallel paths and float-absorbed slip both add to it. Read it as a sanity check against the project-finish movement above (a small total against a large movement points to topology drivers below) and as the denominator for the WBS rollup that follows.

Where to investigate. No topology edits were identified between the schedules.

The three figures above answer different questions and are not expected to reconcile. What happened is the authoritative project-level movement; Why is the summed activity-level slip across every event — a churn and structural signal, with each activity counted independently so parallel paths and float-absorbed slip both add to it; Where is a direction-of-travel signal for structural edits the engine cannot size without a calendar-aware Time Impact Analysis per event. See METHODOLOGY §5a.

QUANTIFIED DRIVERS (WORKING DAYS BY CATEGORY)

Category	Events	Working days
Duration changes	1	+5 working days

05 Period 1: Float-path risk

NEAR-CRITICAL PATHS: 3 sub-critical or parallel-critical, within 20 working days of the controlling path (primary driving path shown separately as rank 1; full list in the Excel appendix).

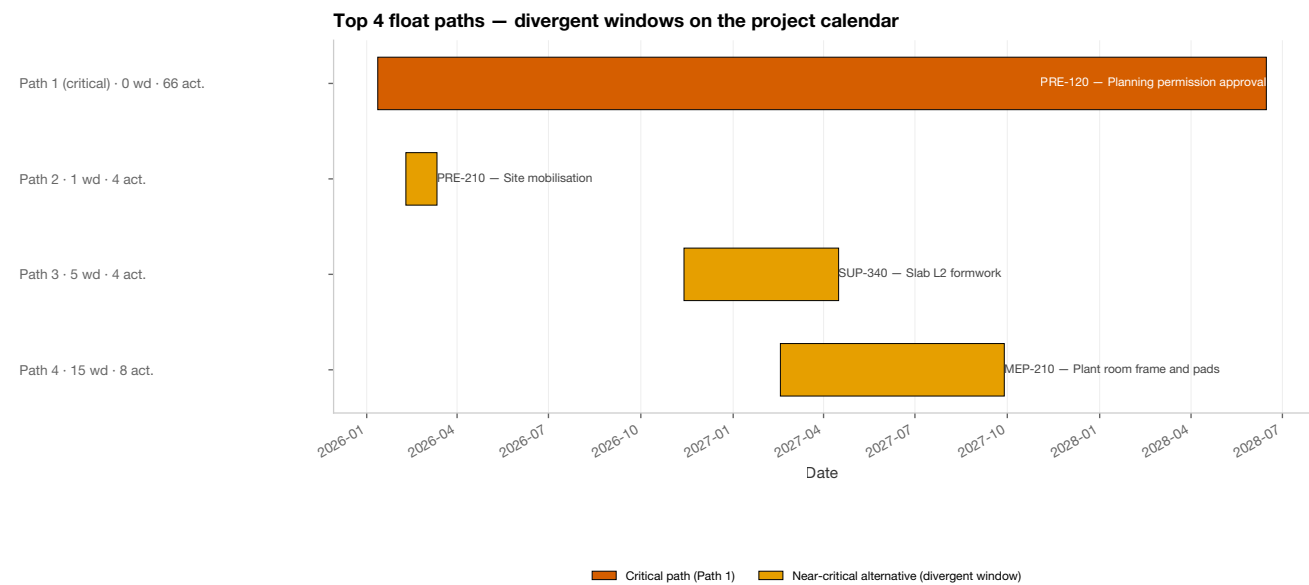
What this section answers: where else forward risk is concentrated besides the controlling chain. Each row is an alternative chain to the project endpoint that's within 20 working days of the critical path; any of them could become controlling with a small slip.

3 sub-critical paths within 20 working days of critical — a delay on any of them could shift the controlling path. Rank 1 in the table below is the primary critical path for reference.

TOP 4 FLOAT PATHS

#	Float	Activities	Envelope	Driving activity	Branches from
1	0 wd	66	2026-01-12 → 2028-06-15	PRE-120 — Planning permission approval	—
2	1 wd	67 (4 unique)	2026-02-09 → 2028-06-15	PRE-210 — Site mobilisation	Path 1 at SUB-110
3	5 wd	37 (4 unique)	2026-11-13 → 2028-06-15	SUP-340 — Slab L2 formwork	Path 1 at MEP-130
4	15 wd	30 (8 unique)	2027-02-17 → 2028-06-15	MEP-210 — Plant room frame and pads	Path 1 at FIT-160

FLOAT-PATH OVERLAY — WHEN EACH NEAR-CRITICAL CHAIN LANDS



One bar per top-5 float path showing its divergent window — the activities unique to this path before it merges into a higher-priority chain. Background shading marks the critical-path envelope. Reads at a glance: are the alternatives spread across the programme or crowded into one window?

