



فرآیند جامع آنالیز تاخیرات در پروژه

بخش سوم:

مقدمه: آنالیز تاخیرات از نگاه قراردادی

ارائه دهنده:

سید محمدرضا علوی پور

(PhD, PMP, CMIT)

دانشگاه Illinois Tech آمریکا

What we will learn?

- ❑ Determination of delays
 - ❖ Skills required for designer (AE) /CM related to delays analysis
 - ❖ Sources of delay analysis
 - ❖ AACE International Recommended Practice No. 29R-03
 - ❖ SCL Protocol
- ❑ SCL Delay Protocol
 - ❖ Delay and disruption
 - ❖ 22 Core Principles
 - ❖ Sample of contract provisions
- ❑ Types of construction delays
 - ❖ Critical vs. non-critical
 - ❖ Excusable
 - ❖ Non-excusable
 - ❖ Compensable vs. non-compensable
 - ❖ Sample of contract provisions
- ❑ Some of main reasons leading to the submission of claims

Determination of Delays



Determination of delays

❑ Initial 5 Step Process

1. Determine the **critical path delays/improvements** of the project
2. Determine **what caused** each critical path delay/improvement
3. Determine **who** was **responsible** for each critical path delay/improvement
4. Analyze the contract
5. Analyze the delays using common methods

Do not start up by already saying who is **responsible**!
First and foremost: Determine **when the delays occur and **where** the critical path delays.**

❑ Key practices:

- ➡ Careful planning and preparation
- ➡ Careful review
- ➡ Accurate reporting and updating

Garbage In Is Garbage Out



Determination of delays

4. Analyze the contract

- ❖ What it says about delays?
- ❖ How are you supposed to document?
- ❖ What type of analysis do you need to provide?
- ❖ What it says about weather, how do you implement that into the contract, etc?

Skills required for Designer (AE) / CM related to delay analysis

The *Royal Brompton Hospital NHS v Watkins Gray International (UK) (2000)* identified that architect needs three basic skills:

1. **Construction knowledge**
2. **Understanding of programming techniques**
 - ❖ (schedule, plan, delay analysis methods, etc.)
3. **Contractual awareness**
 - ❖ The architect **must understand** the **relevant contractual provisions** and be **up-to-date on decided cases**.

Claims are inevitable on most large-scale construction projects



Sources of delay analysis

❑ Two primary sources:

1. International Recommended Practice No. 29R-03 (2011)

- ❖ American Association of Cost Engineering (AACE) International

2. SCL Delay Protocol (2nd Edition published in Feb 2017)

- ❖ Society of Construction Law Delay and Disruption Protocol

❑ دو منبع رایج در ایران

1. بخشنامه ۵۰۹۰

2. بخشنامه ۱۳۰۰

AACE International Recommended Practice No. 29R-03

❑ Forensic schedule analysis

- ❖ Published in **2011**.
- ❖ The **purpose** is to provide a **unifying reference** of basic **technical** principles and **guidelines** for the application of **critical path method (CPM) scheduling** in **forensic schedule analysis**.
- ❖ The **RP** discusses **certain methods** of **schedule delay analysis**, **irrespective** of whether these methods have been deemed **acceptable** or **unacceptable** by **courts** or **government boards** in various **countries around the globe**.
- ❖ This RP is **not** intended to establish a **standard of practice**, **nor** is it intended to be a prescriptive document applied **without exception**.
- ❖ While the **recommended protocols** are intended to **aid** the practitioner in creating a competent work product it may, in **some cases**, **require additional** or **fewer steps**.



SCL Delay Protocol

- ❑ **2nd edition** published in **2017**
- ❑ Published by the **Society of Construction Law (UK)**
- ❑ The **purpose** is to provide **guidance** on common **delay** and **disruption** when **one party wishes to**:
 1. Recover an **extension of time (EOT)**
 2. **Compensation** for the **additional time** spend and **additional resources** used
- ❑ The purpose is to **avoid unnecessary disputes**
- ❑ Focus is to provide **practical** and **principled guidance** on issues that can be applied in **relation to all projects to**:
 1. **Avoid disputes**
 2. **Limit** the **costs** of disputes if **disputes** are **unavoidable**



SCL Delay Protocol

- ❑ **Protocol** identifies **various options**, leaving people to choose based on **their needs** (e.g., complexity of project, nature of the project, etc.)
- ❑ It is **not** the **contract document**, nor the **international law**.
- ❑ This **guidance** is intended to be generally **applicable** to **any contract**.
- ❑ It is only a **good practice**, not best practice.
- ❑ Users of the Protocol should **apply its recommendations** with **common sense**.
- ❑ The Protocol is intended to be a **balanced document**, reflecting equally the **interests of all parties** to the construction process.



SCL Delay Protocol

❑ Structure of the 2nd edition

- (a) Core Principles: a summary of the 22 Core Principles;
- (b) Guidance Part A: an overview of delay, disruption and acceleration concepts;
- (c) Guidance Part B: guidance on each of the 22 Core Principles;
- (d) Guidance Part C: guidance on other financial heads of claim that often arise in the context of delay and disruption;
- (e) Appendix A: definitions and glossary for both defined terms in the Protocol and terms commonly used in relation to delay and disruption; and
- (f) Appendix B: lists of the typical records within each of the six categories of records relevant to delay and disruption identified in the guidance to Core Principle 1.

SCL Delay Protocol

SCL Delay Protocol – Delay and disruption

- ❑ The **construction industry** **often associates** delay and disruption.
- ❑ While they are both **effects** of events,
 1. **Impacts** on the works are **different**,
 2. **Events** may be governed by **separate provisions of the contract** and governing **law**,
 3. They may require **different types of substantiation** and
 4. They will lead to **different remedies**.
 - ❖ Having said that, the **monetary consequences** of delay and disruption may **overlap** and, further,
delay can lead to disruption and,
vice versa, disruption can lead to delay.



SCL Delay Protocol – Delay

- ❑ In referring to ‘delay’, the Protocol is concerned with **time** –
work activities taking **longer than planned**.
- ❑ In large part, the focus is on delay to the **completion of the works** –
in other words, **critical delay**.
- ❑ Hence, ‘delay’ is concerned with an **analysis of time**.
 - ❖ This type of analysis is necessary to **support** an **Extension of Time (EOT) claim** by the Contractor.

Does it relate to cost?

SCL Delay Protocol – Delay

- ❑ Of course, **time** means **money**.
- ❑ Typical **monetary claims** by a Contractor

that are dependent upon an **analysis of time** (i.e. a delay analysis)

are as follows (subject to the **terms of the contract** and depending on the **specific circumstances**):

- Relief from LDs** (with the **inverse claim by an employer** for LDs);
- Compensation for time-related costs**; and
- If the contractor has taken **acceleration steps** in an attempt to **mitigate the delay**, **compensation** for those steps.

liquidated and ascertained damages, liquidated damages, LADs, LDs A fixed sum, usually per week or per day, written into the contract as being payable by the Contractor in the event that the works are not completed by the contract completion date (original or extended).	خسارت‌های تسویه نشده و تایید شده، خسارات معوق، LAD ها و LD ها یک مبلغ ثابت، معمولاً هفتگی یا روزانه، که در قرارداد باید توسط پیمانکار و در صورتی پرداخت شود که کارها تا تاریخ تکمیل قرارداد تمام نشده باشند (مدت اصلی یا تمدید آن).
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SCL Delay Protocol – Disruption

❑ In referring to ‘disruption’,

the Protocol is concerned with disturbance, hindrance or interruption to a **Contractor’s normal working methods**, resulting in **lower productivity or efficiency** in the execution of particular **work activities**.

Disruption could lead to...



SCL Delay Protocol – Disruption

❑ Work that is carried out with a lower than reasonably anticipated productivity rate (i.e. which is disrupted) will **lead to**:

(a) activity **delay**; or

(b) the need for **acceleration**, such as increasing resources, work faces or working hours, to avoid activity delay; or

(c) A **combination** of both – and therefore, in each case, loss and expense.

❖ Hence, ‘**disruption**’ is concerned with an **analysis** of the **productivity** of work activities,

irrespective of whether those activities are on the **critical path** to completion of the works.



SCL Delay Protocol – Delay and Disruption

- ❑ Delay and disruption are **inherently interrelated**.
- ❑ A **loss of productivity** (i.e. disruption) can **lead to delay** and, if the **impacted activities** are on the **critical path**, that can be **critical delay**.
 - ❖ Hence, the Contractor may rely upon a **disruption analysis** to support a **critical delay claim** in addition to its **delay analysis**.



SCL Delay Protocol – Core principles

❑ There are 22 core principles in SCL Protocol

1. Programme and records
2. Purpose of extension of time (EOT)
3. Contractual procedure requirements
4. Do not 'wait and see' regarding impact of delay events (contemporaneous analysis)
5. Procedure for granting EOT
6. Effect of delay
7. Incremental review of EOT
8. Float as it relates to time
9. Identification of float
10. Concurrent delay – effect on entitlement to EOT
11. Analysis time – distant from the delay event
12. Link between EOT and compensation
13. Early completion as it relates to compensation
14. Concurrent delay – effect on entitlement to compensation for prolongation
15. Mitigation of delay and mitigation of loss



SCL Delay Protocol – Core principles

❑ There are 22 core principles in SCL Protocol

- 16. Acceleration
- 17. Global claims
- 18. Disruption claims
- 19. Valuation of variations
- 20. Basis of calculation of compensation for prolongation
- 21. Relevance of tender allowance
- 22. Period for evaluation of compensation

SCL Delay Protocol – CP 1: Programme and records

- ❑ Contracting parties should reach a clear agreement on
 1. The **type of records** to be kept and
 2. **Allocation of the necessary resources** to meet that agreement
- ❑ The programme should be updated to record:
 - ❖ Actual progress,
 - ❖ Variations,
 - ❖ Change of logic,
 - ❖ Methods and sequences,
 - ❖ Mitigation or acceleration measures and
 - ❖ Any EOTs granted

Your contract should include procedures for all of these records

WE TALKED THIS IN DOCUMENT MANAGEMENT COURSE

HOWEVER, WE WOULD HAVE A QUICK REVIEW LATER

The **programme** means “schedule” in SCL Protocol.

SCL Delay Protocol – CP 1: Programme and records

۱۸-ب)

پیمانکار متعهد است که سازمان، روش اجرا و برنامه زمانی تفصیلی اجرای کار را طبق نظر مهندس مشاور بر اساس نقشه‌های موجود. برنامه زمانی کلی تهیه کند و ظرف یک ماه از تاریخ مبادله پیمان یا مدت دیگری که در اسناد و مدارک پیمان تعیین شده است، تسلیم مهندس مشاور نماید تا پس از اصلاح و تصویب کارفرما برای اجرا به پیمانکار ابلاغ شود. اگر در اسناد و مدارک پیمان، جزئیاتی برای چگونگی تهیه برنامه زمانی تفصیلی و بهنگام کردن آن تهیه شده باشد، پیمانکار ملزم به رعایت آن می‌باشد.

۱۸-ه)

پیمانکار متعهد است که در پایان هر ماه، گزارش کامل کارهای انجام شده در آن ماه را تهیه نماید. شکل و چگونگی تهیه گزارش را مهندس مشاور تهیه می‌کند. این گزارش، شامل مقدار و درصد فعالیت‌های انجام شده، میزان پیشرفت یا تأخیر نسبت به برنامه زمانی تفصیلی، مشکلات و موانع اجرایی، نوع و مقدار مصالح و تجهیزات وارد شده به کارگاه، تعداد و نوع ماشین‌آلات موجود و آماده به کار، تعداد و تخصص نیروی انسانی موجود و دیگر اطلاعات لازم می‌باشد. در صورتی که جزئیات دیگری برای چگونگی تهیه گزارش پیشرفت کار در اسناد و مدارک پیمان تعیین شده باشد، پیمانکار موظف به رعایت آن است.

SCL Delay Protocol – CP 2: Purpose of EOT

❑ The **benefit** of an **EOT** to the **contractor** is to:

❖ **Relieve** him/her of **liability** for **damages** for delay (usually **liquidated damages**).

✓ **LDs** means **liquidated damages** in **SCL Protocol**.

❑ The **benefit** of an **EOT** for the **employer (owner)** is that

1. It establishes a **new contract completion date**.
2. It **prevents time** for completion of the works **becoming “at large.”**
3. It allows for **coordination / planning** of its **own activities**, such as **training operational staff**.

**Contracts should separate EOT provisions
from Compensation provisions**

SCL Delay Protocol – CP 3: Contractual procedural requirements

❑ **Contractual procedural requirements** such as **contractor's obligations** relating to:

- ❖ Notices (e.g., change orders issued from Owner)
- ❖ Time (substantial completion, final completion, submissions, etc.)
- ❖ Proof and assessment to delay events
- ❖ Etc.

Contracts should include provisions related to contractor's obligation

SCL Delay Protocol – CP 3: Contractual procedural requirements

❑ Most if not all the standard forms of contract contain obligations on the part of contractor to give notice to the CA (AE) as soon as an Employer Risk Event occurs that the contractor considers entitles it to an EOT.

1. Some **require notice** of the occurrence irrespective of whether it is **likely to affect** the contract **completion date**.

✓ Delays occurred, but we do not know whether it affects the completion date.

2. Some **require notice** of all event that adversely affect progress irrespective of liability or consequence.

✓ All events, whether occurs or is going to occur. It affected or may affect.

**In some standard form these notices are
pre-conditions to entitlement**

SCL Delay Protocol – CP 4: Contemporaneous analysis

- ❑ Do not “wait and see” regarding impact of delay events (**contemporaneous analysis**)
- ❑ The **contractor** potentially will be entitled to an **EOT** only for those events or **causes** of delay in respect of which the **employer (owner)** has assumed **risk** and **responsibility** that **impact** the **critical path**.
 - ❖ “**Employer Risk Events**” is an event or cause of **delay** or **disruption** which under the contract is at the **risk and responsibility** of the Employer.
- ❑ Each **EOT application** should be assessed **as soon as possible**, not later than one **month** after it has been **received**.

Why?

SCL Delay Protocol – CP 4: Contemporaneous analysis

- ❑ A ‘wait and see’ approach to assessing EOT is **discouraged**.
 1. This allows **appropriate mitigation measures** to be considered by the project participants so as to **limit** the **impact of the delay** event.
 2. It also provides the Employer and the Contractor with **clarity** around the **contract completion date** so that they can **understand** their **risks** and **obligations** and **act accordingly**.

What is the responsibility of CM or CA here?
Remember the advanced planning and scheduling course?

SCL Delay Protocol – CP 4: Contemporaneous analysis

❑ One of the key responsibilities of the CM is to

advise the **owner** regarding the **impact of change orders** on contract completion dates and other milestone dates.

❖ Like the cost estimates prepared for **change orders**,

such analysis can provide the owner with a forward looking analysis of the estimated time impact due to **change orders**.

Time extensions should be given when due and should not be withheld to the end of the project.

Change orders should address both the cost and the time extensions due as a result of the

Contracts should include provisions as to how the contractor should perform contemporaneous analysis

WE WILL TALK MORE IN DEPTH LATER IN NEXT SESSIONS

SCL Delay Protocol – CP 4: Contemporaneous analysis

سوال:

آیا بر اساس نشریه ۴۳۱۱ باید لایحه تاخیرات در انتهای پروژه ارائه شود؟

SCL Delay Protocol – CP 4: Contemporaneous analysis

۱۸-هـ)

پیمانکار متعهد است که در پایان هر ماه، گزارش کامل کارهای انجام شده در آن ماه را تهیه نماید. شکل و چگونگی تهیه گزارش را مهندس مشاور تهیه می‌کند. این گزارش، شامل مقدار و درصد فعالیت‌های انجام شده، میزان پیشرفت یا تأخیر نسبت به برنامه زمانی تفصیلی، مشکلات و موانع اجرایی، نوع و مقدار مصالح و تجهیزات وارد شده به کارگاه، تعداد و نوع ماشین‌آلات موجود و آماده به کار، تعداد و تخصص نیروی انسانی موجود و دیگر اطلاعات لازم می‌باشد. در صورتی که جزییات دیگری برای چگونگی تهیه گزارش پیشرفت کار در اسناد و مدارک پیمان تعیین شده باشد، پیمانکار موظف به رعایت آن است.

SCL Delay Protocol – CP 4: Contemporaneous analysis

(۳۰-الف)

در صورت وقوع هریک از موارد زیر که موجب افزایش مدت اجرای کار شود، پیمانکار می‌تواند درخواست تمدید مدت پیمان را بنماید. پیمانکار درخواست تمدید مدت پیمان را با ارائه محاسبات و دلایل توجیهی، به مهندس مشاور تسلیم می‌کند و مهندس مشاور پس از بررسی و تأیید، مراتب را برای اتخاذ تصمیم به کارفرما گزارش می‌کند و سپس نتیجه تصمیم کارفرما را به پیمانکار ابلاغ می‌نماید.

(۳۰-الف-۱)

در صورتیکه طبق بندهای "الف" و "ج" ماده ۲۹، مبلغ پیمان تغییر کند.

(۳۰-الف-۲)

هرگاه به دستور کارفرما یا مهندس مشاور، نقشه‌های اجرایی یا مشخصات فنی تغییر اساسی کند.

(۳۰-الف-۳)

هرگاه کارفرما در تحویل کارگاه، ابلاغ دستور کارها یا نقشه‌ها و تحویل مصالحی که تهیه آن‌ها به عهده اوست، تأخیر کند. تأخیر در ابلاغ دستور کارها و نقشه‌ها به شرطی مشمول این بند است که پیمانکار با توجه به برنامه زمانی تفصیلی آن‌ها را از مهندس مشاور درخواست کرده باشد.

(۳۰-الف-۴)

اگر در تحویل مصالحی که فروش آن‌ها لزوماً باید با حواله کارفرما صورت گیرد تأخیر ایجاد شود، به شرطی که پیمانکار با توجه به برنامه زمانی تفصیلی برای تهیه آن‌ها به موقع اقدام کرده باشد.

SCL Delay Protocol – CP 4: Contemporaneous analysis

(۳۰-الف-۵)

در موارد حوادث قهری و همچنین در موارد مربوط به کشف اشیای عتیقه و آثار تاریخی که در مواد ۲۶ و ۴۳ پیش‌بینی شده است.

(۳۰-الف-۶)

هرگاه محدودیت برای ورود مصالح و تجهیزات طبق بند "د" ماده ۲۰ پیش‌آید.

(۳۰-الف-۷)

در صورتیکه کار طبق ماده ۴۹ به حالت تعلیق درآید.

(۳۰-الف-۸)

در صورتیکه قوانین و مقررات جدیدی وضع شود که در تغییر مدت اجرای کار مؤثر باشد.

(۳۰-الف-۹)

هرگاه کارفرما نتواند تعهدات مالی خود را در مواعدهای درج شده در اسناد و مدارک پیمان انجام دهد.

(۳۰-الف-۱۰)

موارد دیگری که به تشخیص کارفرما خارج از قصور پیمانکار باشد.

SCL Delay Protocol – CP 4: Contemporaneous analysis

سوال:

آیا "میتواند" به معنای "اختیار" است؟

SCL Delay Protocol – CP 4: Contemporaneous analysis

<https://clc1int.com/eot-mom/>

آیا «می‌تواند» به معنای «اختیار» است؟

لیکن، برخی از صاحب‌نظران حقوق پیمان، از لفظ «می‌تواند»، معنی «اختیار» را افاده نموده‌اند و بیان داشتند که، واژه «می‌تواند» که، در بند (الف) ماده ۳۰ ش.ع.پ به کار رفته، دلیل بر تخییری بودن درخواست پیمانکار، جهت تمدید مدّت پیمان است؛ به عبارت دیگر، در نتیجه‌ی استنباط ایشان، بایستی قائل به آن باشیم که، پیمانکار، تکلیفی به ارائه درخواست تمدید پیمان، در صورت اتمام مدّت پیمان و عدم اتمام کار ندارد!

اما، چنین برداشتی از لفظ «می‌تواند»، بر اساس اصول استنباط، صحیح به نظر نمی‌رسد؛ چه اینکه، عبارت «پیمانکار، می‌تواند درخواست تمدید مدّت پیمان را بنماید» در اصطلاح اصولیین، جزای شرط می‌باشد. با کالبدشکافی منطوق بند (الف) ماده ۳۰ ش.ع.پ، در می‌یابیم که، عبارت «در صورت وقوع هر یک از موارد زیر ...» نیز در اصطلاح اصولیین، شرط است. لازم به ذکر است، عبارت «.. که موجب افزایش مدّت اجرای کار شود» وصف شرط مذکور خواهد بود. و مفهوم مخالف شرط^{۱۰} بدین صورت است که، «در صورت عدم وقوع هر یک از موارد زیر ... پیمانکار، نمی‌تواند درخواست تمدید مدّت پیمان نماید! پس افاده‌ی معنای اختیار، از لفظ می‌تواند در این ماده، ناصواب است.

از طرفی، ویژگی خاصّ تعهدات پیمانکاری احداث که، از نوع تعهد به نتیجه^{۱۱} می‌باشد نیز، نظر نگارنده این مقاله را، تقویت می‌نماید. هر چند آخر الامر، آن دسته از نویسندگان محترم نیز، به تکلیف پیمانکار اشاره نمودند، لیکن، استدلال آنها گواه بر افاده‌ی معنای تخییر، از لفظ می‌تواند در نزد ایشان دارد.^{۱۲} با اوصاف مذکور، در لزوم درخواست تمدید مدّت پیمان، همراه با ارائه لایحه تاخیرات از سوی پیمانکار، تردیدی نیست.