06 Period 1: Delay and change register

IDENTIFIED CHANGES: 1

The register below lists every identified change between baseline and update. Each row carries an Impact basis tag (matching the chart that follows) so the reader can immediately see whether its delay-days value is a directly-measured figure or a placeholder:

- Activity-level (measured) — Duration change and Progress shortfall events. The delay-days value is a directly-measured working-day figure (update duration minus baseline duration for duration changes, or days-behind-current-plan for progress events).
- Scope — upper bound — Added scope and Removed scope events. The activity's own planned duration is shown as an upper bound; the real delay contribution depends on whether the activity sits serially on the critical path, which this engine does not verify per event.
- Topology (engine-unresolved) — Logic change, Constraint change, and Calendar change events. These carry a 0 delay-days value because the engine cannot size each event's isolated impact without a calendar-aware Time Impact Analysis per event (METHODOLOGY §5a).

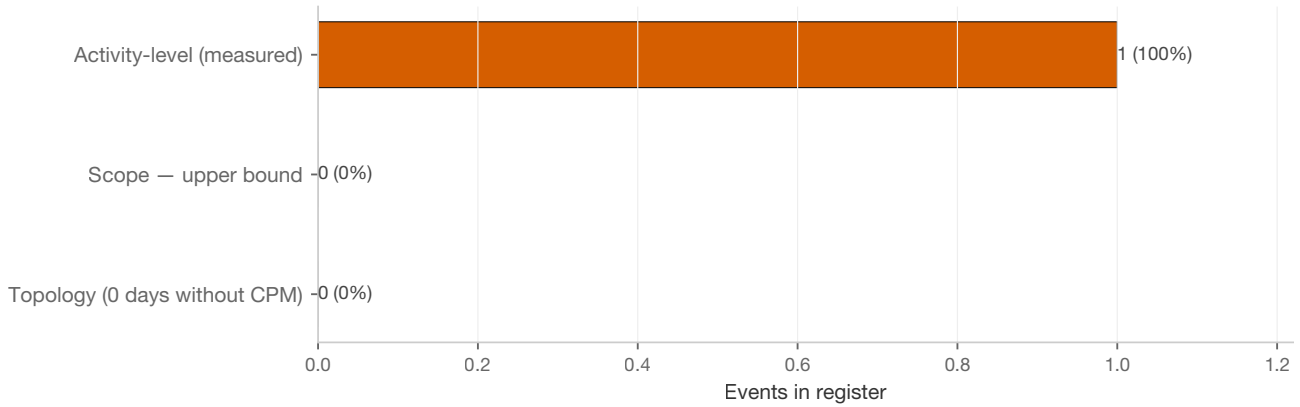
Positive delay values indicate delay to the project finish; negative values indicate acceleration. The TIA (wd) column carries the isolated Time Impact Analysis figure for each critical event — working-day movement of the project finish when the event's change is reverted in isolation (AACE MIP 3.4-shaped; CIOB §5.8.34–5.8.43). Events off the critical path show "—"; events whose category is not resolvable by the calendar- and constraint-agnostic trace (constraint / calendar changes) show "see note" — see METHODOLOGY §5a for the limitation. The Entitlement (prelim.) column carries a rule-based first-pass classification per SCL Protocol §10.4 (Employer risk / Contractor risk / Neutral / Concurrent / Not assessed). The first-pass reads activity descriptions for cause-of-delay keywords and falls back to category-default rules where no keyword fires. Verify every classification against the contract, the variation register, NCRs, and documentary evidence before relying on it in any formal correspondence — the final call is a legal / contractual determination this tool does not make.

Composition by category:

- Duration change: 1

REGISTER COMPOSITION

Register composition by impact basis (1 events)



Register split by the three Impact basis buckets defined above — Activity-level (measured), Scope (upper bound), and Topology (0 without CPM). Bar width shows the event count in each bucket; percentages sum to 100 across the register.

The full register for this period (1 event) is in the All Delay Events sheet of the Excel companion — filter the Period column to P1. The composition chart above and the cumulative waterfall below summarise the register's shape; the Brief layer's WBS-impact decomposition names the packages where action is warranted.

CUMULATIVE DELAY BY CATEGORY

Cumulative delay by category

All 5 working days of critical delay come from a single category (Duration change). A breakdown chart is only meaningful when two or more categories contribute.

Stacked contribution of each category to the total engine-attributed delay. Excludes topology events whose impact is not quantified.

07 Period 1: Delay timeline

Timeline visualisation of delay events plotted against the project schedule. Events are coloured by category; concurrent-delay windows are shaded.

DELAY EVENTS AND CONCURRENT PERIODS

Delay events and concurrent periods

Only one delay event was identified (Bulk excavation Zone A: Duration change, 2026-03-23 to 2026-04-17). A timeline chart is only meaningful when two or more events can be compared. See the register table above for full details.

08 Period 1: Concurrent delay

This section lists time windows where two or more independent critical delay events overlap. The "net impact" column shows the delay days that flow through to the project completion date under the methodology named in the disclosure at the top of the report; the "absorbed" column shows delay days that would otherwise have been counted twice and are removed from the total.

The delay register contains 1 critical event(s), of which 1 carry a measurable delay in days.

Concurrent delay analysis requires at least two independent, measurable critical events overlapping in time.