SCL Delay Protocol – CP 4: Contemporaneous analysis

سوال:

آیا بر اساس نشریه ۴۳۱۱ مشاور میتواند درخواست کاهش زمان را بر اساس تغییرات بنماید؟

SCL Delay Protocol – CP 4: Contemporaneous analysis

۳۰-ب)

اگر وقوع برخی از موارد درج شده در بند "الف"، موجب کاهش مدت پیمان شود، مهندس مشاور با کسب نظر پیمانکار، کاهش مدت پیمان را تعیین می‌کند و مراتب را برای اتخاذ تصمیم به کارفرما گزارش می‌نماید، و سپس نتیجه را به پیمانکار ابلاغ می‌کند.

SCL Delay Protocol – CP 5: Procedure for granting EOT

- ❑ Employer Risk Event should be **predicted** to the extent it is **possible** using **CP 4**.
- ❑ The **analysis** should **start before** a position of considering whether the **contractor** is **liable** for **liquidated damages** or **relieved** from it (CP 4).
 - ❖ This assessment should be based upon an **appropriate delay analysis**
- ❑ If Employer Risk Event **impacts** the **critical path** of the works and thus **extends** the contract completion date, the **procedure for granting EOT** defines how extension of time should be given to the **contractor**.

Contracts should include provisions as to what procedure should be used if EOT needs to be granted

SCL Delay Protocol – CP 5: Procedure for granting EOT

- ❑ If CA (AE) does **not make a determination** of the EOT entitlement **when EOT is in fact due**, there is a **danger** that the **EOT mechanism may fail**,
leaving the contractor **only obliged** to **finish the work** within a **reasonable time**.

For this reason, **construction contracts** should **contain provisions** entitling the CA (AE) to **determine an EOT**,

even if

contractor has **not applied** for one, **or** has **applied** with **insufficient**
information.

What questions may raised here?

Remember the advanced planning and scheduling course?



SCL Delay Protocol – CP 5: Procedure for granting EOT

How the EOT should be requested?

What should be **included** in narrative report?

What is the role of **CM** here?

How the CM should review the analysis?

Should the **CM** perform an independent analysis?

What should **CM** do once the review completed?

What is the owner's role here?

What should **CM** act in the case of delays?

SCL Delay Protocol – CP 5: Procedure for granting EOT

❑ An EOT clause should be **drafted properly**.

- ❖ Wording such as **“any other special circumstances”** is general and will be **dismissed** by many courts.
- ❖ Such an EOT clause should also **explain** the **consequences** of the **contractor’s failure** to **comply** with any **procedural requirements** in **applying** for an EOT.

❑ This procedure and the process to **predict** whether the **Employer Risk Event** results in **granting EOT** to the contractor needs to **consider CP 8 (float ownership)**.

SCL Delay Protocol – CP 5: Procedure for granting EOT

۳۰-ج)

در پایان مدت اولیه پیمان یا هر تمدید مدت پیمان، اگر کار به اتمام نرسیده باشد، مهندس مشاور با کسب نظر پیمانکار و با توجه به موارد تعیین شده در بند "الف" علل تأخیر کار را بررسی می‌کند و میزان مدت مجاز و غیرمجاز آن را با توافق پیمانکار تعیین می‌نماید و نتیجه را به کارفرما گزارش می‌کند، و سپس نظر کارفرما را در مورد میزان مجاز یا غیرمجاز تأخیر کار به پیمانکار اعلام می‌کند و معادل مدت تأخیر مجاز، مدت پیمان را تمدید می‌نماید.

سوال:

آیا بر اساس نشریه ۴۳۱۱ مشاور میتواند بدون بررسی دلایل تاخیر و لایحه تاخیرات پیمان را تمدید نموده و در انتها به بررسی دقیقتر آن پردازد؟

SCL Delay Protocol – CP 5: Procedure for granting EOT

□ بدون بررسی تاخیرات و تعیین مدت مجاز

کار، تمدید مدت پیمان امکانپذیر

نمیباشد.

□ اگر مدت پیمان بدون این موضوع تایید

شود، به خاطر وجود امارت قانونی، دعوی

منقلب شده و دلیل ظنی مبنی بر وجود

تاخیرات مجاز به نفع پیمانکار محقق گردیده

و بار اثبات دعوی از روی دوش پیمانکار

برداشته میشه و روی دوش کارفرما قرار

میگیرد.

□ تو این حالت کارفرما تنها با توسل به دلیل

"قطعی" میتونه غیر مجاز بودن تاخیرات را

اثبات نماید.



ریاست جمهوری

سازمان مدیریت و برنامه ریزی کشور

شماره: ۱۶۵۳۵۵

تاریخ: ۱۳۹۳/۱۲/۱۷

بسم:

بسم تعالی

شرکت پارس سازان فرابین

با سلام؛

بازگشت به نامه شماره ۹۳/۳۰ مورخ ۱۳۹۳/۱۰/۲۱ به آگاهی می‌رساند:

در صورتی که شرایط عمومی پیمان که طی بخشنامه شماره ۵۴/۸۴۲-۱۰۲/۱۰۸۸-۵۴ مورخ ۱۳۷۸/۳/۳ ابلاغ شده مورد عمل در پیمان باشد، در بند «ج» ماده ۳۰ آن اعلام گردیده، در پایان مدت اولیه پیمان یا هر تمدید مدت پیمان، اگر کار به اتمام نرسیده باشد، مهندس مشاور با کسب نظر پیمانکار و باتوجه به موارد تعیین شده در بند الف ماده ۳۰ شرایط عمومی پیمان، علل تأخیر کار را بررسی می‌کند و میزان مدت مجاز و غیرمجاز آن را با توافق پیمانکار تعیین می‌نماید و نتیجه را به کارفرما گزارش می‌کند و سپس نظر کارفرما را در مورد میزان مجاز یا غیرمجاز تأخیر کار به پیمانکار اعلام می‌کند و معادل مدت تأخیر مجاز مدت پیمان را تمدید می‌نماید. بنابراین بدون رسیدگی به تأخیرات و تعیین مدت مجاز کار، تمدید مدت پیمان امکان‌پذیر نمی‌باشد.

پس از وصول پاسخ به مراتب ذکر شده در فوق، موضوع بررسی و پاسخ لازم به سوال مطروحه ارایه خواهد شد.

غلامحسین حمزه مصطفوی
رئیس امور نظام فنی

۱۳۹۳/۱۲/۱۷

SCL Delay Protocol – CP 5: Procedure for granting EOT

<https://clc1int.com/eot-mom/>

لیکن، بعضاً، مهندس مشاور، با کسب نظر از کارفرما، نسبت به تمدید مدّت پیمان، بدون رسیدگی به تأخیرات پیمانکار، اقدام و در انتهای ابلاغیه تمدید هم، مرسوم است، جملاتی از این دست مرقوم می‌نماید که،

این نامه، صرفاً جهت ارائه به سازمان تامین اجتماعی^۶ به منظور فراهم نمودن امکان تحویل لیست بیمه کارکنان پیمانکار، یا در جهت تسهیل در تمدید بیمه نامه‌های^۷ پیمان (اعم از تمام خطر نصب و مسئولیت مدنی) صادر گردیده و النهایه، به قید این جمله که، رسیدگی به تأخیرات مجاز و غیرمجاز، در پایان کار (زمان تحویل پروژه) بررسی خواهد شد، اکتفاء می‌گردد.



ذهنیت غالب نیز، بر این امر استوار است که، همین جمله‌ها کافیست تا، به اصطلاح، بار اثبات جواز تأخیرات، تا انتهای کار، بر عهده پیمانکار قرار گیرد. اما حقیقت امر، این نیست؛

چنانچه، به محض وقوع رویداد ابلاغ تمدید مدّت پیمان، با شرایط پیش‌گفته، آثار خاصی از حیث حقوقی بر پیمان مترتب می‌گردد؛ یعنی، از نظر حقوقی، اماره‌ی مجاز بودن تأخیرات، به نفع پیمانکار، حاصل می‌گردد،

به نحوی که بار اثبات دعوی تأخیرات مجاز و غیرمجاز، پس از آن، در تعهد مشاور و کارفرما قرار خواهد گرفت، نه پیمانکار.

SCL Delay Protocol – CP 5: Procedure for granting EOT

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بررسی یک نمونه رای
(شورای فنی استان)

در پی ارسال نامه شماره ۲۰۲۲/۹۳ مورخ ۳۱/۱۰/۱۳۹۳ شرکت پیمانکاری (ا.ا.ش) به انجمن صنفی، با موضوع رسیدگی به اعتراض مشاوریه، در خصوص نحوه رسیدگی دستگاه اجرائی (کارفرما) به صورت وضعیّت قطعی و محاسبه تأخیرات پروژه مسکن مهر یکی از شهرستان‌های استان خراسان رضوی و نامه‌نگاری انجمن مذکور با شماره ۹۳/ذ/۶۰۱۹ در مورخه ۰۴/۱۰/۱۳۹۳، مدیرکلّ محترم دفتر فنی استانداری خراسان رضوی، با ارسال دعوتنامه شماره ۳۸۰۴۲/۴۱/۳۸ مورخ ۱۱/۱۱/۱۳۹۳ برای اصحاب دعوی و سایرین، در تاریخ ۲۱/۱۱/۱۳۹۳، نسبت به تشکیل پنجاه و سومین جلسه کمیته پیمان شورای فنی استان، اقدام و پس از بررسی اسناد، مدارک و استماع نظرات کارفرما، مهندسین مشاور، پیمانکار و نماینده انجمن صنفی، در تاریخ ۱۰/۱۲/۱۳۹۳، مبادرت به صدور رأی شماره ۴۲۳۶۷/۴۱/۳۸، به شرح ذیل می‌نماید که، منطوق آن عیناً و بدون دخل و تصرف، ارائه شده است:

۱- تاریخ ابلاغ قرارداد ۲۱/۱۰/۱۳۹۰ بوده که، مدتّ اولیّه پیمان ۴ ماه می‌باشد.

۲- قرارداد، سه نوبت تا تاریخ‌های ۲۵/۰۴/۱۳۹۱ و ۳۰/۱۲/۱۳۹۱ و ۳۱/۰۴/۱۳۹۲ تمدید گردیده است.

۳- تاریخ تحویل موقتّ پروژه ۰۱/۰۳/۱۳۹۲ می‌باشد. با عنایت به موارد فوق‌الذکر و به استناد بند (ج) مادّه ۳۰ ش.ع.پ که، کارفرما معادل تاخیر مجاز نسبت به تمدید مدتّ پیمان اقدام می‌نماید، بنابراین با توجّه به اینکه قرارداد تا تاریخ ۳۱/۰۴/۱۳۹۲ تمدید شده و در تاریخ ۰۱/۰۳/۱۳۹۲ تحویل موقت گردیده است، مشمول جریمه تاخیر مجاز نمی‌باشد.

مشاهده می‌گردد، در رأی مذکور، به‌درستی و با درایت، کمیته پیمان شورای فنی استان، باستناد اماره قانونی مندرج در بند (ج) مادّه ۳۰ ش.ع.پ و نیز، با توجّه به عدم ارائه دلیل قطعی توسط کارفرما، دالّ بر غیرمجازبودن تاخیرات پیمانکار، نسبت به اصدار رأی، مبنی بر مجازبودن تاخیرات پیمانکار، اقدام نموده است.

SCL Delay Protocol – CP 5: Procedure for granting EOT

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بررسی یک نمونه رای
(شورای فنی استان)

۷- نتیجه گیری و پیشنهاد

در صورتی که، مشاور، بدون رسیدگی به لایحه تاخیرات و یا بدون مدّ نظر قراردادن تشریفات شکلی و ماهوی تمدید مدّت پیمان، صرفاً بر اساس وضعیّت کلی و شهودی از پیشرفت پروژه، نسبت به ارائه پیشنهاد تمدید مدّت پیمان به کارفرما، اقدام و نهایتاً کارفرما نیز، با نظر وی موافقت نماید و پیمان، به میزان مندرج در نامه کارفرما (پیش از آنکه صورتمجلس تأخیرات، به امضاء پیمانکار و مهندس مشاور برسد) توسط مشاور تمدید گردد، حسبِ نصّ صریح مقرّری آمره، در بند (ج) مادّه ۳۰ ش.ع.پ که، اشعار دارد "... مهندس مشاور... معادل مدّت تاخیر مجاز، مدّت پیمان را، تمدید می نماید"، تمدید مدّت پیمان، اماره قانونی (دلیل ظنی) بر وجود تاخیرات مجاز پیمانکار، به میزان موردالاشاره در فوق، می باشد.

SCL Delay Protocol – CP 6: Effect of delay

- ❑ Employer should **not wait** until
 - ❖ Employer Risk Event **starting** to effect **contractor's progress** or
 - ❖ What is the **full effect** of Employer Risk Event on **contractor progress** or
 - ❖ Whether the **contractor actually** needs the EOT
- ❑ **Employer** should **grant EOT** if **CP 4 (contemporaneous analysis)** proves the extension is the **result** of Employer's action.
- ❑ The **CA (AE)** should **not wait** to see if the **contractor actually needs** the EOT.

**Contracts should include provisions of when the EOT is granted.
End of project? When the effect **started** to **impact**?**



SCL Delay Protocol – CP 7: Incremental review of EOT

❑ Sometimes the **full effect** of an **Employer Risk Event** **cannot** be **predicted** with **certainty** at the time of **initial assessment**.

❖ It is **recommended** to **grant** an **EOT** and **review** and **assess** at **later intervals**.

✓ The EOT should be considered by the **CA at intervals**

as the **actual impact** of the Employer Risk Event **reveals** and

EOT **increased**

but not decreased,

unless *there are express contract terms permitting this*

Why increase and not decrease?

SCL Delay Protocol – CP 7: Incremental review of EOT

Time impact analysis in **two** cases:

1. Update schedule exactly before a change order

- ❖ No decrease
- ❖ May increase because of other Employer's delays

2. Update schedule distant from a change order

- ❖ May decrease because of contractor's delay occurred before a change order
 - ✓ Solution is to consider that delays concurrent based on “**functional theory**”
- ❖ May increase because of other Employer's delays

سوال:

آیا بر اساس نشریه ۴۳۱۱ این شرایط وجود دارد؟ دلیل ظنی و قطعی!

SCL Delay Protocol – CP 7: Incremental review of EOT

❑ CA (AE) should bear in mind that it is **allowable** to deal with **EOT incrementally**.

❖ **HOW?** It will be defined in **CP 4** later in next sessions.

IMPORTANT NOTE:

CA (AE) should **not use this approach** to “**wait and see**” the outcome.

This **allows** the **contractor** to **replan** the **works to completion**

Contracts should include provisions as to how review should be continued if EOT is granted and whether EOT can be decreased or not after it is granted

SCL Delay Protocol – CP 8: Float as it relates to time

- ❑ Float values in a **programme (schedule)** are an **indication** of the **relative criticality** of activities, **generally**, when float is **exhausted**, the **completion date** will be **impacted**.

UNLESS

There is **express provision** to the **contrary** in the **contract**

The “**ownership**” of float causes **particular arguments in disputes** over entitlement to an EOT and **must be addressed in the contracts**.

Contracts should include provisions as to how contractor and owner deal with Float and who is the owner of float.

SCL Delay Protocol – CP 8: Float as it relates to time

❑ For some **harsh contracts**, some **contractors** use **contingency** in the **time of activities** during scheduling.

❖ This is the **responsibility** of **AE** to check the schedule.

1. A **Contractor** may argue that it **‘owns’ the float**,

because, in planning how it proposes to **carry out the works**,

it has **allowed additional or float time** to give itself some **flexibility**.

2. An **Employer** may typically say that the **Contractor has no EOT entitlement**

unless the delay to progress will result in a contract completion date being missed.

**Parties should ensure that this issue is addressed in their contracts.
The expression ‘float’ rarely, if ever, appears in **standard form
conditions of contract****

SCL Delay Protocol – CP 8: Float as it relates to time

☐ Is it **written** in the **contract**?

1. Some written that the owner
2. Few written that the contractor
3. Some written nothing

➤ The **project owns the float!** First come first served.

Could the contractor claim if project owns the float?

SCL Delay Protocol – CP 8: Float as it relates to time

☐ If the project owns the float:

❖ **Contractors** would have activities with float **used by an owner**===no delay===no time extension===but **economic ramifications** to the contractor because:

✓ The **contractor** wanted to perform activities while he **had equipment available**.

☐ *For example, question to design===contractor waits===equipment is no longer available===no delay===but less efficiently perhaps at increased cost.*

☐ But **most contracts** are **silent** with respect to delays that **affect noncritical activities**.

Project owns the float, and either party may use float as long as it is not to the **financial detriment of the other party.**

No need to consider float in **delay analysis if **project owns** the float and **first come first served**.**

SCL Delay Protocol – CP 8: Float as it relates to time – Sample of contract provision

- ❑ The **following provision**, taken from a U.S. federal construction contract, **addresses** the ownership of float **but limits** the provision to addressing **total float only**. The **total float** is essentially **owned** by the **first party** that **requires it**, a **distinct advantage to owners**. Note that **extensions of time** would generally **not** be **granted** under this provision:

- ❖ *Float is not time for the exclusive use or benefit of either the Owner or the Contractor.*
- ❖ ***Extensions of time** for performance required under the contract **clauses entitled Changes, Differing Site Conditions, Termination for Default, Damages for Delay, Time Extensions**, or **Suspension of Work** will be granted **only** to the extent that equitable time adjustments for the activity or activities affected **exceed** the **total float** or slack.*

SCL Delay Protocol – CP 8: Float as it relates to time – Sample of contract provision

- ❑ Another contract term defines float as being owned by both the owner and the contractor, but if changes mandated by the owner, no compensation is allowed as long as the **project essentially completed** by the contractually **established date**.
 - ❖ This is a **harsher provision**.
 - ❖ Any float time, including time between the Contractor's anticipated completion date and the end of the contract time, shall be deemed to be for the joint use of the **Owner** and the **Contractor** provided,
 - ❖ **However**, that, in the event of any **conflicting** need for or **overlapping use** of any float time, the **Owner** shall have **priority** for the use of such float time, and the **Contractor** shall **not be entitled** to any adjustment in the **Contract Time**, the **Progress Schedule**, or to any **additional payment** of any sort by **reason** of the **Owner's use of any float time**.

SCL Delay Protocol – CP 8: Float as it relates to time – Sample of contract provision

- ❑ Many contracts have adopted this **industry standard approach to float ownership**.
- ❑ For example, here is what the **2016 Minnesota Department of Transportation Standard Specifications** for Construction says about float ownership:
 - ❖ *The contractor acknowledges that **all float (including Total Float, Free Float, and Sequestered Float)** is a **shared commodity available** to the Project and is not for the exclusive benefit of any party;*
 - float is an **expiring resource available** to accommodate changes in the Work, however originated, or to **mitigate the effect of events** that may **delay performance or completion** of all or part of the Work.*

SCL Delay Protocol – CP 8: Float as it relates to time

So, what is the recommended approach if the owner or project owns the float?

SCL Delay Protocol – CP 8: Float as it relates to time

- ❑ One mechanism employed by **some contractors** to avoid the adverse impact of such provisions is to **submit late start schedules** to the owner.

*Should the owner **mandate an early start schedule**?*

- ❑ The **possibility** is **very real** that such **owner intervention** could result in a **legal interpretation** that the **owner** has **assumed control** over the methods, means, techniques, sequences, and procedures.

What else?

SCL Delay Protocol – CP 8: Float as it relates to time

❑ If the Contractor wants to make **allowance** for the possibility of Contractor Delays (sometimes referred to as ‘**Time Risk Allowance**’ or ‘**contingency**’),

then it should

1. Include in the **activity durations** in its programme such **additional time** as the contractor believes is necessary to reflect the **risk of such delays** to those activities.
2. Alternatively, it may identify such **allowances as separate activities** in the programme entitled ‘**contingency** for ... [e.g., Groundwork]’.

Which one is **more prudent**?
YOU TELL ME!

SCL Delay Protocol – CP 9: Identification of float

- ❑ This is **greatly** assisted where there is a **properly prepared** and **regularly updated programme (schedule)**, the **Accepted/Updated programmes**.
- ❖ **Recommendation** for the **preparation** of **Accepted/Updated Programmes** are set out as part of the guidance to **CP 1**.

Although CP1 discussed in Document Management Course,

*We will **discuss CP 1 later** in **next sessions**.*

Contracts should include provisions as to how the *schedule* should be updated and how *float* should be identified

SCL Delay Protocol – CP 10: Concurrent delay – effect on EOT

❑ **True concurrent delay** is the occurrence of **two** or **more delay events** at the **same time**:

1. Employer Risk Event
2. Contractor Risk Event

and the **effects** of **both delays** should affect the **critical path**.