09 Period 2: What happened · Why · Where to investigate

COMPLETION MOVEMENT: +10 working days *Three measurements follow — they answer different questions and are not a reconciled figure.*

Traced critical path differs from stored flag on 68 activities

An independent forward/backward pass on the update schedule produced a different critical-path set to the file's stored Activity.is_critical flags on 68 activities. Common causes: stale total-float values (schedule not recalculated after the last edit), retained-logic vs progress-override calculation mode, or constraint-driven criticality the V1 trace does not model. The engine used the traced path for every delay attribution downstream of this section — divergences therefore propagate into the delay register, the criticality flags on specific events, and the Time Impact Analysis figures. Review the divergence before relying on the numbers.

What happened. The project-finish date moved out by +10 working days between the baseline and the update.

Why. The engine logged 3 activity-level events — progress behind plan, duration extensions, and scope additions — totalling +24 working days of summed activity-level slip. This figure is a measure of churn and a structural signal of the schedule, not project impact: each activity is counted independently, so parallel paths and float-absorbed slip both add to it. Read it as a sanity check against the project-finish movement above (a small total against a large movement points to topology drivers below) and as the denominator for the WBS rollup that follows.

Where to investigate. A further 1 topology event (logic, constraint or calendar edits) sit across 1 WBS package. The engine cannot size each event's isolated working-day impact without a calendar-aware Time Impact Analysis per event (METHODOLOGY §5a) — these are direction-of-travel signals showing where the schedule was rewired between baseline and update, not how many days each edit added. Review those packages to understand the structural shift.

The three figures above answer different questions and are not expected to reconcile. What happened is the authoritative project-level movement; Why is the summed activity-level slip across every event — a churn and structural signal, with each activity counted independently so parallel paths and float-absorbed slip both add to it; Where is a direction-of-travel signal for structural edits the engine cannot size without a calendar-aware Time Impact Analysis per event. See METHODOLOGY §5a.

QUANTIFIED DRIVERS (WORKING DAYS BY CATEGORY)

Category	Events	Working days
Duration changes	2	+10 working days
Added scope (upper bound)	1	+14 working days

TOP 1 WBS PACKAGES FOR TOPOLOGY EDITS

WBS package	Events	Logic	Constraint	Calendar
Superstructure	1	1	0	0

10 Period 2: Scope changes

ADDED · REMOVED: **1 · 0** *Net scope delta: +1 activities.*

Activities that exist in one schedule but not the other. Added activities represent new scope; removed activities represent scope deletion.

- Added activities: 1 (total planned duration 14 working days)
- Removed activities: 0

The activity matching process uses four cascading strategies before an activity falls into these pools:

- Exact ID
- Normalised ID
- Name plus WBS path
- Name-only fallback

Surviving entries are genuine scope changes, not renumbering or WBS-restructuring artefacts.

Full per-activity lists (every added and removed activity) are in the Excel appendix under the Scope Changes tab.

11 Period 2: Float-path risk

NEAR-CRITICAL PATHS: 4 sub-critical or parallel-critical, within 20 working days of the controlling path (primary driving path shown separately as rank 1; full list in the Excel appendix).

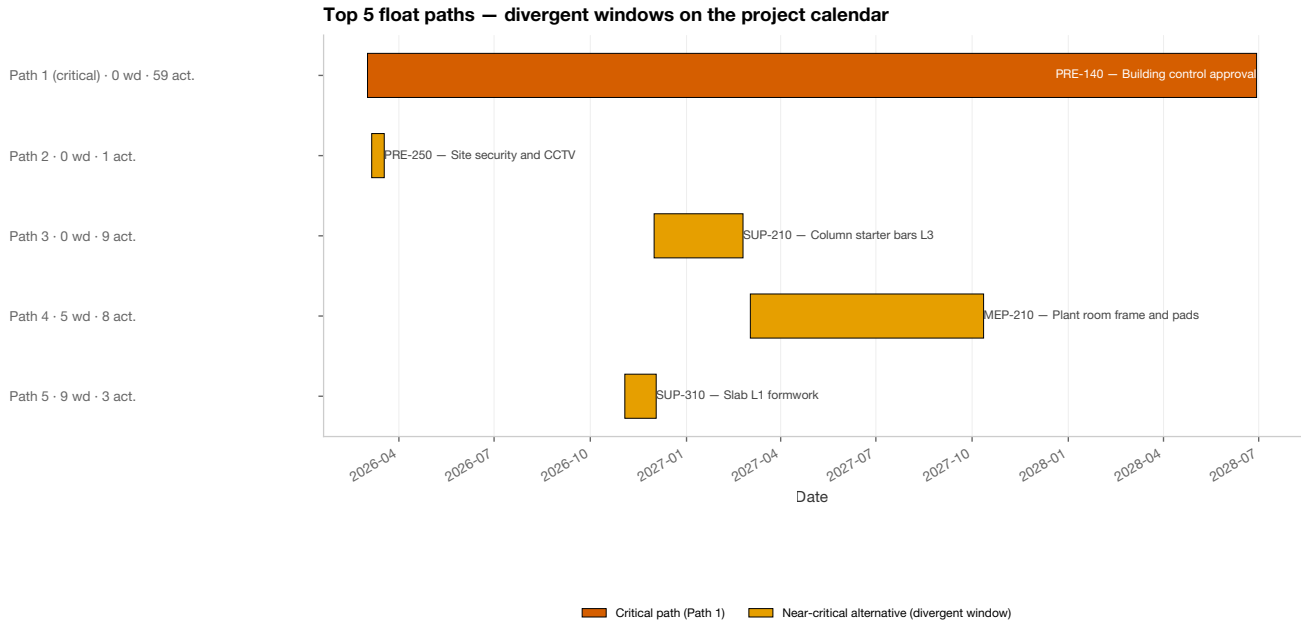
What this section answers: where else forward risk is concentrated besides the controlling chain. Each row is an alternative chain to the project endpoint that's within 20 working days of the critical path; any of them could become controlling with a small slip.