❑ This **Core Principle** is concerned **only** about the effect of **concurrent delay** on **EOT**,
NOT COMPENSATION

Contracts should include provisions as to how concurrent delays should be addressed with regard to EOT

WE WILL TALK MORE IN DEPTH LATER IN NEXT SECTION

SCL Delay Protocol – CP 10: Concurrent delay – effect on EOT

(۳۰-د)

در اجرای مفاد این ماده برای تمدید مدت پیمان، تأخیرهای همزمان ناشی از عوامل مختلف درج شده در بند الف، فقط یک بار محاسبه می‌شود.

(۳۰-الف-۹)

هرگاه کارفرما نتواند تعهدات مالی خود را در مواعیدهای درج شده در اسناد و مدارک پیمان انجام دهد.

دقت کنید که تاخیرات مالی همپوشانی شده از بخشنامه ۵۰۹۰ قابلیت جمع جبری داشته و باید عدد نهایی محاسبه شده از آنرا به بازه مناسب در آورده و سپس در برنامه مدل نماییم. سپس همپوشانی این تاخیرات با سایر تاخیرات ماده ۳۰-الف لحاظ میشود!

این موارد را در بخش آخر آموزش خواهیم داد!

SCL Delay Protocol – CP 11: Analysis time-distant from the delay event

❑ The **Prospective methods** of delay analysis may **no longer** be **appropriate** if the **delay** already **occurred**.

❖ **CP 4** should **not be used** in this case

✓ Then, there should be a **provision** that **addresses** the consideration of EOT applications:

1. **After completion of works**
2. **After the occurrence of delay events or its impact**

Prospective methods will be talked later in next sessions

Contracts should **include provisions** as to **what procedure** should be **used** when **delays** already **occurred**.

Retrospective methods and **provisions related to CP 11** will be talked in the **After-the-Fact Analysis**

SCL Delay Protocol – CP 11: Analysis time-distant from the delay event

۳۰-ج)

در پایان مدت اولیه پیمان یا هر تمدید مدت پیمان، اگر کار به اتمام نرسیده باشد، مهندس مشاور با کسب نظر پیمانکار و با توجه به موارد تعیین شده در بند "الف" علل تأخیر کار را بررسی می‌کند و میزان مدت مجاز و غیرمجاز آن را با توافق پیمانکار تعیین می‌نماید و نتیجه را به کارفرما گزارش می‌کند، و سپس نظر کارفرما را در مورد میزان مجاز یا غیرمجاز تأخیر کار به پیمانکار اعلام می‌کند و معادل مدت تأخیر مجاز، مدت پیمان را تمدید می‌نماید.

۵۰-ب)

در پایان کار، در صورتیکه مدت انجام کار، بیش از مدت اولیه پیمان به علاوه مدتهای تمدید شده پیمان باشد، مهندس مشاور با رعایت ماده ۳۰ و رسیدگی به دلایل پیمانکار، مدت تأخیر غیرمجاز پیمانکار را تعیین می‌کند، تا پس از تصویب کارفرما، به شرح زیر، ملاک محاسبه خسارت تأخیر قرار گیرد.

۵۰-ب-۵۰)

در صورتیکه پیمان، طبق ماده ۴۶ فسخ گردد یا طبق ماده ۴۸، به پیمان خاتمه داده شود، تأخیر کار نسبت به برنامه زمانی تفصیلی با رعایت ماده ۳۰ بررسی شده، میزان مجاز و غیرمجاز آن بررسی می‌شود.

SCL Delay Protocol – CP 12: Link between EOT and compensation

- ❑ Entitlement to an EOT does not automatically lead to entitlement to compensation.
 - ❖ It is a common misconception in the construction industry that if the Contractor is entitled to an EOT,
then it is also automatically entitled to be compensated for the additional time that it has taken to complete the contract.

Under the common standard forms of contract, the claims related to EOT is different and should be submitted separately as their provisions are also different.

Contracts should include provisions as to what is the relationship between EOT and compensation

SCL Delay Protocol – CP 12: Link between EOT and compensation

1. The method to **assess the amount** of an **EOT** can be **prospective**
 - ❖ It can be based on the **likely employer delay** to completion

and
2. The method to **assess compensations** can be **retrospective**
 - a) It can be based on the **loss and/or expense actually incurred**
 - b) It can be based on the **daily rate**

These two assessments of time may produce different results!
This is only to be expected, not to indicate errors in either method

SCL Delay Protocol – CP 12: Link between EOT and compensation

❑ خسارت تاخیر مجاز

- ❖ به صورت کلی و طبق قانون مدنی (ماده ۷۲۸ آئین دادرسی) عدم اجرای تعهدات طرفین، در شرایطی که **باعث ضرر (از جنس از بین رفتن مال یا فوت شدن منفعت)** به طرف دیگر گردد، باید جبران شود.
- ❖ پس تاخیری که به سبب عدم اجرای تعهدات یکی از طرفین اتفاق افتاده باشد، در صورتی که بر روی **مسیر بحرانی** بوده و باعث **تغییر زمان پروژه** گردد، هم بحث زمانی و هم مالی را به همراه دارد و باید جبران گردد.
- ❖ حتی اگر تاخیر روی مسیر بحرانی نبوده و باعث تغییر زمان پروژه نشود هم میتواند **خسارت مالی** از جنس بهره وری را به همراه داشته باشد.

صرف نظر از مبانی نشریه ۴۳۱۱، آیا قانون مدنی اجازه ادعای خسارت مالی برای تاخیراتی
مانند آب و هوا را میدهد؟

SCL Delay Protocol – CP 12: Link between EOT and compensation

❑ خسارت تاخیر مجاز

- ❖ در قانون مدنی کشور، یکی از شروط جبران خسارت آنست که **خسارت ناشی از عدم انجام تعهد** در شرایطی باشد که عدم اجرای تعهد مستند به خود متعهد بوده و ناشی از علت خارجی نباشد (برای خارجی بودن باید دو شرط غیرقابل پیشبینی و غیر قابل دفع را داشته باشد).
- ❖ به همین دلیل، فورس ماژور که حادثه ای غیرقابل دفع و غیر قابل پیش بینی است در ۴۳۱۱ شامل خسارت نمیگردد.
- ❖ این موضوع در برخی قراردادهای خارجی مانند فیدیک موضوعی متفاوت بوده که در **دوره مدیریت ادعا** به تحلیل آن خواهیم پرداخت.

SCL Delay Protocol – CP 12: Link between EOT and compensation

❑ خسارت تاخیر مجاز

❖ چنانچه تاخیرات به وجود آمده در کار به عنوان
تاخیرات خارج از قصور پیمانکار باشد، پیمانکار
محق به دریافت خسارت تاخیر خواهد بود.



معاونت برنامه ریزی و نظارت راهبردی رئیس جمهور

شماره: ۱۱۷۷۳۳
تاریخ نامه: ۱۳۹۳/۱۲/۰۴
پست: ندارد

بسمتعالی

موضوع: درخواست خاتمه پیمان از سوی پیمانکار

باسلام و احترام؛

بازگشت به نامه شماره E/92/AMD/6568 مورخ ۹۲/۱۰/۱۷ اعلام می‌دارد، در قراردادهای منعقد شده با شرایط عمومی پیمان موضوع پیوست بخشنامه شماره ۵۴/۸۴۲-۱۰۲/۱۰۸۸-۵۴ مورخ ۱۳۷۸/۰۳/۰۳ بر طبق ماده ۴۸ شرایط عمومی آن (با موضوع خاتمه پیمان) هرگاه بیش از اتمام کارهای موضوع پیمان، کارفرما بدون آنکه تقصیری متوجه پیمانکار باشد، بنا به مصلحت خود یا علل دیگر، تصمیم به خاتمه دادن پیمان بگیرد، خاتمه پیمان را با تعیین تاریخ آماده کردن کارگاه برای تحویل، که نباید بیش از ۱۵ روز باشد، به پیمانکار ابلاغ می‌کند.
در حالت کلی پیمانکار مکلف به اجرای پیمان طبق اسناد و مدارک پیمان خواهد بود و با اعلام درخواست پیمانکار مبنی بر خاتمه دادن به پیمان، کارفرما ملزم به ابلاغ خاتمه پیمان نخواهد شد.
اگر تاخیرات به وجود آمده در کار به عنوان تاخیرات خارج از قصور پیمانکار شناخته شوند پیمانکار محق به دریافت خسارت تاخیر خواهد بود.

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SCL Delay Protocol – CP 13: Early completion as it relates to compensation

❑ As a result of an **Employer Delay**,

the **contractor** is prevented from **completing** the works by the **Contractor's planned completion date**

date earlier than the **contract completion date**

✓ EOT is **not** the **case** here because the project **still** completed **on time**

The **contractor** should be entitled to **be paid** the costs **directly** caused by the Employer, **not letting him** complete the **project earlier**.

HOW THE CONTRACT COULD HELP HERE?

SCL Delay Protocol – CP 13: Early completion as it relates to compensation

Contracts should include provisions as to what would be the compensation if the contractor wants to finish earlier, and if the contract prevents the contractor from early completion, it should be expressed clearly

- ❖ They should ask themselves the question:
 - ✓ If the **contractor** is **prevented** by the employer from completing on a date **earlier** than the contract completion date, should it have a remedy?
 1. If so, in precisely what circumstances?
 2. If not, then the **contract** should say so expressly.

What if this is not addressed in the **contract?**

SCL Delay Protocol – CP 13: Early completion as it relates to compensation

- ❑ Where the parties have **not addressed** this issue in their **contract**,
for the Contractor to have a valid claim

❖ **Compensation** can **only** be **applied** if:

- ✓ **Employer** was **aware** of **contractor's intention** at the **time** the contract was **signed**

- It is **not permissible** for the Contractor,

after the contract has been entered into, to state that it **intends** to complete early, **unless** there is a new agreement.

How to calculate the recoverable compensation?

SCL Delay Protocol – CP 13: Early completion as it relates to compensation

- ❑ The **recoverable compensation** in the situation described in this guidance to **Core Principle 20**

will **normally only** comprise the increased costs of the **timerelated resources** directly affected by the Employer Delay to Progress.

*Recovery of such compensation will also be **subject to** considerations of concurrency, as described in the guidance to Core Principle 14.*

SCL Delay Protocol – CP 13: Early completion as it relates to compensation

۱۱-۳-

در پیمان‌هایی که دستگاه‌های اجرایی در نظر دارند به منظور ایجاد انگیزه برای تسریع در کار، هزینه تسریع کار به پیمانکار پرداخت کنند، باید میزان و شرایط مورد نظر برای پرداخت آن را همراه با مشخصات اصلی کار، به سازمان برنامه و بودجه منعکس نمایند تا در صورت تصویب شرایط و میزان تسریع کار از سوی این سازمان، مراتب در ماده «۵۰الف» شرایط خصوصی پیمان مربوط درج شود.

۵۰-الف)

اگر در مقابل اتمام پیش از موعد کار، در اسناد و مدارک پیمان، پرداخت هزینه تسریع کار به پیمانکار، پیش‌بینی شده باشد، و پیمانکار پیش از سپری شدن مدت پیمان عملیات موضوع پیمان را تکمیل کند و آماده تحویل نماید، پیمانکار محق به دریافت هزینه تسریع طبق شرایط پیش‌بینی شده می‌باشد.

ماده ۵۰-الف)

در صورت اتمام پیش از موعد کار، کارفرما هزینه تسریع کار را به نحو تعیین شده در زیر، به پیمانکار پرداخت می‌کند.

این موارد باید در شرایط خصوصی تعیین شود!



SCL Delay Protocol – CP 14: Concurrent delay – effect on entitlement to compensation for prolongation

1. If the **delays** are **concurrent** and
2. **Contractor** incurs **additional costs** and
3. If the **contract allows** the **contractor** for **compensation entitlement** if the project is **prolonged**
 - ❖ **Prolongation** is the **extended duration** of the works during which **time-related costs** are **incurred** as a **result of a delay**
 - ✓ Because **contractor's overhead** increased

THEN

The **contractor** can **only** recover **compensation** if it is **able** to **separate** the **additional costs** caused by **Employer** from those **caused** by the **contractor**

In some contract, the **EOT** is only given to the contractor and **compensation** is **not allowed**

SCL Delay Protocol – CP 14: Concurrent delay – effect on entitlement to compensation for prolongation

Contracts should include provisions as to how compensation for prolongation should be addressed if concurrent delays occurred

BUT is it easy to distinguish the loss and/or expense flowing from an Employer Delay?

SCL Delay Protocol – CP 14: Concurrent delay – effect on entitlement to compensation for prolongation

- ❑ The loss and/or expense flowing from an Employer Delay **cannot usually be distinguished** from that flowing from Contractor Delay **without the following**:
 - (a) an as-planned programme showing **how the Contractor reasonably intended** to carry out the works and the as-planned critical path;
 - (b) an as-built programme demonstrating the works and **sequence actually carried out** and the as-built critical path;
 - (c) the identification of activities and periods of time that were **not part of the original scope**;
 - (d) the identification of those activities and periods of time that were **not part of the original scope** and that are also at the **Contractor's risk as to cost**; and
 - (e) the identification of **costs attributable** to the **two preceding sub-sections**.

SCL Delay Protocol – CP 15: Mitigation of delay and mitigation of loss

❑ Contractor has a general duty to mitigate the effect on its works of Employer Risk Events. **However,**

❖ If nothing mentioned in the **contract**, the **duty** to **mitigate** does **not extend** to require the **contractor** to

1. Add extra resources or
2. Work outside its planned working hours.

Could the contractor pacing delays?

SCL Delay Protocol – CP 15: Mitigation of delay and mitigation of loss

- ❑ **If** delays caused by the owner + **if** the contractor is granted an EOT
 - ❖ A contractor may consider **pacing activities** that are **not on the critical path**
 - ❖ **Slow down non-critical activities** to proceed **non-critical activities** at the **same relative pace** as the **delayed activities** on the critical path.

*It is **highly recommended** that the **contractor notifies** the **employer** and the **CA (AE)** of its **intention**, along with its **reasons for doing so**.*

So, what is the contractor's duty to mitigate its loss?

SCL Delay Protocol – CP 15: Mitigation of delay and mitigation of loss

☐ This **duty** has **two aspects**:

1. Contractor must take **reasonable steps** to **minimize loss**
2. Contractor must **not** take **unreasonable steps** that **increase loss**

Contracts should include provisions as to how the contractor should mitigate delays and loss associated with delays if delays caused by the owner

SCL Delay Protocol – CP 15: Mitigation of delay and mitigation of loss

❑ The **contractor** should do all it **reasonably can** to **avoid** the **financial consequences** of **Employer delay**.

❖ **Most construction contracts** include a **requirement** to the effect that the **contractor must** do all it can to **avoid**, **overcome** or **reduce delay**.

1. The contractor **does not have** a **duty** to carry out **any change** in **scope** any **more efficiently** than **the original scope**.
2. **Neither** is the **contractor obliged** to **expand money** in order to **attempt** to **mitigate** the **effect** of an **Employer Risk Event**.

*If the **employer** wishes for this, the **employer should agree to pay the contractor** for the **costs of those efforts**.*

SCL Delay Protocol – CP 15: Mitigation of delay and mitigation of loss

☐ Sample of a contract clause

❖ Some **forms actually make compliance** with such provisions a condition **precedent** to

1. **Recovery** of **compensation**
2. **Relief** from **liquidated damages**

Mitigation

The Contractor shall detail mitigation measures to limit the requirement of additional resources and/or higher logistical expenses. That is, the Employer shall not bear additional cost or damages nor shall it agree any right to extension of time.

The Contractor shall detail mitigation measures to overcome any delays incurred from the previous period or delays that it anticipates and specifically detail measures to meet the overall timescale of the WS.

SCL Delay Protocol – CP 15: Mitigation of delay and mitigation of loss

(۱۸-ج)

در صورتیکه در حین اجرای کار، پیمانکار تشخیص دهد که تغییراتی در برنامه زمانی تفصیلی ضروری است، موظف است که پیش از رسیدن موعد انجام کارهایی که به نظر او باید در برنامه آن تغییر داده شود، مراتب را با ذکر دلیل، به مهندس مشاور اطلاع دهد. مهندس مشاور، تغییرات مورد تقاضای پیمانکار را در قالب برنامه زمانی کلی رسیدگی می‌کند و آنچه را که مورد قبول است، پس از تصویب کارفرما، به پیمانکار ابلاغ می‌کند. بدیهی است که این تغییرات در حدود مندرجات پیمان، از میزان تعهدات و مسئولیت‌های پیمانکار نمی‌کاهد.

اگر تغییر برنامه زمانی تفصیلی از سوی مهندس مشاور مطرح شود، پیمانکار با توجه به نظر مهندس مشاور، تغییرات برنامه زمانی تفصیلی را تهیه می‌کند و به شرح پیش‌گفته، برای طی مراتب بررسی و تصویب، تسلیم مهندس مشاور می‌نماید.

(۴۳- الف)

پیمانکار موظف است که حداکثر کوشش خود را برای حفاظت از کارهای اجرا شده که در وضعیت قهری رها کردن آن‌ها منجر به زیان جدی می‌شود و انتقال مصالح و تجهیزات پای کار به محل‌های مطمئن و ایمن، به کار برد. کارفرما نیز باید تمام امکانات موجود خود را در محل، در حد امکان، برای **تسریع** در این امر، در اختیار پیمانکار قرار دهد.



SCL Delay Protocol – CP 16: Acceleration

1. If there is “**acceleration provision**” in the contract, **payment** should also be specified.
2. If there is **no provision** for **acceleration**, **but** contractor and employer **agree** that **accelerative measures** should be **undertaken**,

The basis of **payment** should be **agreed before** the **acceleration** is **commenced**.

Could the contractor claim for **prolongation compensation** if the Employer Delay **avoided**?

SCL Delay Protocol – CP 16: Acceleration

- ☐ Where **acceleration** is instructed and/or agreed,
the **Contractor** is **not entitled** to **claim prolongation compensation** for the
period of Employer Delay **avoided** by the acceleration measures.

What if the **contractor** is considering

1. Implementing recovering to **avoid** the risk of liquidated damages
2. Then **pursuing** a **constructive acceleration claim**
as a result of **not receiving** an EOT that is his/her **right**?

SCL Delay Protocol – CP 16: Acceleration

- ❑ If the **contractor** is considering **implementing** acceleration measures to **avoid** the risk of **liquidated damages** as a result of **not** receiving an **EOT**

The **contractor** should

take steps to have the **dispute** or **difference** about **entitlement** to an **EOT** resolved in **accordance** with the “**contract dispute resolution provisions**.”

- ❖ Otherwise, there is the **risk** that it will **not be entitled to compensation** for those **acceleration measures**.

What else should be done?

SCL Delay Protocol – CP 16: Acceleration

- ☐ **In any event, before pursuing** any such **acceleration measures**,
 1. Contractor should **provide notice** with particulars of the **intended acceleration measures** to the CA.
 2. Contractor should **then include such measures** in a **revised programme**.

You will learn how to right “**constructive acceleration claim**” in
Claim Management Course

SCL Delay Protocol – CP 17: Global claims

- ❑ In some circumstances, **contractors** may make a ‘**global claim**’ by **rolling together** a number of **different breaches** and **making a case** for a **cumulative effect** resulting in a **single total cost** **without** attributing actual costs to **specific events**.
 - ❖ *No breakdown or subdivision*
- ❑ **Global claims** have **not always** found **favor** with the **employer** and **courts**, as they **can ignore** other reasons for the delay or disruption.
- ❑ The court will put **place** the **burden of proof** on the **employer** to carry out a **detailed assessment** of the **claim** and **how** it has been **constituted**.

SCL Delay Protocol – CP 17: Global claims

❑ This is **not uncommon** practice for contractors, however

it is **discouraged** by the Protocol,

despite an **apparent trend** for the **courts** to take a **more moderate approach** when considering global claims.

Contracts should include provisions as to how disputes should be resolved and when and how global claims need to be done.

SCL Delay Protocol – CP 17: Global claims

- ❑ If the **contractor** has made and **maintained accurate** and **complete records**,
in most cases the contractor should be able to establish casual link between the Employer Risk Event and the resultant cost and/or loss, without the need to make a global claim.

The failure to maintain such records is unlikely to justify the contractor in making a global claim.

The Protocol's guidance as to the keeping of records will be set out in CP 1.

SCL Delay Protocol – CP 17: Global claims

❑ What if the determination of financial consequences of various causes of compensation is impossible or impracticable?

1. Quantify individually those items of the claim for which the **casual link** can be established between the **Employer Risk Event** and **resultant costs and/or loss claimed**
2. Claim compensation for the **remainder** as a composite whole

What should be done for second part of the claim (Composite whole)?

SCL Delay Protocol – CP 17: Global claims

- ❑ For the **composite part** of the claim (**the global claim**), we need **four steps**:
1. **Contractor** needs to **set out** the **details** of the **Employer Risk Events relied** on the **compensation** claimed, with ***sufficient particularity***.
 2. **Contractor** should **accompany** its **claim** with a **statement** as to the **steps it has taken**.
 3. **Contractor** should **prove** the **reason** that **why** this **composite part** is **impossible** or **impracticable**.
 4. **Contractor** will also need to **demonstrate** that it would **not have incurred** the costs or suffered the loss included in the **composite claim** in **any event**.

If the **court** recognizes that the **employer bears no responsibility** and/or it is **not possible** for **CA, judge or arbitrator** to assess the value of that **non-recoverable portion of the evidence**
YOUR CASE CAN BE FAILED ENTIRELY!

SCL Delay Protocol – CP 18: Disruption claims

- ❑ The **objective** of a **disruption analysis** is to **demonstrate**
the **loss of productivity** and **additional loss** and **expense**
caused by **employer**

✓ *Remember we talked about this when float was talked?*

Compensation may be **recovered** for disruption **only** to the extend that the
“**contract permits**” or there is an “**available cause of action at law.**”
(suspension or breach of the contract)

SCL Delay Protocol – CP 18: Disruption claims

❑ **Disruption** is a **interruption** to a **contractor's normal** working methods, resulting in a **lower efficiency**.

❑ **Disruption** events can have **two effects**:

1. **Direct effect** (e.g., out of sequence work, design changes, etc.)
2. **Secondary effect** (crowding of labor or stacking of trades, labors have to work overtime and it leads to fatigue and lower productivity for other activities)

Which could **further reduce productivity!**

SCL Delay Protocol – CP 18: Disruption claims

- ☐ If **Cost and/or loss** relating to specific **Employer Risk Events** is established, does the contractor have also **chance** for disruption cost?

The chance is very low!

What if disrupted, but not on the critical path?

SCL Delay Protocol – CP 18: Disruption claims

❑ It is possible for work to be **disrupted** and

yet for the **works still to be completed** by the **contract completion date**.

In this situation, the **Contractor** will **not have a claim** for an EOT,

but it may have a claim for the **cost of the lost productivity**.

Tell me the difference of free float and total float here?

What **costs are recoverable if disruption occurs as a **result of acceleration** to recover critical delay?**

SCL Delay Protocol – CP 18: Disruption claims

- ❑ If **acceleration** measures are **taken to overcome critical delay** but which **lead to a loss of productivity**, the **costs** of those steps **cannot be recovered** under both the delay and disruption heads of claim.

**Which one will be advanced?
Disruption or Delay?**

SCL Delay Protocol – CP 18: Disruption claims

- ❑ Typically, **both claims** will be **advanced**,
but it must be recognized that a **credit** has to be given for any **recovery in the first claim**.

Who should claim?



SCL Delay Protocol – CP 18: Disruption claims

❑ Usually it is the **Contractor** that **advances** delay and/or disruption **claims** against the Employer.

❖ The **exception** is an **LDs** claim by the **Employer against the Contractor**, but that claim does **not typically require** any **detailed analysis**, only the **identification** of whether the **contract completion** date has **passed**.

Could Employer claim for any other reasons?

SCL Delay Protocol – CP 18: Disruption claims

❑ It is possible for an **Employer** to have **delay and disruption claims** against the Contractor,

for example where there are **multiple contractors** on site and the

Contractor is responsible for

disruption events that have hindered the **progress** of those other **contractors**.

❖ Further, a **sub-contractor** may have a delay and/or disruption **claim** against the **Contractor** (or vice versa).

Contracts should include provisions as to how disputes should be addressed and whether compensation should be made for disruption or not.

WE WILL TALK MORE IN FINANCIAL ANALYSIS RELATED TO DELAY

SCL Delay Protocol – CP 19: Valuation of variations

- ❑ Every contract should draft the mechanism of variations (**change orders**), with a mechanism for **determining the price** of variations.
- ❑ The standard forms sometimes, but **not always**,
 - ❖ contain **wording enabling** the parties to **agree in advance** of the execution of the variation, what its **fixed price** will be.

This practice is supported by the Protocol

How usually the cost of **varied work** calculated in **standard forms**?

SCL Delay Protocol – CP 19: Valuation of variations

❑ How to determine the cost of **varied work**?

1. Where the **varied work** is **similar to the original work**, the **same rate** at the time of **bidding** should be used.
2. Where the **varied work** is **not similar** or is **not in similar conditions**, the rates should be **adjusted** to take account of the **different circumstances**.
3. Where the **varied work** is **completely dissimilar**, reasonable or **fair rates** and **prices** are to be determined.
 - ❖ *Reasonable direct cost + reasonable project overhead + markup overhead & profit*

What **other items** should be considered when **changes ordered**?

SCL Delay Protocol – CP 19: Valuation of variations

۲۹-الف)

در ضمن اجرای کار، ممکن است مقادیر درج شده در فهرست بها و مقادیر منضم به پیمان تغییر کند. تغییر مقادیر به وسیله مهندس مشاور محاسبه می‌شود و پس از تصویب کارفرما به پیمانکار ابلاغ می‌گردد. پیمانکار با دریافت ابلاغ تغییر مقادیر کار موظف به انجام کار با نرخ پیمان است، به شرط آنکه مبلغ ناشی از تغییر مقادیر کار، از حدود تعیین شده در زیر بیشتر نشود.

۲۹-الف-۱)

افزایش مقادیر باید در چارچوب موضوع پیمان به پیمانکار ابلاغ شود. جمع مبلغ مربوط به افزایش مقادیر و مبلغ کارهای با قیمت جدید "موضوع بند ج" نباید از ۲۵ درصد مبلغ اولیه پیمان بیشتر شود.

۲۹-الف-۲)

جمع مبلغ مربوط به کاهش مقادیر و حذف آن‌ها نباید از ۲۵ درصد مبلغ اولیه پیمان بیشتر شود. اگر این مبلغ، از حد تعیین شده بیشتر شود و پیمانکار با اتمام کار با نرخ پیمان موافق باشد، عملیات موضوع پیمان در چارچوب پیمان انجام می‌شود. ولی در صورتی که پیمانکار مایل به اتمام کار نباشد، پیمان طبق ماده ۴۸ خاتمه داده می‌شود.

۲۹-تبصره)

در صورت حذف قسمت‌هایی از کار به استناد بند ج ماده ۲۸، برای تعیین حد افزایش یا کاهش مقادیر طبق بندهای ۲۰ا، به جای مبلغ اولیه پیمان، مبلغ اولیه پیمان پس از کسر مبلغ کارهای حذف شده به وسیله پیمانکار، ملاک قرار می‌گیرد.

SCL Delay Protocol – CP 19: Valuation of variations

□ نشریه ۴۳۱۱

❖ ماده ۲۹- تغییر مقادیر کار، قیمت‌های جدید، تعدیل نرخ پیمان (سوال زیر از سایت حقوق احداث استخراج شده)

۰۱۲۹۰۴ - پرسش)

در پیمانهای منعقد شده با شرایط عمومی پیمان جدید آیا کارفرمایان می‌توانند با کاهش حجم عملیات در بعضی از ردیف‌های فهرست‌بهای منضم به پیمان باعث کاهش ۲۵ درصد مبلغ پیمان (نسبت به مبلغ اولیه پیمان) و از سوی دیگر با افزایش حجم عملیات در بعضی دیگر از ردیف‌های فهرست‌بهاء (و یا ردیف‌های قیمت جدید باعث افزایش ۴۹ درصدی مبلغ پیمان گردند؟) (در این حالت کارفرما مدعی افزایش صرفاً ۲۴ درصد مبلغ اولیه پیمان می‌باشد و پیمانکار را ملزم به اجرای این دستور می‌داند).

۰۱۲۹۰۴ - پاسخ)

در شرایط عمومی پیمان جدید افزایش و یا کاهش مقادیر بطور جداگانه محاسبه می‌شود و در نتیجه اختیارات کارفرما محدود به حداکثر ۲۵ درصد در جهت افزایش نسبت به مبلغ اولیه پیمان بطور جداگانه و ۲۵ درصد در جهت کاهش نسبت به مبلغ اولیه پیمان بطور جداگانه می‌باشد ولی در سایر موارد که افزایش مزبور وجود ندارد قرارداد جاری و براساس مفاد آن عمل خواهد شد.

SCL Delay Protocol – CP 19: Valuation of variations

۲۹-ج)

اگر در چارچوب موضوع پیمان، کارهایی به پیمانکار ابلاغ شود که برای آن‌ها قیمت و مقدار در فهرست بها و مقادیر منضم به پیمان پیش‌بینی نشده است، پیمانکار باید بی‌درنگ پس از دریافت ابلاغ مهندس مشاور، قیمت پیشنهادی خود را برای اجرای کارهای یاد شده، همراه با تجزیه قیمت، به مهندس مشاور تسلیم کند. قیمتی که با توافق پیمانکار و مهندس مشاور تعیین شود و به تصویب کارفرما برسد، ملاک پرداخت است. قیمت‌های جدیدی که به این‌صورت تعیین می‌شود باید برحسب هزینه اجرای کار در محل اجرا محاسبه گردد. از اینرو، تنها ضریب هزینه بالاسری پیمان به قیمت‌های جدید اعمال می‌شود.

۲۹-د)

جمع بهای قیمت‌های جدید، علاوه بر آنکه تابع سقف تعیین شده در بند الف است، نباید از **۱۰ درصد** مبلغ اولیه پیمان بیشتر شود.

SCL Delay Protocol – CP 19: Valuation of variations

❑ The total likely **effect of variations** (**change orders**) should be **pre-agreed** between the **employer** and the **contractor**

1. **Cost consideration**: **Fixed price (sum)** recommended that includes

1. *Prolongation compensation related to variation*
2. *Disruption cost related to variation*
3. *Direct cost for performing varied work*

2. **Time consideration**: **Agreed EOT**

3. **Schedule Consideration**: Necessary **revision** to the **programme**

Is it a good practice to **leave prolongation and disruption costs** of different variations to be **compensated separately** at the **end of the contract**?

SCL Delay Protocol – CP 19: Valuation of variations

It is **not a good practice** to postpone the compensation of a **varied work** (change orders) and **disruption** resulted from **prolongation** to the **end** of the contract

WHY?

It is **likely** to result in the contractor presenting a **global claim**, which is a **practice** that is to be **discouraged!**

So, what should be done if it is **not practicable** to agree **in advance**?



SCL Delay Protocol – CP 19: Valuation of variations

☐ Where it is **not practicable** to agree **in advance** the amounts for

1. Prolongation and disruption to be included in **variations**

2. Sums for **changed circumstances**

then it is **recommended** that the parties to the contract do their best to
agree the total amount payable

as the **consequence** of the variations and/or changes **separately**

as soon as possible after the **variations are completed**.

What if variation affects unvaried work?

SCL Delay Protocol – CP 19: Valuation of variations

- ❑ Some standard forms of contract have a **provision** that

where a **variation affects unvaried work**,

affected unvaried work may be **treated as varied**.

However, these provisions are rarely used.

Why some standard forms use these provisions?

- ❑ The use of these provisions is encouraged,
in order to promote early agreement on the complete effect of the variation.

SCL Delay Protocol – CP 20: Basis of calculation of compensation for prolongation

- ☐ **Delay** causes **prolongation**
- ☐ **Prolongation** increases the **cost**
- ☐ **Compensation** for **prolongation** (**if any**) should **not be paid** for **anything** other than
 1. **Work** actually **done**
 2. **Time** actually **taken up**
 3. **Loss** and/or **expense** actually **suffered**

Compensation for **prolongation** caused **other than** by **variations** is based on the **actual additional cost** incurred by the **contractor**.

Contracts should include provisions as to how compensation for prolongation should be calculated. Some contracts do NOT ALLOW for compensation

SCL Delay Protocol – CP 20: Basis of calculation of compensation for prolongation

- ❑ Compensation for **prolongation** is the compensation for “critical delays.”
- ❑ Compensation for **prolongation** resulting from **Employer Risk Events** will primarily increase time-related resources, notably its project overheads.
- ❑ The recovery of **prolongation** compensation depends on the terms of the contract and the cause of the prolongation. It may be caused by:
 - ❖ Any kind of Employer Risk Event
 - ❖ Variation (change orders)
 - ❖ Breach of contract
 - ❖ Etc.

These items will be talked in this Section in the “Excusable Delays”

SCL Delay Protocol – CP 20: Basis of calculation of compensation for prolongation

- ☐ The recovery of **prolongation compensation** depends on
 1. **Terms** of the contract
 2. **Cause** of the prolongation

- ☐ It is **up to the Contractor** to **demonstrate** that it has **actually suffered** loss and/or expense

unless the contract provides otherwise.

How to reduce disputes about proof of loss?

SCL Delay Protocol – CP 20: Basis of calculation of compensation for prolongation

- ❑ Arguments **about proof of loss** could be **reduced or avoided** altogether if the **contract** contained an **agreed amount per day** that can be **applied to each day of prolongation**.
- ❑ This is the **reverse** of the normal Employer's **liquidated damages** provision.
 - ❖ It may be necessary to have a **number of different agreed amounts** to be applied **depending on the stage** in the project where the delay occurs.
 - ✓ One method of fixing the figure(s) would be for the **Contractor to price a schedule of rates** with indicative quantities at **tender stage**.

Wow, this is actually great!
You will see some contracts in US that are using this!

SCL Delay Protocol – CP 20: Basis of calculation of compensation for prolongation

❑ خسارت تاخیر مجاز

❖ چنانچه تاخیرات به وجود آمده در کار به عنوان تاخیرات خارج از قصور پیمانکار باشد، پیمانکار محق به دریافت خسارت تاخیر خواهد بود.



معاونت برنامه ریزی و نظارت راهبردی رئیس جمهور

شماره: ۱۱۷۷۳۳
تاریخ نامه: ۱۳۹۳/۱۲/۰۴
پست: ندارد

بسمتعالی

موضوع: درخواست خاتمه پیمان از سوی پیمانکار

با سلام و احترام؛

بازگشت به نامه شماره E/92/AMD/6568 مورخ ۹۲/۱۰/۱۷ اعلام می‌دارد، در قراردادهای منعقد شده با شرایط عمومی پیمان موضوع پیوست بخشنامه شماره ۵۴/۸۴۲-۱۰۲/۱۰۸۸-۵۴/۸۴۲ مورخ ۱۳۷۸/۰۳/۰۳ بر طبق ماده ۴۸ شرایط عمومی آن (با موضوع خاتمه پیمان) هرگاه بیش از اتمام کارهای موضوع پیمان، کارفرما بدون آنکه تقصیری متوجه پیمانکار باشد، بنا به مصلحت خود یا علل دیگر، تصمیم به خاتمه دادن پیمان بگیرد، خاتمه پیمان را با تعیین تاریخ آماده کردن کارگاه برای تحویل، که نباید بیش از ۱۵ روز باشد، به پیمانکار ابلاغ می‌کند. در حالت کلی پیمانکار مکلف به اجرای پیمان طبق اسناد و مدارک پیمان خواهد بود و با اعلام درخواست پیمانکار مبنی بر خاتمه دادن به پیمان، کارفرما ملزم به ابلاغ خاتمه پیمان نخواهد شد. اگر تاخیرات به وجود آمده در کار به عنوان تاخیرات خارج از قصور پیمانکار شناخته شوند پیمانکار محق به دریافت خسارت تاخیر خواهد بود.

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SCL Delay Protocol – CP 20: Basis of calculation of compensation for prolongation

۴۹-ب)

کارفرما هزینه‌های بالاسری پیمانکار را در دوران **تعليق**، به میزان تعیین شده در اسناد و مدارک پیمان، به پیمانکار می‌پردازد. اگر در اسناد و مدارک پیمان، تعیین هزینه‌های یاد شده، به توافق طرفین در زمان ابلاغ **تعليق** موکول شده باشد، کارفرما در مورد میزان آن با پیمانکار توافق می‌نماید. در صورتی که در اسناد و مدارک پیمان، هیچ نوع پیش‌بینی برای پرداخت هزینه‌های بالاسری پیمانکار در دوره **تعليق** نشده باشد، کارفرما ماهانه مبلغی معادل ۱۰ درصد متوسط کارکرد فرضی ماهانه به پیمانکار می‌پردازد. اگر به دستور کارفرما، قسمتی از کار متوقف شود، بابت هزینه‌های پیش‌گفته در مدت **تعليق**، ماهانه مبلغی معادل ۱۰ درصد متوسط کارکرد فرضی ماهانه، به تناسب مبلغ کار متوقف شده، به پیمانکار پرداخت می‌شود. برای تعیین هزینه **تعليق**، کسر ماه به تناسب ارائه می‌شود.

۴۹-تبصره)

در صورتیکه پیش از آغاز عملیات موضوع پیمان، **تعليق** پیمان از سوی کارفرما ابلاغ شود، ۸۰ درصد هزینه **تعليق** محاسبه شده طبق این بند، به پیمانکار پرداخت می‌شود.

۴۹-ج)

کارفرما و پیمانکار در مورد ماشین‌آلاتی که پیمانکار مایل است در مدت **تعليق** از کارگاه خارج نماید، بدون پرداخت هیچ نوع هزینه‌ای، توافق می‌کنند اجاره مربوط به دوران توقف آن تعداد از ماشین‌آلات که در کارگاه باقی می‌مانند، براساس توافق طرفین به پیمانکار پرداخت می‌شود.

SCL Delay Protocol – CP 21: Relevance of tender allowance

- ❑ The **tender allowances** have **limited relevance** to the evaluation of the cost of **prolongation and disruption** caused by **breach of contract** or **any other cause** that requires the evaluation of **additional costs**.

Tender allowance is an approximate cost that is estimated for specific item that usually does not have enough detail yet.

Why this is very important?

SCL Delay Protocol – CP 21: Relevance of tender allowance

- ❑ **Common misunderstanding** in the construction industry is that **if** the contractor has made **no or inadequate allowance** for **project overheads** in its **tender**, **then** that fact **limits** or **removes** its **entitlement** to **compensation** for prolongation and/or disruption **where actual cost incurred**.

This is not correct

Contractor is **entitled** to its **actual costs** of the prolongation or disruption.

The contractor requires to prove:

1. Actual cost **incurred**
2. Actual cost of **remaining** on project for **additional time**

The tender allowances are therefore of little relevance to the determination of compensation under these circumstances.

So, when tender allowance may be useful?

SCL Delay Protocol – CP 21: Relevance of tender allowance

- ❑ The **tender allowances** may be a useful **reference point** for the evaluation of prolongation and disruption **caused by a variation**.

It should be mentioned that there is **nothing to prevent the use of the tender allowances** as a **rough guide** for the agreement,

if that is what the **parties for convenience** wish to do.

Contracts should include provisions as to whether tender allowance does have any effect when compensation calculated for prolongation or disruption

SCL Delay Protocol – CP 22: Period for evaluation of compensation

- ☐ **Liability** for compensation **must first be established** by showing that the **prolongation** has been **caused by an Employer Risk Event**.

BUT THERE IS AN ARGUMENT!

Arguments commonly arise as to the **time when recoverable prolongation compensation** is to be **assessed**:

1. Is it to be assessed by reference to the **period when the employer delay occurred** (when the **daily or weekly amount of expenditure** and therefore compensation **may be high**) or
2. By reference to the **extended period** at the **end of the contract** (when the amount of compensation may be **much lower**)?

SCL Delay Protocol – CP 22: Period for evaluation of compensation

- ☐ Once it is established that **compensation for prolongation** is due,
the **evaluation** of the sum due is **made** by
reference to the **period when the effect** of the Employer Risk Event
was felt,
not by reference to the extended period at the end of the
contract.

What if we have agreed on the compensation per day?

SCL Delay Protocol – CP 22: Period for evaluation of compensation

- ❑ The **pre-agreed amount** is used for the **extended period**,
however the **period of delay** is important
if different **pre-agreed amount** exist for **different stages** of the project.

Therefore, the point in time when the compensable prolongation occurred would need to be **consistent** with what **has been agreed**.

Contracts should include provisions as to the period of time, compensation should be assessed for prolongation or disruption

SCL Delay Protocol – Conclusion

شرایط استفاده از این مبانی در حقوق ایران چیست؟
آیا اساساً اجازه استفاده از این مبانی وجود دارد؟

SCL Delay Protocol – Conclusion

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نحوه تعمیم و تسری عرف و عادت خارجی به داخلی

اسناد حقوقی در عرصه خارجی از جمله اصول قراردادهای تجاری خارجی^{۵۴}، کنوانسیون بیع خارجی کالا^{۵۵} و اصول قراردادهای اروپایی^{۵۶}، طرفین معامله را به رعایت عرف تجاری که در تجارت بین‌الملل به طور گسترده‌ای شناخته شده است و به طور منظم مورد استفاده قرار می‌گیرد، ملزم نموده‌اند. قوانین مدنی کشورهای مختلف نیز، هر یک به نوعی به این مهم پرداخته و رد پای التزام به عرف در آن‌ها مشاهده می‌شود. بنابراین سکوت قرارداد در عرصه بازرگانی بین‌الملل به معنای فقدان قابلیت بهره‌مندی از عرف و عادت نیست. همچنان که ماده ۲۲۰ از قانون مدنی ایران (ناظر به عرف حکمی) نیز اشعار می‌دارد «عقود نه فقط متعاملین را به اجرای چیزی که در آن تصریح شده است ملزم می‌نماید بلکه متعاملین به کلیه نتایجی هم که بموجب عرف و عادت یا به موجب قانون از عقد حاصل می‌شود ملزم می‌باشند.»

«ماده ۲۲۵» از قانون مدنی ایران (ناظر به عرف موضوعی) که بیان می‌دارد:

«متعارف بودن امری در عرف و عادت بطوری که عقد بدون تصریح هم منصرف آن باشد، به منزله ذکر در عقد است.»