2 sub-critical paths within 20 working days of critical, plus 2 additional zero-float chains parallel to the primary driving path — a delay on any of them could shift the controlling path. Rank 1 in the table below is the primary critical path for reference.

TOP 5 FLOAT PATHS

#	Float	Activities	Envelope	Driving activity	Branches from
1	0 wd	59	2026-03-02 → 2028-06-29	PRE-140 — Building control approval	—
2	0 wd	59 (1 unique)	2026-03-06 → 2028-06-29	PRE-250 — Site security and CCTV	Path 1 at SUB-110
3	0 wd	42 (9 unique)	2026-12-01 → 2028-06-29	SUP-210 — Column starter bars L3	Path 1 at MEP-130
4	5 wd	30 (8 unique)	2027-03-03 → 2028-06-29	MEP-210 — Plant room frame and pads	Path 1 at FIT-160
5	9 wd	39 (3 unique)	2026-11-03 → 2028-06-29	SUP-310 — Slab L1 formwork	Path 3 at SUP-440

FLOAT-PATH OVERLAY — WHEN EACH NEAR-CRITICAL CHAIN LANDS



One bar per top-5 float path showing its divergent window — the activities unique to this path before it merges into a higher-priority chain. Background shading marks the critical-path envelope. Reads at a glance: are the alternatives spread across the programme or crowded into one window?

12 Period 2: Completion forecast and PF scenarios

EV-IMPLIED FINISH: 2029-01-20

From a linear regression across 3 status periods. Sanity-check only — not a CPM re-calc.

At the current earned-value gradient (EV 5.4 % at the data date, slope 0.09 pp/day, R² 0.99), the schedule reaches 100 % around 2029-01-20 — roughly 205 calendar days later than the stored finish of 2028-06-29. The productivity-factor rows below show how the implied finish responds to slower execution.

IMPLIED PC DATES

Scenario	PF	Implied PC	vs stored
Current trajectory	from EV	2029-01-20	+205 days vs stored
Conservative	85%	2028-12-29	+183 days vs stored
Realistic ambition	95%	2028-09-18	+81 days vs stored
Stored (planned)	100%	2028-06-29	matches stored

Indicative only. The PF rows apply the named productivity factor to remaining durations on labour activities (procurement / milestones are not scaled) and re-trace the longest path. They do not re-level resources, re-apply calendars, or re-optimize logic — use alongside a native P6 re-schedule for any contractual decision (METHODOLOGY §5b).

13 Period 2: Delay and change register

IDENTIFIED CHANGES: 4

The register below lists every identified change between baseline and update. Each row carries an Impact basis tag (matching the chart that follows) so the reader can immediately see whether its delay-days value is a directly-measured figure or a placeholder:

- Activity-level (measured) — Duration change and Progress shortfall events. The delay-days value is a directly-measured working-day figure (update duration minus baseline duration for duration changes, or days-behind-current-plan for progress events).
- Scope — upper bound — Added scope and Removed scope events. The activity's own planned duration is shown as an upper bound; the real delay contribution depends on whether the activity sits serially on the critical path, which this engine does not verify per event.
- Topology (engine-unresolved) — Logic change, Constraint change, and Calendar change events. These carry a 0 delay-days value because the engine cannot size each event's isolated impact without a calendar-aware Time Impact Analysis per event (METHODOLOGY §5a).