SCL Delay Protocol – Conclusion

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نحوه تعمیم و تسری عرف و عادت خارجی به داخلی

از قرائن موید استدلال و استناد اخیر، می‌توان به فراز دوم «ماده ۶» شرایط عمومی پیمان قراردادهای مهندسی، تأمین کالا و تجهیزات، ساختمان و نصب به صورت توأم برای کارهای صنعتی (EPC - نشریه ۵۴۹۰) اشاره کرد که بیان می‌دارد

«در موارد سکوت در پیمان از آخرین نگارش استانداردها و کدهای معتبر خارجی هماهنگ با دیگر استانداردهای پیش‌بینی شده در پیمان با تأیید مشاور کارفرما استفاده می‌شود.»

چرا که موارد فنی در زمره امور موضوعی هستند که قابلیت تسری آن‌ها از نظام‌های خارجی به داخلی در صورت سکوت قرارداد با درج شرط (ارجاع مستقیم - قرارداد) و یا بدون درج شرط (ارجاع غیر مستقیم - عرف و عادت) وجود دارد. البته بایستی متذکر شویم که تعمیم و تسری مورد بحث، با ملحوظ نمودن محدودیت‌های حقوق موضوعه بایستی صورت پذیرد تا در نظم حقوق کنونی، واجد اثر باشد.

با توضیحات فوق

در رجوع به عرف و عادت، در مواقع سکوت قرارداد، تردیدی باقی نمی‌ماند.
در واقع هر موضوعی که در کشور بر اساس قاعده فقهی قابلیت اجرا داشته باشد،
میتوان در قاعده حقوقی نیز بدان ارجاع داد.

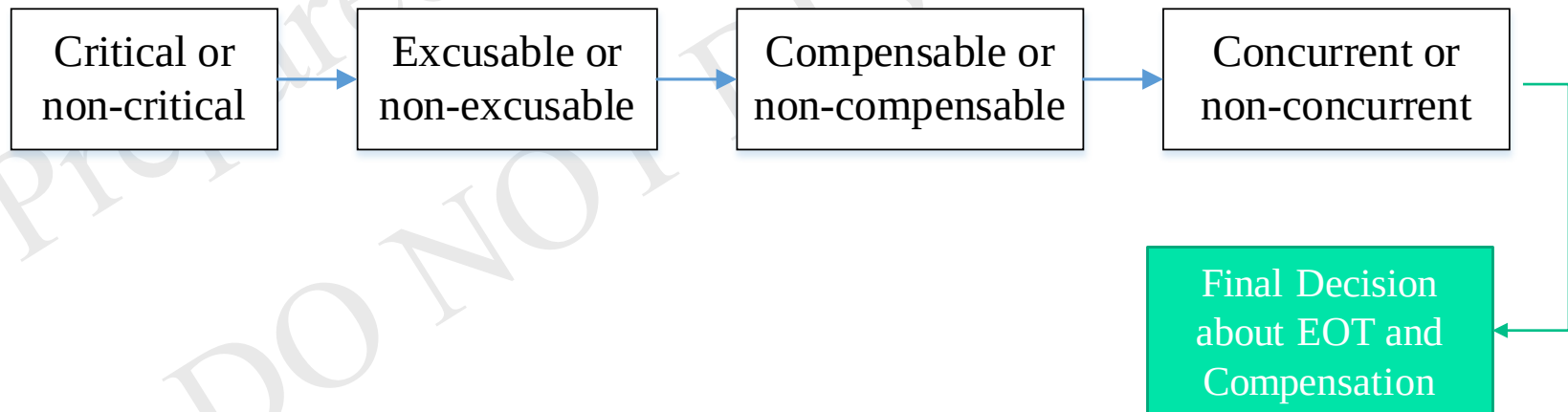
Types of Construction Delays

Types of construction delays

❑ There are **four basic ways** to categorize delays:

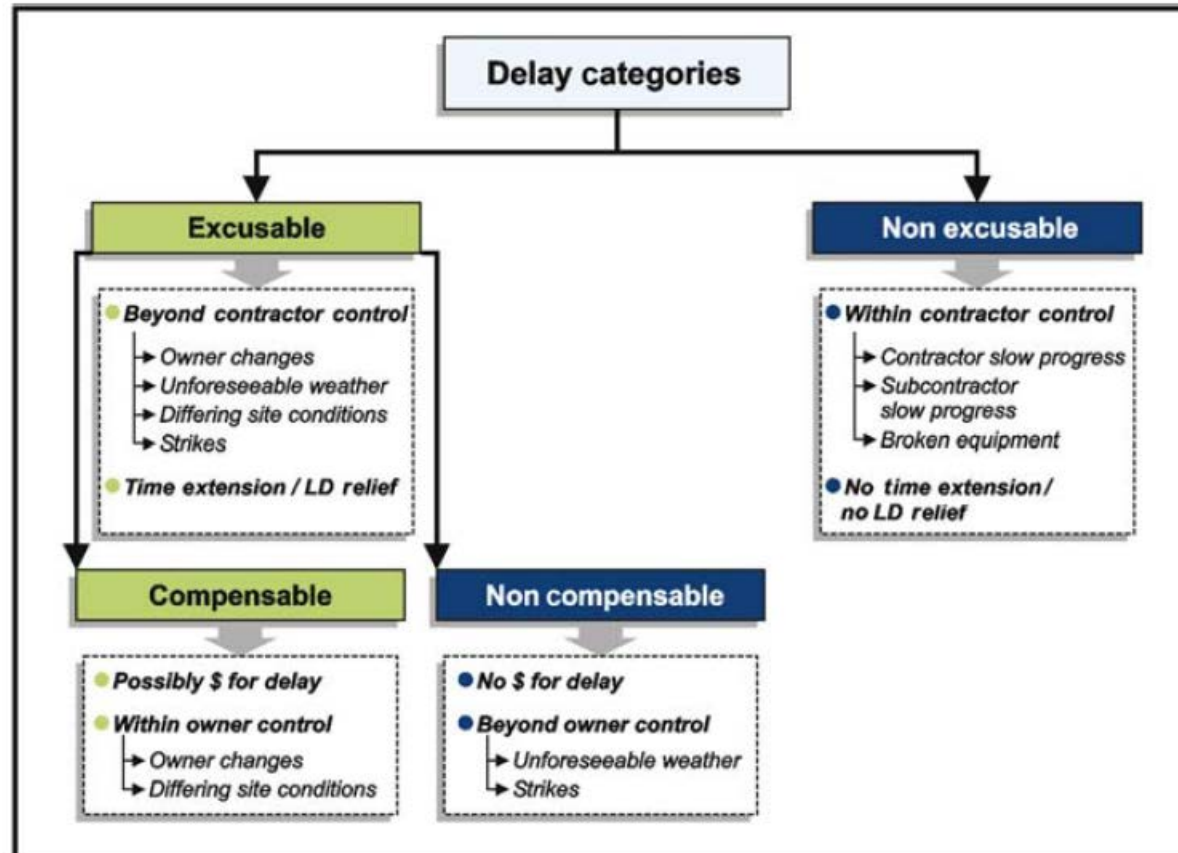
1. Critical or noncritical (بحرانی و غیربحرانی)
2. Excusable or non-excusable (مجاز و غیرمجاز)
3. * Compensable or non-compensable (قابل جبران و غیرقابل جبران)
4. * Concurrent or non-concurrent (Next session) (همزمان و غیرهمزمان)

❑ In the **process of determining the effect of a delay** on the project, the analyst must determine:



Types of construction delays

❑ **Note:** This figure represents **one interpretation**. However, **excusability** and **compensability** can **vary**, depending on the **contract**.



Descriptions of excusable, nonexcusable, compensable, and nonexcusable delays.



Critical vs. noncritical

- ❑ The **primary focus** is on delays that **affect the progress** of the **entire project**. **Two types of delays** in terms of criticality:

1. Critical delays

- ✓ Time extension + Delay cost (if possible)

2. Noncritical delays

- ✓ Disruption cost (if possible)
- ✓ Back to who owns the float?

Excusable – Unavoidable by both owner and contractor

❑ Excusable (Unavoidable – nor by contractor neither by owner)

❖ Force Majeure Delays

- ✓ Non-contracted work delays
- ✓ Unforeseeable weather delays

❑ بند ج ماده ۱۶: محل اجرای کار را دید و بررسی کرده و از وضعیت آب و هوا، بارندگی و امکان اجرای کار در فصلهای مختلف سال، **با توجه به آمار ۲۰ سال** پیش از تاریخ ارائه پیشنهاد قیمت و در نظر گرفتن مدت اجرای کار، اطلاع یافته است.

- ✓ Fires
- ✓ Labor issues/strikes
 - Sent labors to other places, e.g., flood
- ✓ Unknown conditions
- ✓ Supply shortages by acts of agreement
 - For example, in World War 2, steel companies provided steels only for military needs in USA.
- ✓ Acts of God (natural disasters such as flood, fire, earthquake)
- ✓ Wars

Excusable, Most of the time non-compensable

Excusable – Unavoidable by both owner and contractor

□ ماده ۴۳: بروز حوادث قهری

❖ جنگ، اعم از اعلام شده یا نشده، انقلابها و اعتصابات عمومی، شیوع بیماریهای واگیردار، زلزله، سیل و طغیانهای غیر عادی، آتش سوزیهای دامنه دار و مهارنشدنی، **طوفان** و حوادث مشابه خارج از کنترل دو طرف پیمان که در (۱) منطقه اجرای کار وقوع یابد و (۲) ادامه کار را برای پیمانکار ناممکن سازد جزو حوادث قهری به شمار میرود و در صورت بروز آنها به ترتیب زیر عمل می شود. در بروز حوادث قهری هیچ یک از دو طرف مسئول خسارتهای وارد شده به طرف دیگر در اثر این حوادث نیست.

□ سه شرط:

- (1) خارج از اراده طرفین باشد.
- (2) قابل مقاومت نباشد (در منطقه اجرای کار وقوع یابد و ادامه کار را برای پیمانکار ناممکن سازد)
- (3) پیش بینی آن ممکن نباشد (اگر اشاره نشده باشد باید از معیار عرف استفاده کرد)

QUESTION

Is war Excusable itself?



Question

جنگ به خودی خود حادثه قهری نیست مگر اینکه اجرای موضوع پیمان را ناممکن کند. بمباران تجهیزات موضوع پیمان توسط دشمن یا سوزاندن اسناد و نقشه ها.

Excusable – Unavoidable by contractor

❑ Excusable (Owner caused delays)

- ❖ Change orders
 - ✓ Constructing new walls or increasing the quality beyond the specs
 - ✓ Very common
- ❖ Access to worksite
- ❖ Change conditions (when only the owner accepts the responsibility)
 - ✓ Who owns the risk in the contract if for example:
 - GC should excavate the soil, but he encounters huge amount of stones and he should change the methods.
 - If GC accepts the risk, the price would be jacked up.

❑ ماده ۱۶ بند ج: محل اجرای کار را دیده و بررسی کرده... و

❑ در انتهای ماده ۱۶ میگویند: "به هر حال، پیمانکار تایید مینماید که **هنگام تسلیم پیشنهاد**، مطالعات

کافی انجام داده و هیچ موردی باقی نمانده است که بعداً در مورد آن استناد به جهل خود نماید.

✓ این شرایط مشکل جدی در بحث *Differing Site Conditions* دارد که در دوره مدیریت ادعا مفصل بررسی خواهیم نمود.

- ❖ Suspensions of work
- ❖ Delays in owner furnished items
- ❖ Coordination with other contracts

Excusable, may be compensable



Excusable – Unavoidable by contractor

❑ Excusable (Designer caused delays)

- ❖ Designer errors and omissions
- ❖ Slow reviews of submittals, RFIs, and change order requests
- ❖ Late implementation of change orders
- ❖ Delays in inspections and tests

➡ Difficult to separate from delays that owner caused

Excusable, may be compensable



Excusable – Sample of contract provision

- ❑ The occurrence of **unavoidable delays** will typically have a **less adverse impact** on the **contractor** as time extensions are **often automatic** **when** certain procedures are **followed**.
- ❑ Note that in the following provisions, **extracted from one of our sample contracts**, the delay will result in a **time extension only** if "the unavoidable delay involves the **controlling item on the critical path**."

For **delays** that the **Owner's Representative** considers to be **unavoidable**, the **Contractor shall**, pursuant to a **written request**, be **allowed** an **extension of time** **beyond** the time herein set forth, **proportional to such delay or delays**, in which to complete the contract.

During such extension of time, **neither extra compensation** for **engineering** and **inspection** shall be charged to the Contractor. **Time extensions** will be granted **only** if the **unavoidable delay** involves the **controlling item** on the **critical path**.

Time extensions granted as **a result of a change order** shall **not be duplicated** or otherwise deemed to cause **further extensions** within the **terms of this provision**.

Excusable – Sample of contract provision

108.6.1 General*

If warranted, the engineer will extend the contract completion date by issuing a "Contract Amendment" (Form E_61). The engineer will do so only if an excusable delay extends the scheduled late finish date beyond the lattermost contract completion date or its most recent extension. The engineer will not consider a request to revise partial or contract completion dates without notice as specified in subsection 104.2.7, "Contractor-Department Notification," and without documentation from the project schedule, including updates, supporting the need for a revision. The engineer will evaluate the information submitted and determine the time extension due, if any.

* Excerpted from the Wyoming Department of Transportation, Section 108.6, Extension to the Contract Completion Date

Excusable – Sample of contract provision

108.6.1 General*

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* Excerpted from the Wyoming Department of Transportation, Section 108.6, Extension to the Contract Completion Date

Non-excusable – Avoidable by contractor

❑ Non-excusable (Contractor caused delays)

- ❖ Late performance of SCs
- ❖ Ultimately performance by suppliers
- ❖ A **project-specific labor strike** caused by either the **contractor's unfair labor practices** or **unwillingness** to **meet with labor representatives**
- ❖ Late submittals
- ❖ Schedule omissions
- ❖ Mismanagement of resources
- ❖ Quality assurance and rework
- ❖ Insufficient productivity rates
- ❖ Lack of onsite supervision

Non-excusable, No time extension, no compensation, liquidated damages

Non-excusable – Avoidable by contractor

❑ Conditions not considered by the owners for time extension

- ❖ Conditions existed at the time contract was signed

❑ انتهای ماده ۱۶ میگویند: "به هر حال، پیمانکار تایید مینماید که هنگام تسلیم پیشنهاد، مطالعات کافی انجام داده و هیچ موردی باقی نمانده است که بعداً در مورد آن استناد به جهل خود نماید.

مشکل این ماده چیست؟

- ❖ The failure of GC to anticipate delivery schedule
- ❖ Adverse weather

✓ Only unusual weather is accepted

❑ بند ج ماده ۱۶: محل اجرای کار را دیده و بررسی کرده و از وضعیت آب و هوا، بارندگی و امکان اجرای کار در فصلهای مختلف سال، با توجه به آمار ۲۰ سال پیش از تاریخ ارائه پیشنهاد قیمت و در نظر گرفتن مدت اجرای کار، اطلاع یافته است.

Non-excusable – Sample of contract provision

- ❑ Note that while the time extension may be granted, the contractor may still be asked to pay for any added costs that the **owner may incur** as a result of the **time extension**.
- ✓ In case the **work is not completed** in the **time specified**, including such extensions of time as may have been granted for avoidable delays, the **Owner, however**, shall have the **right to grant an extension of time** for **avoidable delays** if it is deemed in the Owner's best interest to do so.
 - ✓ During **such extension of time**, the Contractor may be charged for **engineering and inspection services and other costs**, but will not be assessed liquidated damages.

اما آیا میتوان طبق نشریه ۴۳۱۱ چنین کاری را انجام داد؟

Non-excusable – Sample of contract provision

۳۰-ج)

در پایان مدت اولیه پیمان یا هر تمدید مدت پیمان، اگر کار به اتمام نرسیده باشد، مهندس مشاور با کسب نظر پیمانکار و با توجه به موارد تعیین شده در بند "الف" علل تأخیر کار را بررسی می‌کند و میزان مدت مجاز و غیرمجاز آن را با توافق پیمانکار تعیین می‌نماید و نتیجه را به کارفرما گزارش می‌کند، و سپس نظر کارفرما را در مورد میزان مجاز یا غیرمجاز تأخیر کار به پیمانکار اعلام می‌کند و معادل مدت تأخیر مجاز، مدت پیمان را تمدید می‌نماید.

۵۰-ب)

در پایان کار، در صورتیکه مدت انجام کار، بیش از مدت اولیه پیمان به علاوه مدت‌های تمدید شده پیمان باشد، مهندس مشاور با رعایت ماده ۳۰ و رسیدگی به دلایل پیمانکار، مدت تأخیر غیرمجاز پیمانکار را تعیین می‌کند، تا پس از تصویب کارفرما، به شرح زیر، ملاک محاسبه خسارت تأخیر قرار گیرد.

عملاً یک تناقض در این موضوع وجود دارد و این یکی از **اصلیترین دلایلی** که کارفرمایان تأخیرات را تا انتهای پروژه بررسی نمی‌کنند دقیقاً همین است. زیرا **نمی‌توانند** به ازای **تأخیرات غیر مجاز** پروژه را **تمدید کنند!**

پس راهکار در شرایط موجود چیست؟
بررسی و تدوین برنامه جبرانی!

Compensable vs. non-compensable

- ❑ Where the Contractor is entitled to a **time extension** + **additional compensation**.
 - ❖ Only excusable delays can be **compensable**.
- ❑ Depends **primarily** on the terms of the **Contract**.
 - ❖ In **most cases**, a Contract **specifically notes** the **kinds of delays** that are **non-compensable**.

The owner can write the contract as to **prevent consequential damages** OR may be **limited by the contract**

You will learn more in Claim Management Course!

Compensable vs. non-compensable – Sample of contract provisions

- ☐ No damage clause
- ☐ Example of **no-damage-for-delay clause** covering work by **other contractors**.

The Contractor shall assume all liability, financial or otherwise, in connection with its Contract, and hereby waives any and all claims against the Department for additional compensation that may arise because of inconvenience, delay, or loss experienced by it because of the presence and operations of other contractors working within the limits of or adjacent to the Project.

Compensable vs. non-compensable – Sample of contract provisions

(ج) ماده ۴۹: تعلیق (بند ب و ج)

۱. هزینه بالاسری

- اگر پیش بینی شده
- اگر نشده ماهانه مبلغی معادل ۱۰ درصد متوسط کارکرد فرضی ماهانه

۲. هزینه اجاره ماشین آلات

این موضوع ارتباطی با تاخیر مجاز و خسارت تاخیر پرداختی به پیمانکار نداشته و به موضوع تعلیق اختصاص دارد.



Some of main reasons leading to the submission of claims

Claims are inevitable on most large-scale construction projects

- ☐ Inadequate time and planning before the project commenced on site;
- ☐ Inviting bidders on incomplete drawings;
- ☐ Introducing extensive revisions throughout the project;
- ☐ Inadequate site investigation – particularly on civil engineering works involving deep
- ☐ Basements, piling, earthworks, tunneling etc.
 - ✓ A claim for unforeseen ground conditions is encountered on most large-scale projects;
- ☐ Extensive changes to standard forms shifting the risk to the contractor often lead to claims – Standard forms of contract are tightly integrated documents;
- ☐ Client's interference with the timing and sequence of construction.

We categorized this comprehensively in Claim Management Course



فرآیند جامع آنالیز تاخیرات در پروژه

بخش چهارم:
مقدمه: آنالیز تاخیرات همزمان
(Concurrent Delays)

ارائه دهنده:

سید محمدرضا علوی پور

(PhD, PMP, CMIT)

دانشگاه Illinois Tech آمریکا

What we will learn?

- ❑ Meaning of concurrent delays
 - ❖ General concepts
 - ❖ SCL Protocol
 - ✓ Meaning
 - ✓ True concurrent delay
 - ✓ More common usage
 - ❖ AACE Recommended Practices
 - ✓ AACE 10S-90
 - ✓ AACE 29R-03
 - Literal
 - Functional
 - ❖ ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis)

What we will learn?

❑ Dealing with concurrent delays

❖ Legal implication

- ✓ U.S. law
- ✓ English law
- ✓ Scots law
- ✓ Canadian law
- ✓ Hong Kong law
- ✓ Australian law
- ✓ FIDIC
- ✓ AIA A201-2017
- ✓ Other contracts
- ✓ SCL Protocol
- ✓ AACE 29R-03
- ✓ ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis)

What we will learn?

☐ Dealing with concurrent delays

❖ Practical implication

- ✓ General concept
- ✓ Separate critical path
- ✓ Same critical path

❖ My choice

- ✓ Contemporaneous
- ✓ Forensic

☐ Pacing delays

Meaning of Concurrent Delays

(General Concepts)



Concurrent delays – Introduction

☐ Few contract includes:

1. A **definition** of “**concurrent delay**”
2. **How** concurrent delay should be **resolved**?

☐ How concurrent delays **affect** a **contractor’s entitlement** to:

1. Time extensions
2. Additional compensation
3. Responsibility for liquidated damages (This is **addition** to **compensation**)



Concurrent delays – Introduction

❑ Controversial issue, why?