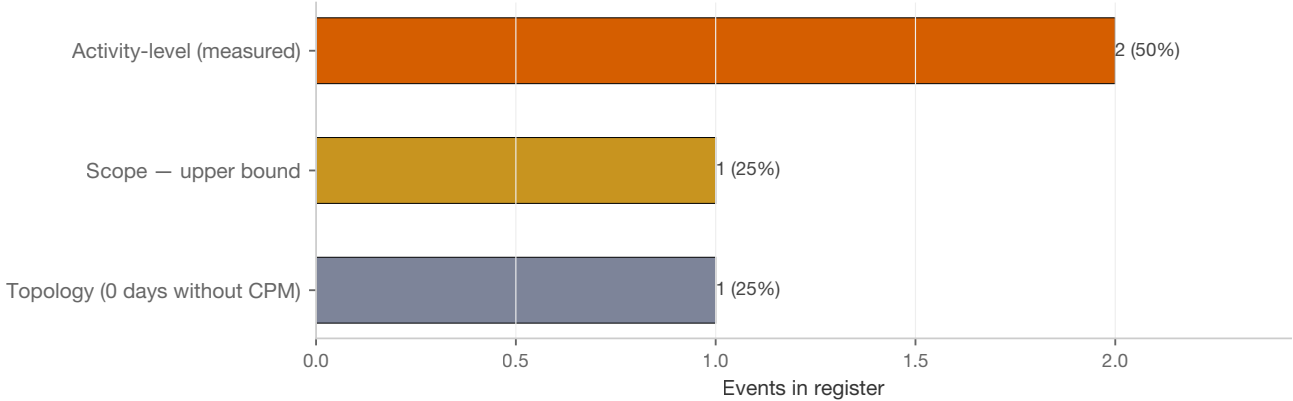
Positive delay values indicate delay to the project finish; negative values indicate acceleration. The TIA (wd) column carries the isolated Time Impact Analysis figure for each critical event — working-day movement of the project finish when the event's change is reverted in isolation (AACE MIP 3.4-shaped; CIOB §5.8.34–5.8.43). Events off the critical path show "—"; events whose category is not resolvable by the calendar- and constraint-agnostic trace (constraint / calendar changes) show "see note" — see METHODOLOGY §5a for the limitation. The Entitlement (prelim.) column carries a rule-based first-pass classification per SCL Protocol §10.4 (Employer risk / Contractor risk / Neutral / Concurrent / Not assessed). The first-pass reads activity descriptions for cause-of-delay keywords and falls back to category-default rules where no keyword fires. Verify every classification against the contract, the variation register, NCRs, and documentary evidence before relying on it in any formal correspondence — the final call is a legal / contractual determination this tool does not make.

Composition by category:

- Duration change: 2
- Logic change: 1
- Added scope: 1

REGISTER COMPOSITION

Register composition by impact basis (4 events)



Register split by the three Impact basis buckets defined above — Activity-level (measured), Scope (upper bound), and Topology (0 without CPM). Bar width shows the event count in each bucket; percentages sum to 100 across the register.

The full register for this period (4 events) is in the All Delay Events sheet of the Excel companion — filter the Period column to P2. The composition chart above and the cumulative waterfall below summarise the register's shape; the Brief layer's WBS-impact decomposition names the packages where action is warranted.

CUMULATIVE DELAY BY CATEGORY

Cumulative delay by category

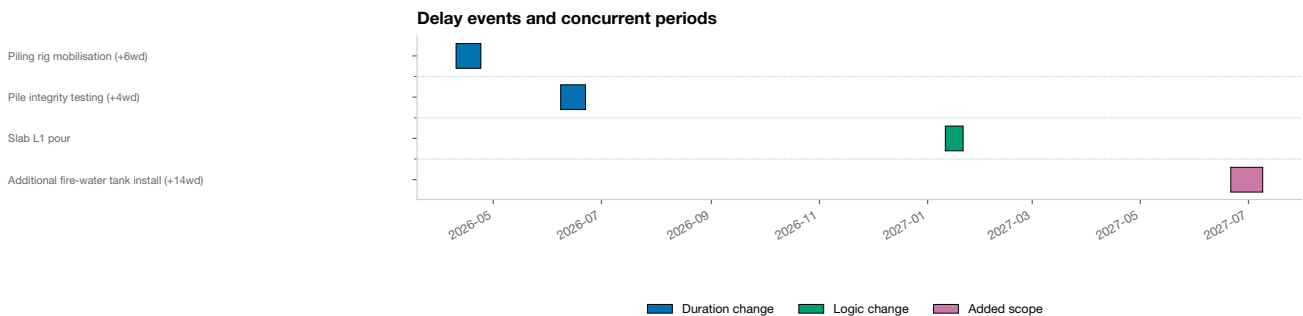
All 10 working days of critical delay come from a single category (Duration change). A breakdown chart is only meaningful when two or more categories contribute.

Stacked contribution of each category to the total engine-attributed delay. Excludes topology events whose impact is not quantified.

14 Period 2: Delay timeline

Timeline visualisation of delay events plotted against the project schedule. Events are coloured by category; concurrent-delay windows are shaded.

DELAY EVENTS AND CONCURRENT PERIODS



15 Period 2: Concurrent delay

This section lists time windows where two or more independent critical delay events overlap. The "net impact" column shows the delay days that flow through to the project completion date under the methodology named in the disclosure at the top of the report; the "absorbed" column shows delay days that would otherwise have been counted twice and are removed from the total.

The delay register contains 2 measurable critical events. None met the SCL §10.4 independence test for concurrency — the events are either causally linked in the schedule network (one activity is upstream of the other in either the baseline or the update) or their time windows do not overlap. This is a defensible zero, not an absence of analysis: SCL true concurrency requires two or more independent critical chains contending for the finish during the same period. Where a schedule shows a single dominant delay chain — for example a vendor procurement sequence or a commissioning chain — the events on that chain are causally linked and correctly excluded. Where two or more independent chains exist, this section will populate with the windows during which they overlap. Review the delay register and the schedule logic to confirm the chain structure is expected.