*There is also a **lack of understanding** in the industry concerning the concept of concurrent delay.*

1. **Meaning:** **Because** there are **different meaning** of **concurrent delay** itself
2. **Analyzing:** **Because** there are **different views** on the **correct approach** when **analyzing** entitlement to **ETO** and **compensation**

SCL Delay Protocol – CP 10: Concurrent delay – effect on EOT

(د-۳۰)

در اجرای مفاد این ماده برای تمدید مدت پیمان، تأخیرهای همزمان ناشی از عوامل مختلف درج شده در بند الف، فقط یک بار محاسبه می‌شود.

(۳۰-الف-۹)

هرگاه کارفرما نتواند تعهدات مالی خود را در مواعیدهای درج شده در اسناد و مدارک پیمان انجام دهد.

چگونه مشکل را در انواع مختلف حل خواهید نمود؟

Concurrent delays – Some of the scenarios



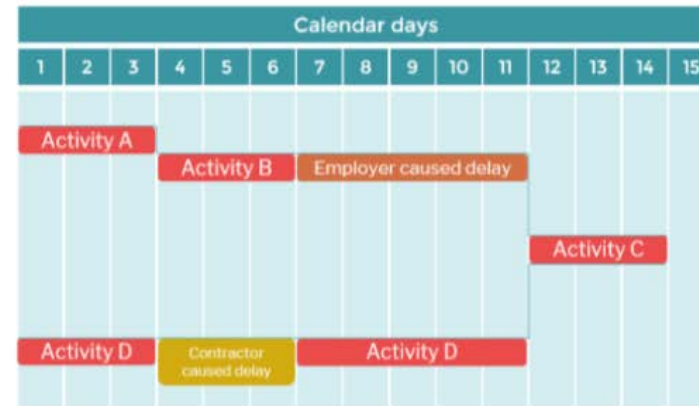
Scenario A



Scenario B



Scenario C



Scenario D

Concurrent delay event scenarios

Compensation? EOT? Concurrent? What would you do? Why?

Meaning of Concurrent Delays

(SCL Protocol)



Definition

❑ **Concurrency** is very complex issue because:

1. **Meaning** of concurrent delay
2. Correct approach to **deal with** the concurrent delay

- ✓ **Protocol** provides **guidance** in order to organize and resolve concurrent delays in an agreed manner as part of the **overall delay analysis**.
- ✓ **Protocol** takes different competing arguments and represents what the **Protocol** considers to be the most appropriate solution.



Meaning of concurrent delay

❑ There are two views in SCL Protocols

1. True concurrent delay

❖ Strict approach

2. More common usage of concurrent delay (Keating's “overlapping” concurrent delay)

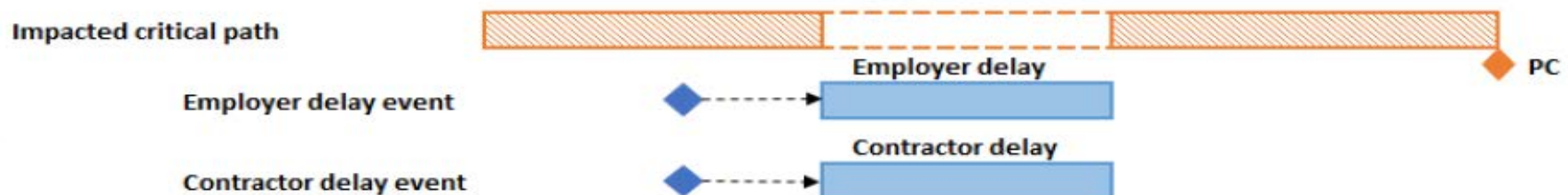
❖ Less strict approach

Let's see the difference!

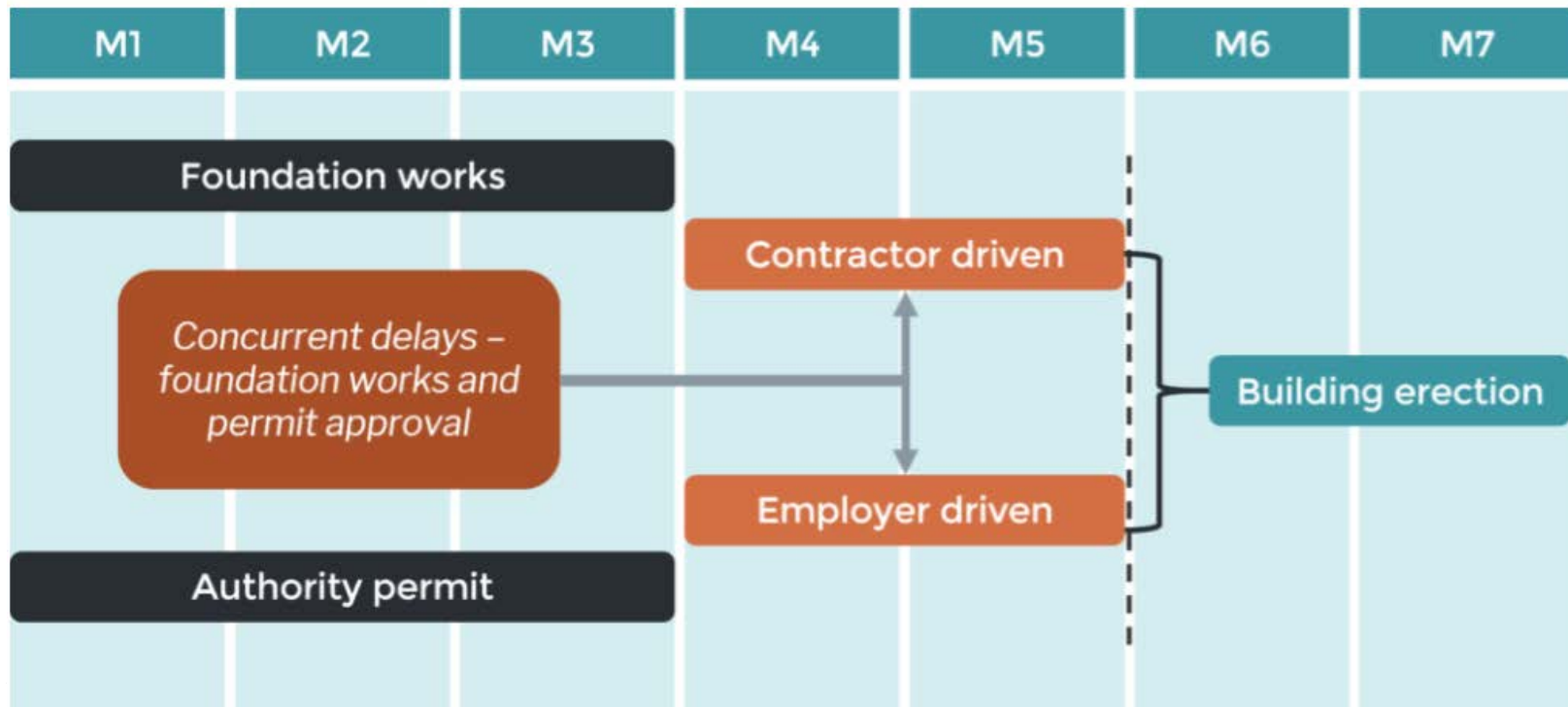


Meaning of concurrent delay – True concurrent delay

1. **Occurrence** of two or more delay events at the **same time**, one an Employer Risk Event, the other a Contractor Risk Event (**some contract uses approximately**)
 2. Sharing the **same start and finish dates**
 3. The **effects** are **felt at the same time**
 4. **Both** should lead to delay to **completion**
- ☐ It is **unlikely to occur** and **argued** by some (**Keating on construction contracts, 2016**) that this narrow definition is possibly **too limited for practical application**.



Meaning of concurrent delay – True concurrent delay

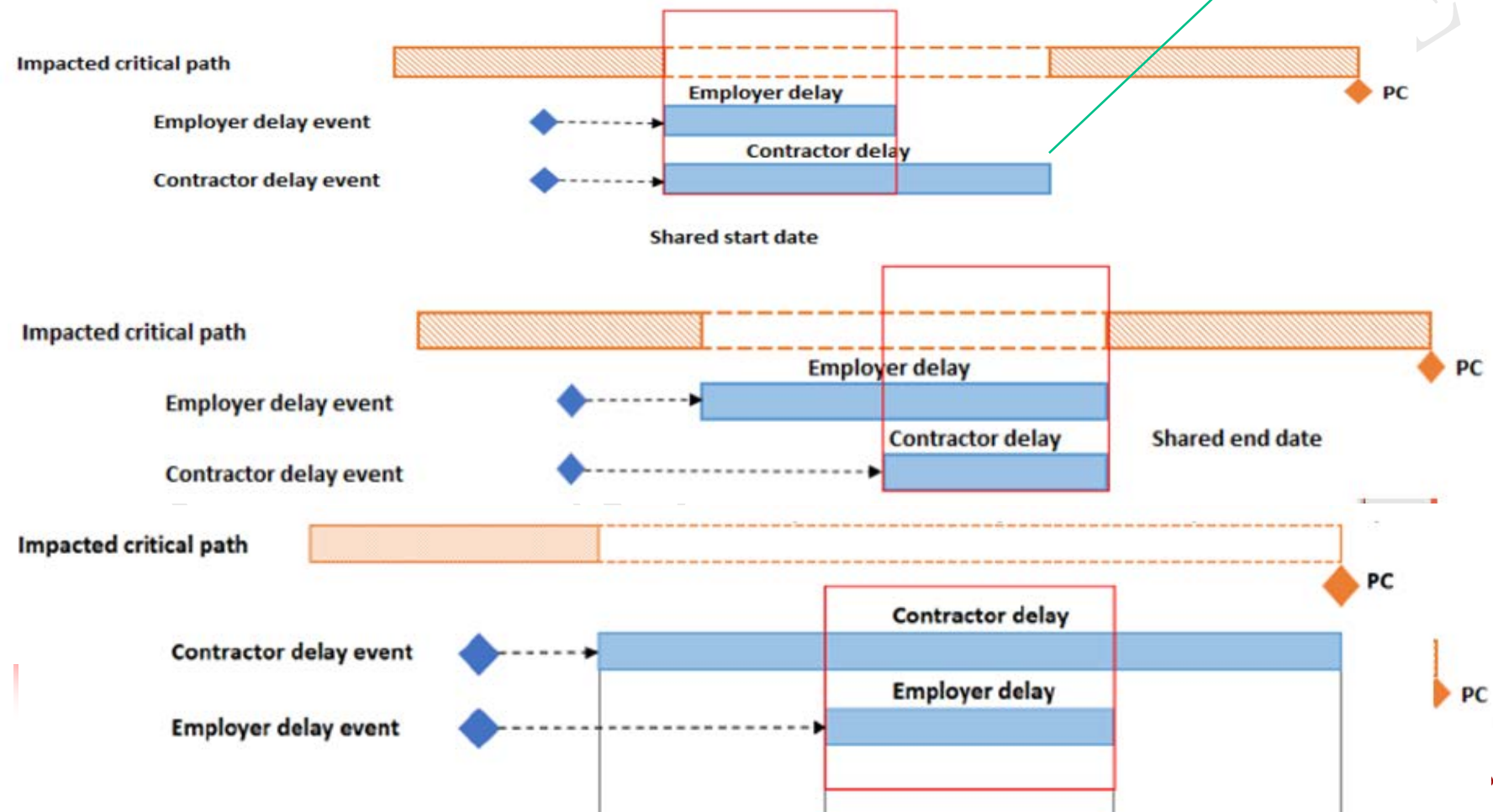


Meaning of concurrent delay – More common usage

1. Two or more delay events **arise** at **different times**, but
2. **Effects** of them are felt at the **same time**
3. **Both** should lead to delay to **completion**

Many call this “true concurrent delay”
Do you know why?

Period of overlapping delay = concurrent delay



Meaning of concurrent delay

*In both cases, concurrent delay **does not become an issue** unless each of an **employer risk event** and a **contractor risk event** lead or will lead to **delay to completion**.*



Meaning of concurrent delay

- ❑ **Employer Delay** to Completion does **not exonerate the Contractor** for **all its delays** **prior** to that Employer Delay to Completion occurring.
- ❑ The **effect of the Employer Delay** should be assessed as described in **Core Principle 5** and **any EOT determined** due should simply be added to the contract completion date.

Meaning of concurrent delay

❑ **Protocol** says that concurrent delays have **both**

1. **Practical** implications
2. **Legal** implications

We will talk about that later!

Meaning of Concurrent Delays

(AAACE Recommended Practices)



AACE 10S-90

- ❑ In the **United States**, one of the technical references that is **commonly-cited** in **delay claims** is AACE International Recommended Practice **(RP) 10S-90**, entitled Cost Engineering Terminology. RP 10S-90, however, does **not offer one single definition** of concurrent delays.

Let's see the definitions!



AACE 10S-90 – Meaning of concurrent delay

1. **Two or more delays** that take place or **overlap** during the **same period** (**Keating**),
either of which **occurring alone** would have **affected the ultimate completion date**.
2. Concurrent delays occur when there are **two or more independent causes** of delay during the **same time period** (**Functional**)

The “same” time period from which concurrency is measured, however, is **not always literally within the exact period of time**.

*For delays to be considered concurrent, **most courts do not require** that the period of concurrent delay **precisely match**.*



AACE 10S-90 – Meaning of concurrent delay

3. **True concurrent delay** is the occurrence of **two or more delay events at the same time** (*Literal*)

one an employer risk event, the other a contractor risk event and the **effects of which are felt at the same time.**

- ❖ The term “**concurrent delay**” is often used to describe the situation where two or more delay events **arise at different times**, but the **effects of them are felt (in whole or in part) at the same time.**

To avoid confusion, this is more correctly termed the “concurrent effect” of sequential delay events.



AACE 10S-90 – Meaning of concurrent delay

4. Concurrent delay occurs when **both the owner and contractor delay** the project or when either party delays the project during an **excusable but non-compensable** delay (e.g., abnormal weather).
 - ❖ The delays need **not occur simultaneously** but can be on **two parallel critical path chains** (*separate critical path*)
5. The condition where **another delay-activity independent** of the subject delay is **affecting the ultimate completion** of the chain of activities (*same critical path*).

Which one?



AACE 29R-03 – Contract

- ❑ The **existence of a contractual definition** is a **major factor** on the determination of concurrency.
- ❑ As stated in the previous subsections, **contracting parties are free to mutually agree** on any method or procedure **as long as** those agreements are **legally enforceable**.
- ❑ Therefore, the general rules, exceptions, and considerations in this **RP are applicable** to the extent that they **do not directly contradict contractual definitions** and specifications.

What pre-requisite requirements needed before evaluation?



AACE 29R-03 – Pre-requisites of concurrent delay

1. Two or more delays that are **unrelated**, **independent**, and would **have delayed** the project even if the **other delay did not exist** (*both on critical path*)
2. Two or more delays that are the **contractual** responsibility of **different parties**, but one may be a **force majeure event** (*different parties*)
3. The delay must be **involuntary** (*not pacing*); and,
4. The **delayed work** must be **substantial** and **not easily curable** (*mitigation with no cost could not have been done*)

What types of concurrent delays exist based on this requirements?



AACE 29R-03 – Types of concurrent delay

❑ Whether concurrency is determined literally or functionally:

1. Literal concurrency

- ❖ Happening at the same time
- ❖ Like “**true concurrency**”
 - ❖ Under this theory, if the **first delay started on day one**, and the **second delay started on day two**, they would **not be concurrent** – the delay associated with the first event would **create float in the entire project** so the **second delay could not also** be on the **co-critical path**.

2. Functional concurrency

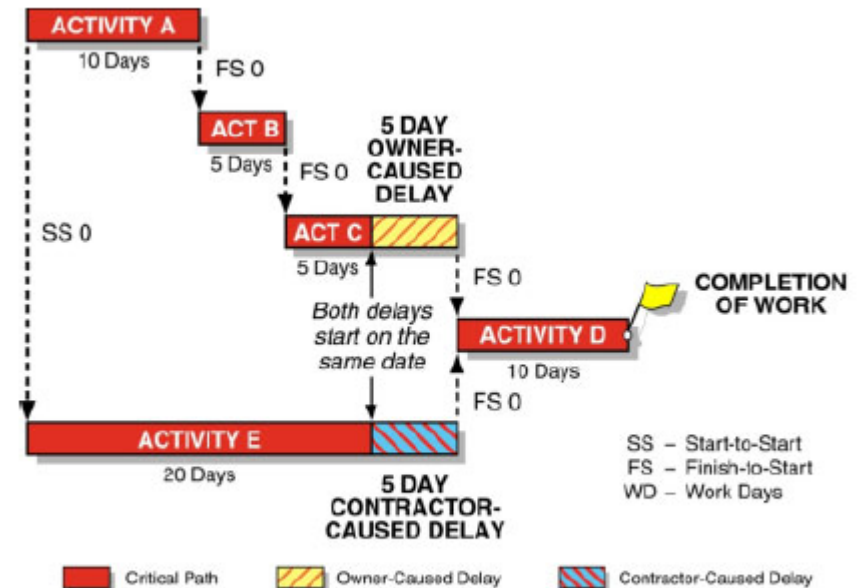
- ❖ Happening within the same analysis period (usually a month)
- ❖ “**Concurrent effects**”



AACE 29R-03 – Literal concurrency

- ❑ **Literal concurrency** occurs when two or more **delay-causing events** occur at the **same time**.

Illustration of Literal Concurrent Delays



The two 5 WD delays are literal, concurrent delays because they both started on the same day and are of equal duration.

AACE 29R-03 – Functional concurrency

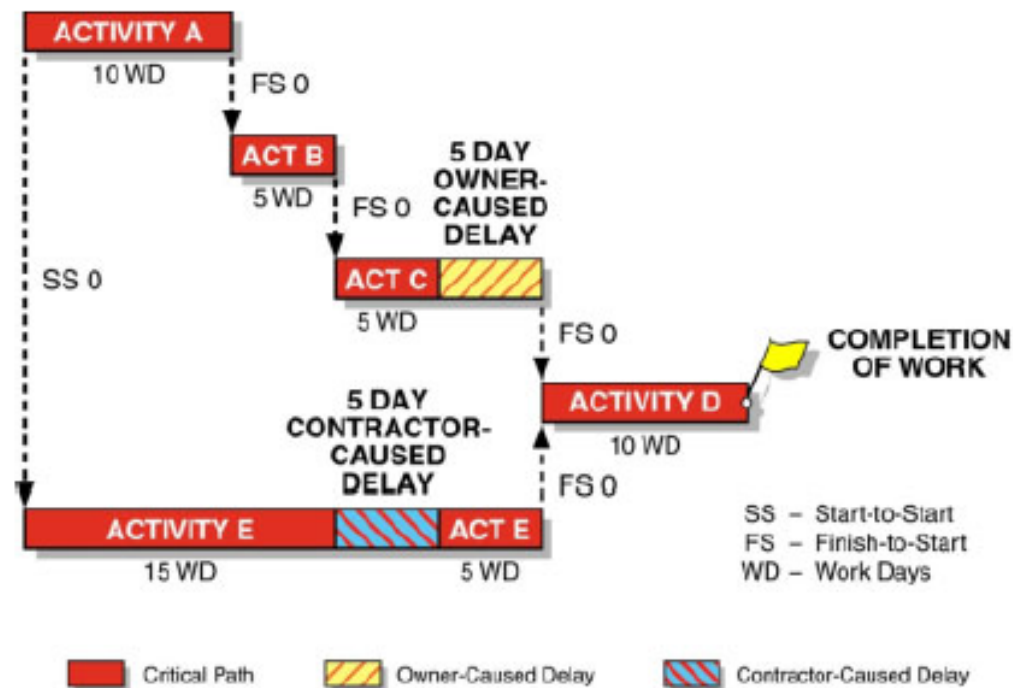
❑ **Functional concurrency** occurs when the **separate network paths**, on which the delays reside, **concurrently impact** the completion of work date

❖ Accordingly, the **functional application** of concurrent delay theory does **not necessarily** require the delay events to **occur at the same time**.

Be careful!

This is different compared to Keating Theory!

Illustration of Functional Concurrent Delays



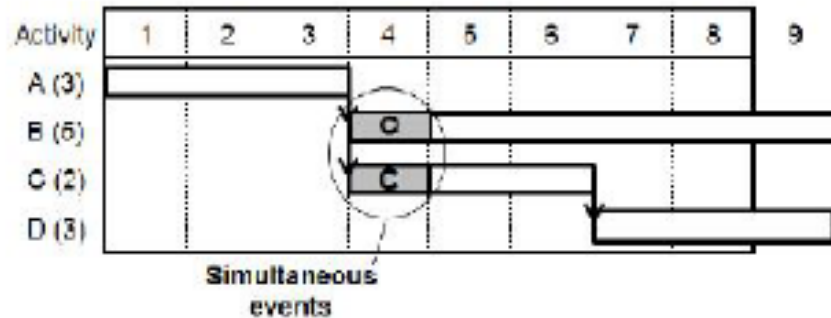
The two 5 WD delays are functionally concurrent because they both have the same effect on the completion of work, but occurred at different times during the schedule period being examined.