16 Period 3: What happened · Why · Where to investigate

COMPLETION MOVEMENT: -5 working days *Three measurements follow — they answer different questions and are not a reconciled figure.*

Traced critical path differs from stored flag on 68 activities

An independent forward/backward pass on the update schedule produced a different critical-path set to the file's stored Activity.is_critical flags on 68 activities. Common causes: stale total-float values (schedule not recalculated after the last edit), retained-logic vs progress-override calculation mode, or constraint-driven criticality the V1 trace does not model. The engine used the traced path for every delay attribution downstream of this section — divergences therefore propagate into the delay register, the criticality flags on specific events, and the Time Impact Analysis figures. Review the divergence before relying on the numbers.

What happened. The project-finish date pulled forward by +5 working days between the baseline and the update.

Why. The engine logged 2 activity-level events — progress behind plan, duration extensions, and scope additions — totalling -5 working days of summed activity-level slip. This figure is a measure of churn and a structural signal of the schedule, not project impact: each activity is counted independently, so parallel paths and float-absorbed slip both add to it. Read it as a sanity check against the project-finish movement above (a small total against a large movement points to topology drivers below) and as the denominator for the WBS rollup that follows.

Where to investigate. No topology edits were identified between the schedules.

The three figures above answer different questions and are not expected to reconcile. What happened is the authoritative project-level movement; Why is the summed activity-level slip across every event — a churn and structural signal, with each activity counted independently so parallel paths and float-absorbed slip both add to it; Where is a direction-of-travel signal for structural edits the engine cannot size without a calendar-aware Time Impact Analysis per event. See METHODOLOGY §5a.

QUANTIFIED DRIVERS (WORKING DAYS BY CATEGORY)

Category	Events	Working days
Duration changes	2	-5 working days

17 Period 3: Float-path risk

NEAR-CRITICAL PATHS: 3 sub-critical or parallel-critical, within 20 working days of the controlling path (primary driving path shown separately as rank 1; full list in the Excel appendix).

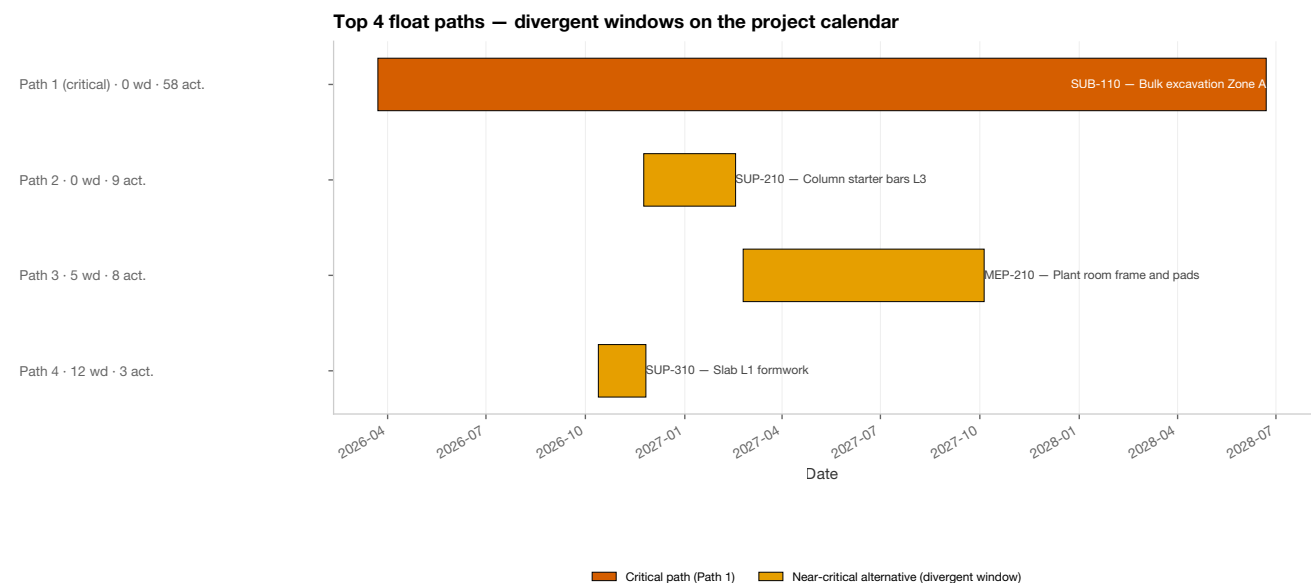
What this section answers: where else forward risk is concentrated besides the controlling chain. Each row is an alternative chain to the project endpoint that's within 20 working days of the critical path; any of them could become controlling with a small slip.

2 sub-critical paths within 20 working days of critical, plus 1 additional zero-float chain parallel to the primary driving path — a delay on any of them could shift the controlling path. Rank 1 in the table below is the primary critical path for reference.

TOP 4 FLOAT PATHS

#	Float	Activities	Envelope	Driving activity	Branches from
1	0 wd	58	2026-03-23 → 2028-06-22	SUB-110 — Bulk excavation Zone A	—
2	0 wd	42 (9 unique)	2026-11-24 → 2028-06-22	SUP-210 — Column starter bars L3	Path 1 at MEP-130
3	5 wd	30 (8 unique)	2027-02-24 → 2028-06-22	MEP-210 — Plant room frame and pads	Path 1 at FIT-160
4	12 wd	39 (3 unique)	2026-10-13 → 2028-06-22	SUP-310 — Slab L1 formwork	Path 2 at SUP-440

FLOAT-PATH OVERLAY — WHEN EACH NEAR-CRITICAL CHAIN LANDS



One bar per top-5 float path showing its divergent window — the activities unique to this path before it merges into a higher-priority chain. Background shading marks the critical-path envelope. Reads at a glance: are the alternatives spread across the programme or crowded into one window?

18 Period 3: Completion forecast and PF scenarios

EV-IMPLIED FINISH: Unstable — see PF rows *Recent EV trajectory does not support a single implied date — see the PF-scenario rows below for a productivity-bracketed range.*

Recent EV gradient is too unstable to extrapolate reliably — implied finish is 378 calendar days later than stored (47% of remaining schedule), beyond the 30% envelope at which the recent gradient is usually a phase transition rather than a sustainable productivity trend. The single-number EV-implied finish has been suppressed; the productivity-factor scenarios below give a defensible bracketed range against the stored finish (METHODOLOGY §5b.5).

IMPLIED PC DATES

Scenario	PF	Implied PC	vs stored
Current trajectory	from EV	—	see PF rows below
Conservative	85%	2028-12-14	+175 days vs stored
Realistic ambition	95%	2028-09-07	+77 days vs stored
Stored (planned)	100%	2028-06-22	matches stored

Indicative only. The PF rows apply the named productivity factor to remaining durations on labour activities (procurement / milestones are not scaled) and re-trace the longest path. They do not re-level resources, re-apply calendars, or re-optimize logic — use alongside a native P6 re-schedule for any contractual decision (METHODOLOGY §5b).

19 Period 3: Delay and change register

IDENTIFIED CHANGES: 2

The register below lists every identified change between baseline and update. Each row carries an Impact basis tag (matching the chart that follows) so the reader can immediately see whether its delay-days value is a directly-measured figure or a placeholder:

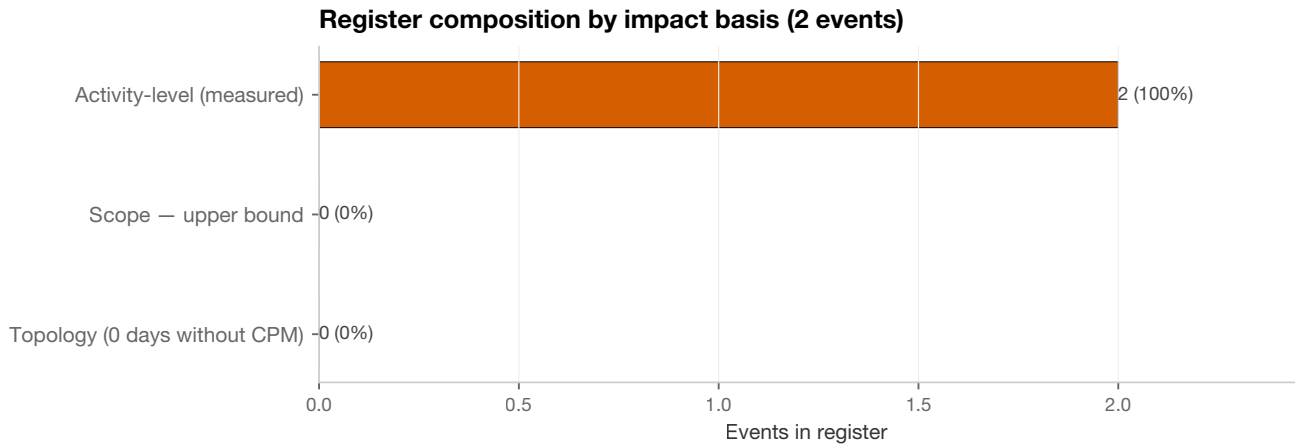
- Activity-level (measured) — Duration change and Progress shortfall events. The delay-days value is a directly-measured working-day figure (update duration minus baseline duration for duration changes, or days-behind-current-plan for progress events).
- Scope — upper bound — Added scope and Removed scope events. The activity's own planned duration is shown as an upper bound; the real delay contribution depends on whether the activity sits serially on the critical path, which this engine does not verify per event.
- Topology (engine-unresolved) — Logic change, Constraint change, and Calendar change events. These carry a 0 delay-days value because the engine cannot size each event's isolated impact without a calendar-aware Time Impact Analysis per event (METHODOLOGY §5a).

Positive delay values indicate delay to the project finish; negative values indicate acceleration. The TIA (wd) column carries the isolated Time Impact Analysis figure for each critical event — working-day movement of the project finish when the event's change is reverted in isolation (AACE MIP 3.4-shaped; CIOB §5.8.34–5.8.43). Events off the critical path show "—"; events whose category is not resolvable by the calendar- and constraint-agnostic trace (constraint / calendar changes) show "see note" — see METHODOLOGY §5a for the limitation. The Entitlement (prelim.) column carries a rule-based first-pass classification per SCL Protocol §10.4 (Employer risk / Contractor risk / Neutral / Concurrent / Not assessed). The first-pass reads activity descriptions for cause-of-delay keywords and falls back to category-default rules where no keyword fires. Verify every classification against the contract, the variation register, NCRs, and documentary evidence before relying on it in any formal correspondence — the final call is a legal / contractual determination this tool does not make.