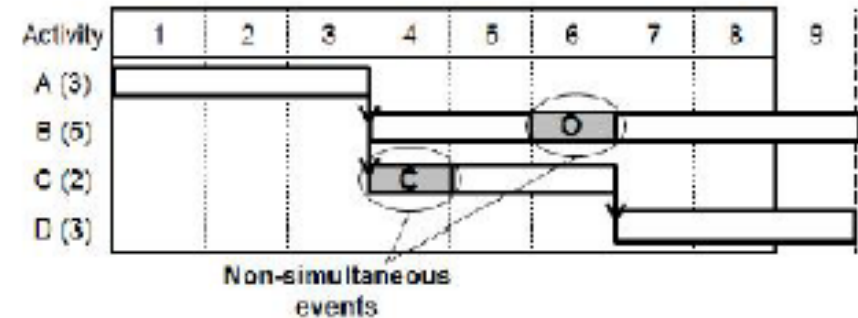
AACE 29R-03 – Functional concurrency

- ❑ **Functional concurrency** is a much **more liberal** application of the concurrent-delay theory,
 - allowing for the analyst to **identify concurrent delays simply** if the **two delays occur within the same measurement period** for the delay analysis.
- ❑ Typically, a **delay-analysis measurement period** is a **month**, or the **time between schedule updates**.
 - ❖ Theoretically, a delay that occurred during the **first 5 days of the month** and a delay that occurred during the **last 5 days of the month** could be considered **concurrent**.

AACE 29R-03 – Functional vs. Literal



a) True concurrent delays



b) Concurrent effects



AACE 29R-03 – Functional vs. Literal

- ❑ **Literal** will result in **fewer concurrent** delays
- ❑ **Literal** will need **day-to-day delay analysis**
- ❑ **Functional** is more **liberal** in identifying and quantifying concurrency
- ❑ **Functional** will result in **more concurrent delays**, **less compensation** for both parties
- ❑ **Functional** theory recognizes the **real-world limitations** of exactly measuring delays
- ❑ **Contemporaneous analysis** is **more functional**.
- ❖ **Forensic analysis** is more likely to be **literal** in nature.

Remember the SCL Protocol approach?

*Employer Delay to Completion **does not exonerate** the Contractor for all its delays **prior** to that Employer Delay to Completion occurring.*

Is it against “functional theory?”

Meaning of Concurrent Delays

(ASCE ANSI/ASCE/CI 67-17)

ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis) – Meaning of concurrent delay

❑ **8.1 Concurrent delay** can be described as a situation where

1. **Two or more critical delays** are occurring
2. At the **same time** during **all or a portion** of the delay **time frame** in which the delays are occurring (*same time not same period, NOT FUNCTIONAL*)
3. It could be on **same or separate critical paths**
4. **Does not need** to have the **same start or finish dates** (*Keating with one exception*)
 - ❖ The standard has **no clear position** regarding the **time interval between delay events**, but it could be understood that it requires both events literally "occurring at the same time".

Is **functional theory** applicable here?

Is it **more consistent** with **SCL Protocol** or **AACE**?

So far you have learned what concurrent delay means!

BUT

HOW COULD WE DEAL WITH THIS?

EOT, Compensation, Liquidated damages, etc.?

Let's see this from two perspectives:

- 1. Legal implication**
- 2. Practical implication**

Dealing With Concurrent Delays

(Legal Implication)

Concurrent delays in Long International document - Introduction

- ❑ This company includes **International Experts** in **Claims Analysis**, **Dispute Resolution**, and **Project Management** for Process, Oil & Gas, Pipeline, Power, Industrial, Infrastructure, and Building Construction Projects.
- ❑ **Long International Inc.** has **many different offices** throughout the **world** even in the **Middle East**, but **main office** located in **USA**.
- ❑ We want to talk about the document **provided** by Long International Inc. in **2015**.

About the Author



Richard J. Long, P.E., is Founder and CEO of Long International, Inc. Mr. Long has over 40 years of U.S. and international engineering, construction, and management consulting experience involving construction contract disputes analysis and resolution, arbitration and litigation support and expert testimony, project management, engineering and construction management, cost and schedule control, and process engineering. As an internationally recognized expert in the analysis and resolution of complex construction disputes for over 30 years, Mr. Long has served as the lead expert on over 300 projects having claims ranging in size from US \$100,000 to over US \$2 billion. He has presented and published numerous articles on the subjects of claims analysis, entitlement issues, CPM schedule and damages analyses, and claims prevention. Mr. Long

Concurrent delay in various legal jurisdictions

- ☐ U.S. law
- ☐ English law
- ☐ Scots law
- ☐ Canadian law
- ☐ Hong Kong law
- ☐ Australian law
- ☐ FIDIC
- ☐ AIA A201-2017
- ☐ Other contracts
- ☐ SCL Protocol
- ☐ AACE 29R-03
- ☐ ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis)

❑ U.S. courts and **arbitration** proceedings offer **three approaches** to the handling of **concurrent delay**:

1. **Time but no money**; or
2. **Apportionment**; or
3. **Responsibility** based on a **critical path delay analysis**

These depend on the meaning of concurrent delays...

when delays are **concurrent**, the decision will be taken based on one of the **above items**



U.S. law – Time but no money

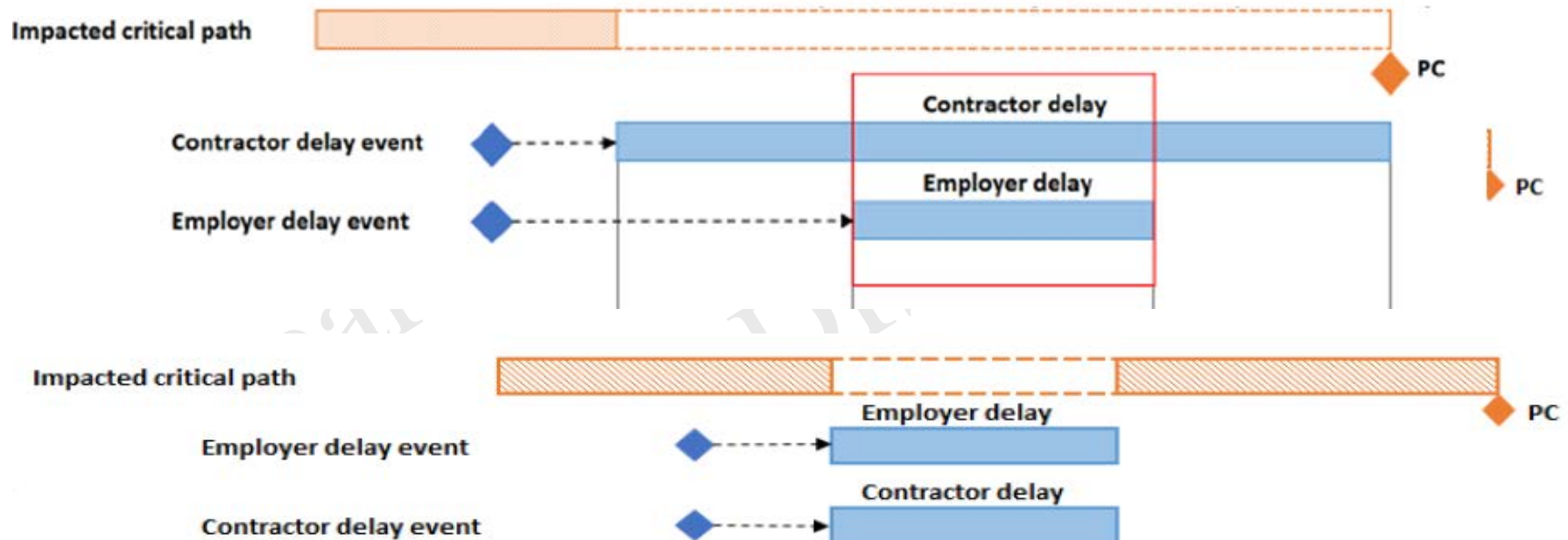
- ❑ “Time but no money” principle traces back to **early 1900s U.S.** cases when a **strict rule against apportionment** applied.
 - ❖ The **courts** could **not apportion** “with any degree of **certainty**.”



U.S. law – Apportionment

- ❑ Basically entails the **allocation** of the **time** and **money** effects of the delay to project completion **based on**

relative causative potency or significance of the competing causes of delay



Is it possible in all cases? How? Let's see!



U.S. law – Apportionment

- ❑ Under this approach, **responsibility for concurrent delay** is **apportioned** between the employer and the contractor based on what is **fair and reasonable**.
- ❑ **Apportionment** may mean a contractor can get a **partial**, but **not full amount** of time relief for concurrent delays to the works.
- ❑ The rationale for this approach is that the **parties should share risk and responsibility** for concurrent delay.

At face value, this might **seem a fair and sensible** solution.

Is it?



U.S. law – Apportionment

❑ However, there are **some difficulties** with it:

1. There is the **practical problem** of having to make an **apportionment**.
 - ❖ This may **not be straightforward**, and it offers **little certainty**.
2. It is **questionable** whether **one party** can be regarded as **more culpable**.
3. It is **doubtful** that words like **“fair and reasonable”** are **sufficient** to create a power of apportionment?
4. It **conflicts** with the **prevention principle** (*this is the most known term in U.K.*)
 - ❖ If a **contractor is awarded less** than a full EOT as a result of an apportionment, they will be **exposed to LDs**
where they **have been prevented** from completing the works on time.

What the **U.S. courts** have been done to **overcome** these problems?



U.S. law – Apportionment

Thus, U.S. courts will apportion delay damages when?

❑ **Evidence** permits the segregation of costs resulting from each party's causes

❖ **Courts** will **not allow** for **apportionment**

if the **segregation** of delay costs is **impossible**.

Apportionment approach is still not accepted in many of English courts!

We will see!



U.S. law – Critical path delay analysis

- ❑ Critical path delay analysis offers an **alternative to apportionment** in that it offers the **best evidence** of **cause-effect analysis** of time impacts, as explained later in **practical implication**.



U.S. law – Critical path delay analysis

Let's see some U.S. Cases...

U.S. law – Blinderman Case

- ❑ Most courts make this decision in the following:

Where both parties contribute to the delay “neither can recover damage, unless there is in the proof a clear apportionment of the delay and the expense attributable to each party.” Coath & Goss Inc. v. United States, 101 Ct.Cl.702, 714-15 (1944); Commerce International v. United States, 167 Ct.Cl.529, 338 F.2d.81, 90 (1964).

Generally, courts will deny recovery where the delays are “concurrent or intertwined” and the contractor has not met its burden of separating its delays from those chargeable to the Government.

- ❑ Meaning that neither prolongation costs **nor liquidated damages** are recoverable where apportionment is not possible.

SO

An extension of time will only be granted

U.S. law – Hood Plumbing Case

In *Hood Plumbing*,¹⁹ claims were made for delay costs and remission of liquidated damages. There were concurrent delays. It was held in relation to the claim for additional costs:

In order to recover for alleged compensable delay by the Government, a contractor must demonstrate, with a reasonable degree of accuracy, both the extent and cause of such delay. ... When delays by the Government are intertwined or concurrent with delays that are not compensable, neither the Government nor the contractor may recover unless the delays can be separated or apportioned.

With regard to the remission of liquidated damages, it was held that the contractor's delay exceeded the period of delay caused by the government and on that basis, liquidated damages could be assessed. This is not inconsistent with the principle that liquidated damages are not recoverable if delay cannot be apportioned; the assessment made in this case did amount to an apportioning of the delay.

□ Meaning that even though an **EOT** should be **granted** and **LD** should **not be applied** in concurrent delays,

the owner can assess for **LD** and **reduce EOT** if apportionment is doable.



1. Dominant cause approach
2. Malmaison approach

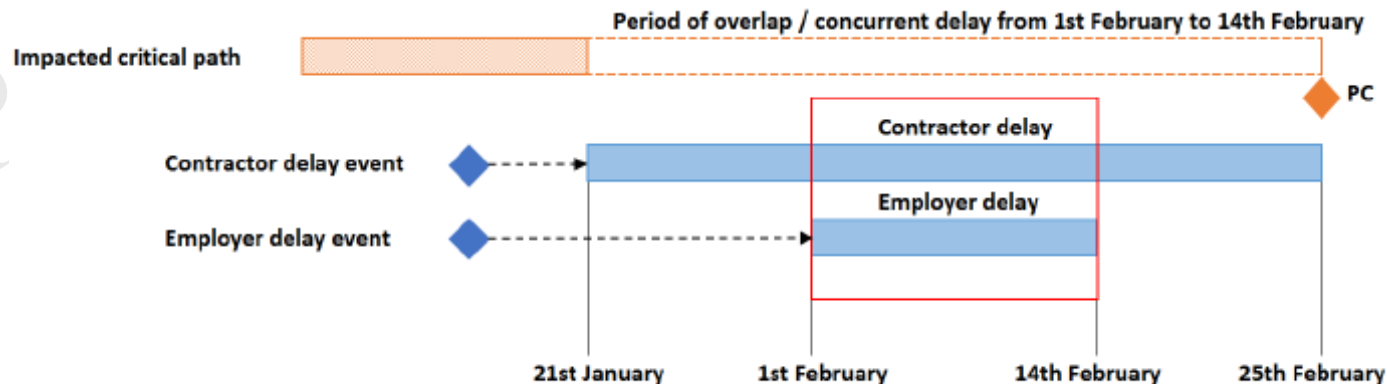
Prepared by Dr. Alavipour
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English law – Dominant Cause approach

- During the 1980s and 1990s in the world of construction claims.

"If there are two causes, one the contractual responsibility of the Defendant and the other the contractual responsibility of the Plaintiff, the Plaintiff succeeds if he establishes that the cause for which the Defendant is responsible is the effective, dominant cause. Which cause is dominant is a question of fact, which is not solved by the mere point of order in time, but is to be decided by applying common sense standards".

- It is **most useful** in situations where a delay at **risk of one of the parties**, is contained **wholly within the start and completion dates** of a delay at risk of the other party.

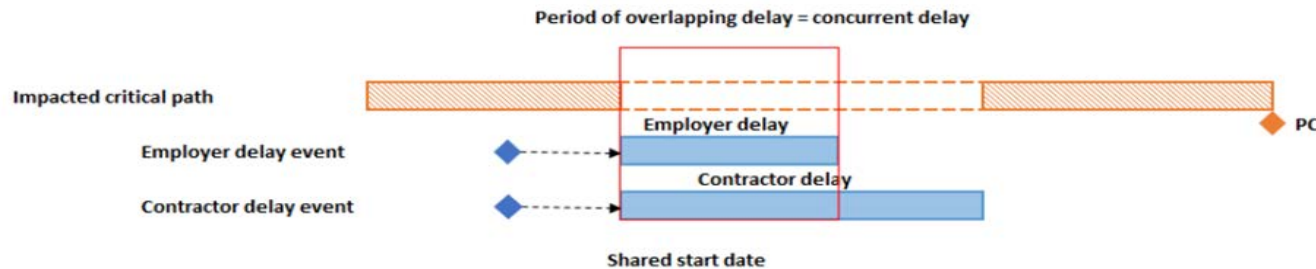




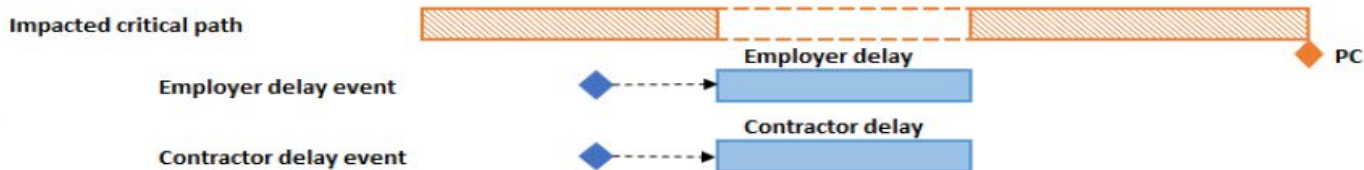
English law – Dominant Cause approach

❑ There are **difficulties**, however, with this approach:

1. First, there is the practical problem of **having to decide which cause is dominant**.



2. Second, it provides **no answer** where the delay events are **equally dominant**.



3. Third, it **conflicts** with the **prevention principle**.

❖ If the **dominant cause** is a **Contractor Risk event**, the contractor will be

1. **Denied an extension of time** and

2. May be exposed to delay damages **even though the employer has also delayed the contractor**.

English law – Dominant Cause approach

Even though the dominant cause approach does not seem to be able to always give a definitive answer of liability, this approach still seems to be relevant and has been supported in

- U.K. (case of Petroleo Brasileiro v ENS 1 Kos Ltd.) and
- Other foreign case law such as South African court.



English law – Malmaison approach

- ❑ The **Malmaison approach**, so called after the case of **Henry Boot Construction v Malmaison Hotel (Manchester) Ltd (1999) 70 Con LR** states that a contractor is entitled to a **full extension of time** for a delay caused by **two or more events**, provided one of them is an **employer's risk event (Relevant Event)** under the contract.

❖ **Relevant event:** *a delay which is caused by the **owner** or **neutral event***

"If there are two concurrent causes of delay, one of which is a relevant event [an employer risk event] , and the other is not, then the contractor is entitled to an extension of time for the periods of delay caused by the relevant event notwithstanding the concurrent effect of the other event."

Let's see an example!



English law – Malmaison approach

❑ To take a **simple example**:

1. If **no work** is possible on a site for a week not only because of **exceptionally inclement weather (a relevant event)**,
2. But also because the **contractor** has a shortage of **labor (not a relevant event)** and
3. If the **failure** to work during that week is likely to **delay** the works **beyond the completion date by one week**,

then the architect is required to **grant an extension of time of one week**.

This approach has been held to be the “generally accepted approach” in resolving issues of ‘true concurrency.’



English law – Malmaison approach – Example

❑ In the **8th edition of Keating**, the learned editors summarized the *Malmaison* approach as follows:

- ❖ ‘Thus it now appears to be accepted that a contractor is entitled to an extension of time notwithstanding the matter relied upon by the **contractor** is **not the dominant cause** of delay, provided only that it has at least **equal** “**causative potency**” with all other matters causing delay.



English law – Malmaison approach – Example

❑ To be concurrent, the delays

1. Must be of approximately "equal causative potency"¹ (*not should be clearly dominant*)
2. Be felt at the same time.

❖ The **Malmaison² decision** stands as authority for the proposition that concurrent delay will

1. Entitle a contractor to an extension of time to the completion date,
2. But **not** to its time-related costs

¹ John Marrin QC, *Society of Construction Law UK paper "Concurrent Delay"* (February 2002), p 2.

² *Henry Boot Construction (UK) Ltd v Malmaison Hotel (Manchester) Ltd* [1999] 70 Con LR 32.

How much is that consistent with **SCL Protocol**?

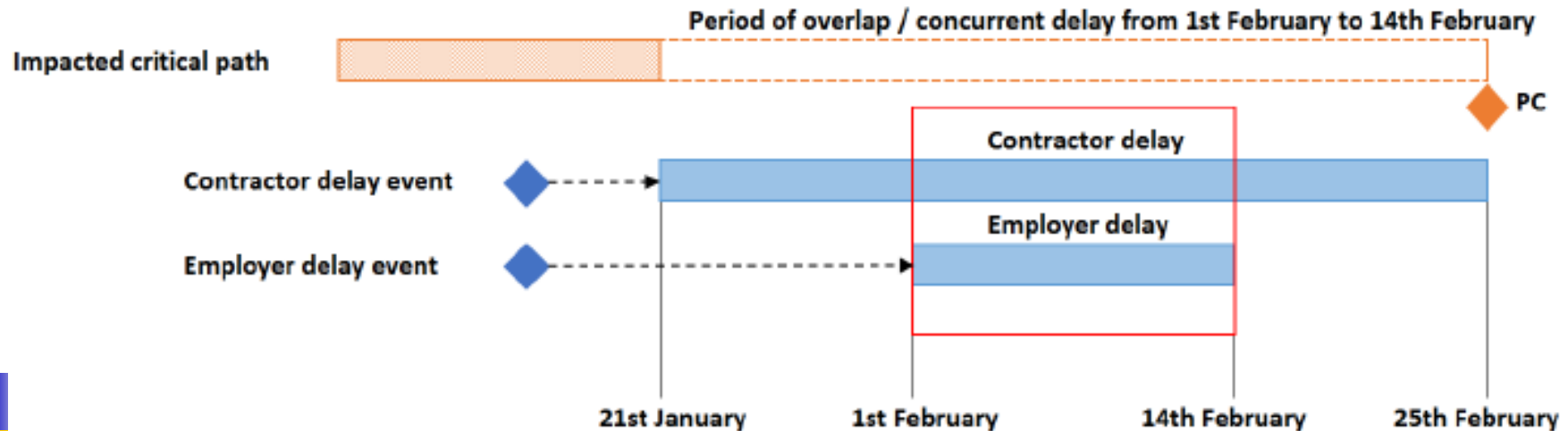
There are **two competing views** as SCL Protocol says!



English law – Malmaison approach – Example

- ❑ A contractor Risk Event will result in **five weeks contractor delay** to completion, from **January 21 to February 25**.
- ❑ **A few weeks later**, Employer Risk Event would result in **Employer Delay** to Completion from **February 1 to February 14**.