Composition by category:

- Duration change: 2

REGISTER COMPOSITION



Register split by the three Impact basis buckets defined above — Activity-level (measured), Scope (upper bound), and Topology (0 without CPM). Bar width shows the event count in each bucket; percentages sum to 100 across the register.

The full register for this period (2 events) is in the All Delay Events sheet of the Excel companion — filter the Period column to P3. The composition chart above and the cumulative waterfall below summarise the register's shape; the Brief layer's WBS-impact decomposition names the packages where action is warranted.

CUMULATIVE DELAY BY CATEGORY

Cumulative delay by category

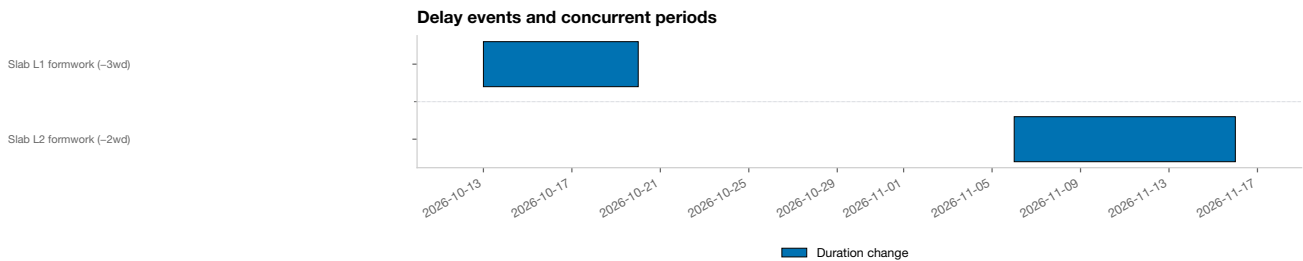
No critical delay contributions to plot

Stacked contribution of each category to the total engine-attributed delay. Excludes topology events whose impact is not quantified.

20 Period 3: Delay timeline

Timeline visualisation of delay events plotted against the project schedule. Events are coloured by category; concurrent-delay windows are shaded.

DELAY EVENTS AND CONCURRENT PERIODS



21 Period 3: Concurrent delay

This section lists time windows where two or more independent critical delay events overlap. The "net impact" column shows the delay days that flow through to the project completion date under the methodology named in the disclosure at the top of the report; the "absorbed" column shows delay days that would otherwise have been counted twice and are removed from the total.

The delay register contains 1 critical event(s), of which 1 carry a measurable delay in days.

Concurrent delay analysis requires at least two independent, measurable critical events overlapping in time.

FULL FORENSIC RECORD

Forensic appendix

Full evidence, registers, methodology, standards citations.

22 Methodology

This report applies the same Delay Analysis treatment to each consecutive pair of schedules in the series and aggregates the results. Two cumulative figures appear in the Brief layer's cumulative delay profile and the distinction between them is load-bearing.

Observed cumulative delay is derived from the project-finish date stored on each schedule, measured in working days from the first schedule's finish using the first schedule's default calendar. It reflects what actually happened to the completion date and is the authoritative top-line figure for the series. It is independent of how the engine attributes delay to specific events.

Pairwise cumulative delay is the running sum of the engine-attributed net delay for each consecutive pair of schedules. Net delay subtracts concurrent absorption per the named concurrency methodology, so the pairwise sum answers a different question than the observed movement: it shows what share of the movement the engine could attribute to specific delay events at the activity level. Where the two diverge materially, treat the observed figure as authoritative and read the per-period decomposition (in the appendix) for the structural shifts the engine could not size without a calendar-aware Time Impact Analysis per event (METHODOLOGY §5a).

Concurrent delay handling. Each period applies the named concurrency strategy to decide which overlapping critical events drive the period's net delay. The strategy is fixed across the series — switching mid-series would invalidate the running pairwise sum. The disclosure at the top of the report names the strategy in force; review the alternative listed there if the contract calls for a different approach.

Concurrency criticality test (approximation note). Within each period, criticality for concurrency-candidate selection is evaluated as the union of baseline-side and update-side critical-path membership. This is a snapshot-level approximation of "critical during the overlap window" — a precise window-level test would require a CPM walk per overlap interval, which is outside V1 scope. The approximation will under-detect concurrency in cases where an activity was on the critical path only during a sub-window of the overlap and not at either snapshot date; this is a known limitation.

As-built critical path. This V1 series report does not produce a single stitched as-built critical path across the update series. The substitute is to read each period's delay register (in this Appendix), where critical events are flagged in the Critical column and represent the chain of activities driving the finish during that period. A reader can stitch the as-built CP manually by tracking which activity IDs appear as critical in successive periods. Producing a single stitched as-built CP timeline as a Brief-layer section is on the V1.1 roadmap.

Per-period appendix sections. Each period below emits the full Comparison-report appendix view: three-number decomposition, scope-change WBS clustering, float-path analysis on the post-period schedule, PF completion scenarios, the full delay register with cumulative waterfall, the delay timeline, and the concurrent-delay analysis. Section ids and chart ids are namespaced by period number so each period stands on its own.