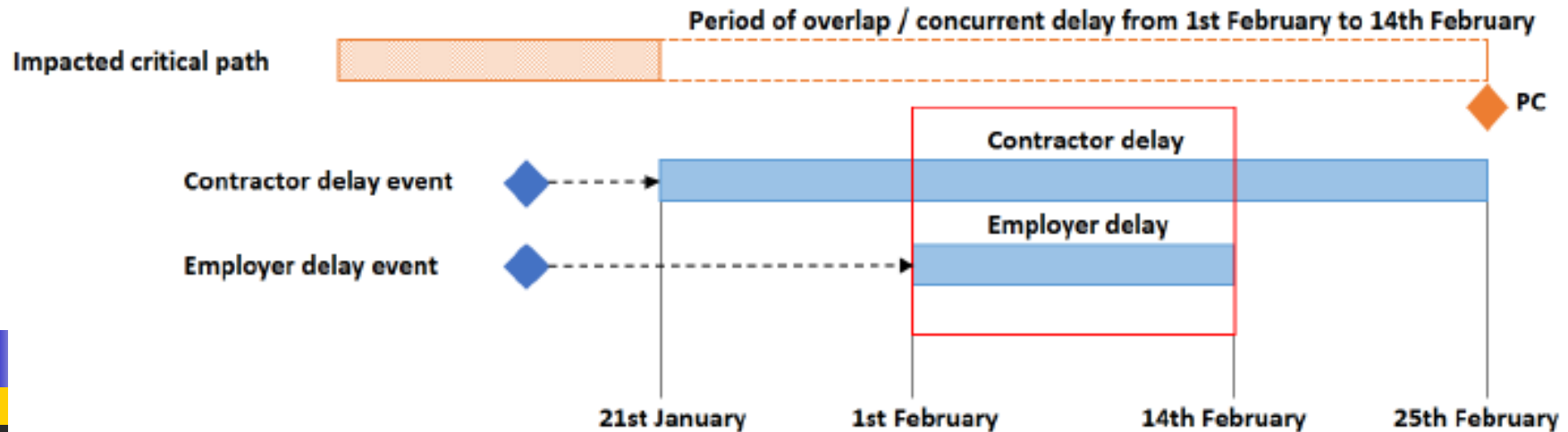
HOW TO ANALYZE? TWO VIEWS



English law – Malmaison approach – Example

View 1

- ❑ Two events are **both effective causes** of delay to completion from **February 1 to 14**, **because** each **would have caused** delay in the **absence of the other**.
 - ❖ This **may be supported** by **some courts**
 - ❖ **Liquidated damages** will **not be payable** for the **time concurrent delay** occurs.
 - ❖ This may be supported by **older English appeal court**.



English law – Malmaison approach – Example

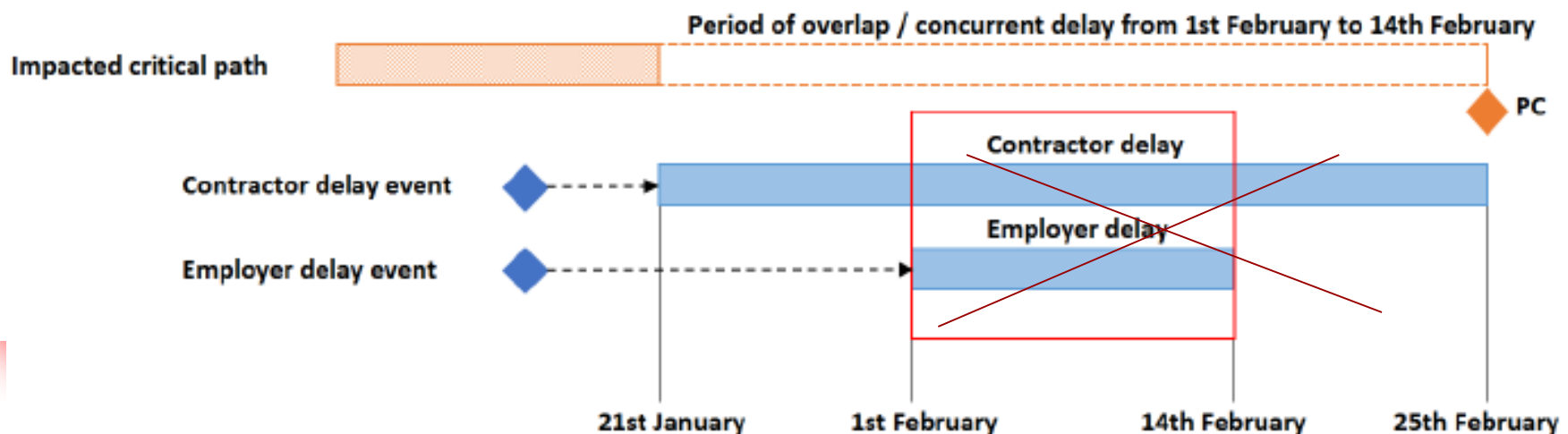
View 2

❑ Because the **works were already in delay** as a result of the **contractor delay**, the **employer delay** has caused **no further delay** and there is therefore **no concurrency**.

❖ Thus the **only effective cause** of the delay is the **Contractor Risk Event**.

✓ This ***may be supported*** by ***some other courts***.

✓ This is the consistent position taken in **recent lower level English court decision**.





English law – Malmaison approach – Example

What **feature** Malmaison has?

The Malmaison approach has the **advantage** of **not invoking** the prevention principle.

The *Malmaison* approach is adopted by the Society of Construction Law:

Where Contractor Delay to Completion occurs concurrently with Employer [Owner] Delay to Completion, the Contractor's concurrent delay should not reduce any EOT [Extension of Time] due;³⁴

The Protocol recommends view 2:

The **Employer Risk Event** should be seen as not causing delay to completion in the **Example** and therefore there is no concurrency.

Let's see a case of law!

English law – Malmaison approach – Example

Facts

Saga (Owners) purchased a cruise ship and contracted with Fincantieri to refurbish the ship. The works were to be completed by 2 March 2012, however completion was not achieved until 16 March 2012. The contract contained a clause that imposed liquidated damages on the Contractor for delay in completing the works "for any reason whatsoever for which the Contractor is, or its employees, agents or sub-contractors are, responsible" capped at €770,000.

The Contractor was responsible for delays between 2 March and 16 March 2012 for a number of reasons. The Owners were responsible for delays from 3 March to 14 March 2012 for reasons concerning the weight of the lifeboats and from 2 March to 10 March 2012 due to requesting additional insulation.

The Contractor tried to rely on the *Henry Boot Construction (UK) Ltd v Malmaison Hotel (Manchester) Ltd* and *Walter Lilly v Mackay* cases, stating that where there are two concurrent causes of delay, one which would be a "relevant event" entitling a contractor to an extension of time and the other not, the contractor is entitled to an extension of time for the relevant event notwithstanding the concurrent effect of the other.



English law – Malmaison approach – Example

Owners' argument

The Owners submitted that the delays were not concurrent delays. They argued that if the Scheduled Completion Date had already been delayed by earlier events for which the Contractor was responsible, the delays for which the Owners were responsible were not to be treated as occurring concurrently. The Owners submitted that because the Contractor's work was already delayed by the Contractor's own delays, any delays for which the Owner bore the responsibility could not have occurred concurrently.

English law – Malmaison approach – Example

Contractor's argument

The Contractor submitted that the Court should approach the question having regard to the prevention principle. The prevention principle is the established English law doctrine that an owner cannot insist upon the performance of an obligation which the owner prevented the contractor from performing. The principle is invoked to relieve a contractor of liability for liquidated damages and to set a reasonable timeframe for completion where an owner delays a contractor's performance.

The Contractor relied on the fact that the contract did not contain a general extension of time provision for acts of prevention by the Owners. It argued that other provisions in the contract providing that the Owners would only have a claim for liquidated damages where delay to the Scheduled Completion Date was due to a matter for which Contractor was responsible, respected the prevention principle. On that basis, the Contractor submitted that where there are two concurrent causes of delay, one being a delay event entitling the Contractor to an extension of time, and one that would not, the Contractor is entitled to an extension of time. The Contractor argued that in those circumstances it was entitled to an extension of time notwithstanding the concurrent effect of its own delays.



English law – Malmaison approach – Example

Decision

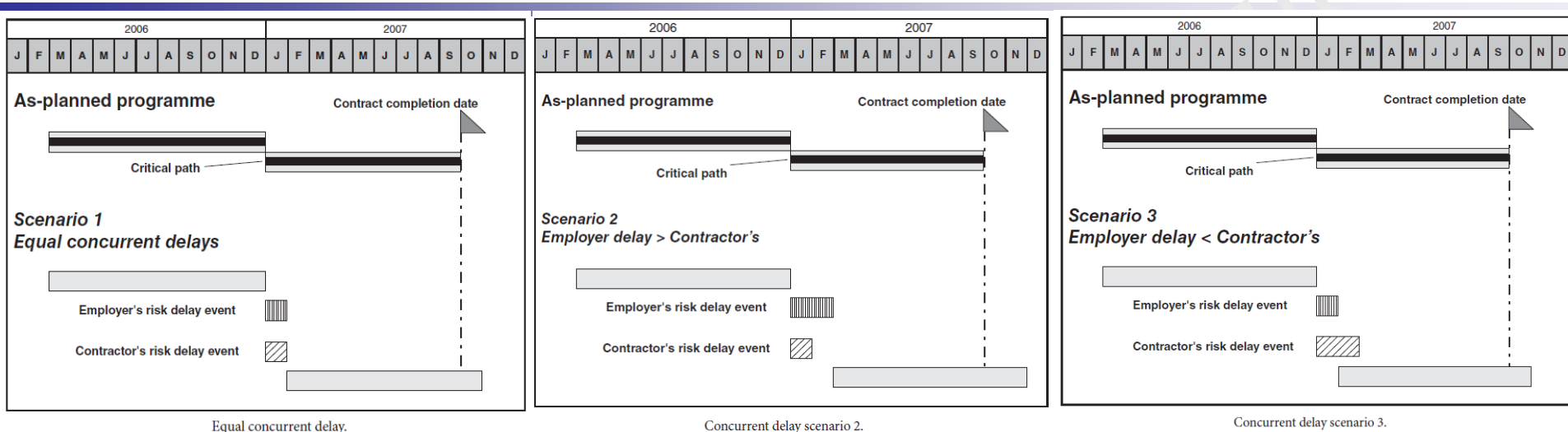
The Court rejected the Contractor's approach awarding liquidated damages to the Owners. The Court held that when the Owners' delays occurred, there were already delays occurring for which the Contractor was responsible. Accordingly, the Contractor could not rely on concurrency to defeat the Owners' claim for liquidated damages.

Referring to the analysis in *Adyard Abu Dhabi*⁴ and *Balfour Beatty Building Ltd*⁵, the Court concluded that unless there is concurrency affecting the completion date, a contractor cannot claim the benefit of it. The Court found that causation must in fact be proved based on the situation as it was known at the time.

Saga Cruises emphasises that causation should always be considered when assessing concurrent delay. A contractor should not be entitled to the benefit of an owner's delay event if it was already in delay, with effect that the owner's event had no actual impact on the completion date. A contractor must prove that an owner's delay event actually caused delay to the completion date.

This is what SCL also believes!

English law – Malmaison approach – Example



All these could be **true concurrent** based on
previous case of law and some references (Delay Analysis in Construction Contracts Book)



English law – Malmaison approach – Variation

What if an **Employer** instructs a variation
where the contractor delay extended the **contract completion**?



English law – Malmaison approach – Variation

What if an **Employer** instructs a variation
where the contractor delay extended the **contract completion**?

Employer may lose its entitlement to liquidated damages
if the **Contractor then accelerates** to recover the Contractor Delay to Completion at its
own cost
and
that results in the **variation** (an Employer Risk Event) becoming the **effective cause of**
Delay to Completion.

English law – New test

✓ *So which one is more common in U.K.?*

✓ *Is apportionment acceptable in U.K.?*

✓ *So which one is more common in U.K.?*

- ❑ There seems to be a new development in English jurisprudence in which a new test may be said to have been adopted.
- ❖ This test has been referred to as the effective cause test.

In the case of *De Beers UK Ltd v Atos Origin IT Services UK Ltd* the court has made the following statement:

“The general rule in construction and engineering cases is that where there is concurrent delay to completion by matters for which both employer and contractor are responsible, the contractor is entitled to an extension of time but he cannot recover in respect of the loss caused by the delay. In the case of the former, this is because the rule where delay is caused by the employer is that not only must the contractor complete within a reasonable time but also the contractor must have a reasonable time within which to complete. It therefore does not matter if the contractor would have been unable to complete by the contractual completion date if there had been no breaches of contract by the employer (or other events which entitled the contractor to an extension of time) because he is entitled to have the time within which to complete which the contract allows or which the employer’s conduct has made reasonably necessary.”

✓ *Is apportionment acceptable in U.K.?*

- ❑ Malmaison approach was made **less certain** after City Inn in 2010 where an apportionment approach was adopted by **Scottish case**.

HOWEVER

- ❑ The recent case of Walter Lilly v Giles Mackay and DMW Developments [2012] EWHC 1773 (TCC) reviewed the authorities regarding concurrent delay and brought some clarity by re-stating that:
 - ✓ **Malmaison approach** was consistent with English law, and
 - ✓ There was no place for the apportionment approach.



English law – New test

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 - ✓ **Malmaison approach** was consistent with English law, and
 - ✓ There was no place for the apportionment approach.

❑ The **Scottish courts** seem to have approved both the **dominant cause** and **apportionment methods** in John Doyle Construction Ltd v Laing Management (Scotland) Ltd and City Inn Ltd v Shepard Construction Ltd.

❖ In other words,

where there is a **dominant cause**, that will **prevail**, and

if **neither cause is dominant**, the concurrent delay is to be **apportioned**.

❑ Thus, *City Inn* may allow **apportionment** based on the **contractual requirement** to be **“fair and reasonable.”**

- ❑ “Canadian courts do not recognize an all or nothing approach,” and **unlike U.S. courts**, “the Canadian system does not place a high evidentiary burden on a claimant as a prerequisite to apportionment.”

Thus, **Canadian courts** tend to favor apportionment and “do the best they can.”



Hong Kong law

❑ Hong Kong courts have typically applied the **Malmaison approach** to issues of concurrent delay,

although more recent decisions suggest a movement towards the apportionment approach.



Australian law

- ❑ Australian standard forms of contract have attempted to provide a solution to the concurrent delay issue without success because

not all forms are consistent or clear.

1. In fact, **one contract** provides no time extension when the **contractor** is responsible for **concurrent delay**.
2. **Other forms**, such as clause 34.4 in AS 4000-1997 and AS 4902-2000, provide for apportionment in the event of **concurrent delays**.

- ❑ **Absent of a contractual provision**, it has been **suggested** that the “*position under Australian law would reflect the approach of English law by reverting to the common law.*”

However, one author suggests that apportioning delays would be preferable.

FIDIC (International Federation of Consulting Engineers)

- ❑ None of the previous drafted standard form contracts prior to the release of the FIDIC 2017 suites, dealt expressly with **concurrency**.
- ❑ The new FIDIC Red Book 2017 suite of contract, has introduced **Clause 8.5**, which states:

"If a delay caused by a matter which is the Employer's responsibility is concurrent with a delay caused by a matter which is the Contractor's responsibility, the Contractor's entitlement to EOT shall be assessed in accordance with the rules and procedures stated in the Particular Conditions (if not stated, as appropriate taking due regard of all relevant circumstances)"

What kind of rules and procedures would the engineer include in the particular conditions?



FIDIC (International Federation of Consulting Engineers)

- ❑ The new edition, does **not prescribe** a new procedure, but it **prompts** the **engineer/employer**, to **decide on a mechanism or approach** at their discretion, which they want to adopt and to confirm this in the particular conditions of the contract.

The **party assessing** the contractor's claim, will have the freedom to determine in line with **either approach**.

This would appear to be **fertile grounds for dispute!**



AIA (Architect Institute of America)

❑ AIA General Conditions A201-2017

❖ Section 8.3

"If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; (5) by other causes that the Contractor asserts, and the Architect determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Architect may determine."

AIA does not force that delay to be “true concurrent”

AIA does **not focus on “functional theory”**

AIA also prefers “apportionment”

Architect has the **power**



Other contracts

- ❑ The contract usually provide **no direct guidance** as to the **treatment of concurrent delays**.
- 1. Some contracts are **explicit**, stating that neither party is to **receive compensation** when delays are concurrent.
- 2. Some contracts state that when concurrent delay occurs, not only is no delay compensation available to either party, but the contractor is not entitled to a time extension.
 - ❖ This is **rare** and impose **significant risk** if liquidated damages also **apply** in the event of delay.
- 3. If nothing mentioned in the contract, in the **international construction industry**, the contractor would **not** be entitled to compensable delay damages and the owner would **not** be entitled to its actual delay or liquidated damages.



Other contracts

☐ New Mexico DOT contract

The Contractor is not entitled to an extension of Contract Time for any period in which a Non-Excusable Delay is concurrent with an Excusable Delay. When a Noncompensable Delay is concurrent with a Compensable Delay, the Contractor may be entitled to an extension of Contract Time but not entitled to compensation for the period the Noncompensable delay is concurrent with the Compensable Delay.

New Mexico DOT concurrent delay contract language.



SCL Protocol - EOT

- ❑ When **concurrent delay established**, the **contractor** should be **entitled** an **EOT** for the Employer Delay to Completion **using CP**.
 - ❖ **CP 5 = Procedure for granting EOT**
- ❑ The **Contractor Delay** should **not reduce** the amount of **EOT due** to the **Contractor** as a **result** of the **Employer Delay**.
- ❑ **Employer Delay to completion** does **not exonerate** the **contractor** for all its **delays** prior to that **Employer Delay** to completion occurring (**does not allow functional theory**).
- ❑ The **Protocol's approach** to the **treatment of concurrent delay** (**once established**) prevents **arguments** about **whether** an **Employer Delay** acting **concurrently** with a **Contractor Delay**.

SCL Protocol - EOT

“The Protocol’s position on concurrent delay is influenced by the English law ‘prevention principle’, by virtue of which an Employer cannot take advantage of the non-fulfilment of a condition, the performance of which the Employer has hindered. The approach to the treatment of concurrent delay (once established) prevents arguments about whether an Employer Delay acting concurrently with a Contractor Delay actually hinders the progress of the Contractor in any way.”



SCL Protocol – Compensation and LDs

14. Concurrent delay – effect on entitlement to compensation for prolongation

Where Employer Delay to Completion and Contractor Delay to Completion are concurrent and, as a result of that delay the Contractor incurs additional costs, then the Contractor should only recover compensation if it is able to separate the additional costs caused by the Employer Delay from those caused by the Contractor Delay. If it would have incurred the additional costs in any event as a result of Contractor Delay, the Contractor will not be entitled to recover those additional costs.

- ❑ The **prolongation compensation** will be recoverable **if** the contractor can prove that its **losses** result from the **employer delay**.

In most cases, **contractor** will be entitled to **compensation** **only** for any period by which the **employer delay** **exceeds** the duration of the **contractor delay** (**true concurrent delay**)

AACE 29R-03 – EOT

“Concurrent delays occur when there are two or more independent causes of delay during the same time period. The same time period from which concurrency is measured, however, is not always literally within the exact period of time. For delays to be considered concurrent, most courts do not require that the period of concurrent delay precisely match. The period of concurrency of the delays can be related by circumstances, even though the circumstances may not have occurred during exactly the same time period.”



AACE 29R-03 – Compensation and LDs

❑ Typically, when **both** contractor and owner are **concurrently responsible** for an **extended period** of performance,

the contractor is granted an **extension of contract time**

without compensation and

owner forgoes the collection of **LD** damages

No time-related compensation flows from either party to the other.

The SCL Protocol is consistent with Association for the Advancement of Cost Engineering (AACE) International 29R-03's interpretation, when contractor and employer driven issues are attributed to the delay, the contractor is eligible to an extension of contract time with no prolongation costs. Here, the primary purpose of any time extension claim is satisfied, this being for the contractor to avoid any liquidated damages.

ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis) – Compensation and LDs

4.7 FOR A DELAY TO BE COMPENSABLE, IT SHOULD BE THE SOLE CAUSE OF DELAY

1. For compensable delay, the delaying event should be the sole cause of **longest path delay** (no concurrent delays compensable)
 - ❖ Typically, a delay solely caused by the owner is required to qualify as **compensable**.
 - ❖ However, third party delay may be compensable depending on the **provisions of the contract**.
2. For compensable delay, the delay should extend the scheduled completion date of the project.
 - ❖ Activities with *float can fall on the longest path* because of schedule **constraints and multiple calendars** (e.g., weekend non-work restrictions),
 - ❖ *Critical activities can fall on paths of work that are not the longest path* (again because of constraints and multiple calendars).

ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis) – Compensation and LDs

4.7 FOR A DELAY TO BE COMPENSABLE, IT SHOULD BE THE SOLE CAUSE OF DELAY

- ❑ In some cases where **multiple subcontractors or multiple prime contractors** are **simultaneously responsible** for delay,

the **contractor or owner** may **still be able to recover** its costs **split** between the responsible parties ===== *Because this is not a concurrent delay*

as long as the **claiming party** had **no fault** or responsibility for delay during the **period claimed**.

NO CONCURRENT EXISTS

ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis) – Compensation and LDs

8.2 CONCURRENT DELAY TYPICALLY IS EXCUSABLE BUT NONCOMPENSABLE, MEANING A TIME EXTENSION IS GIVEN BUT NO COSTS ARE RECOVERED BY EITHER PARTY

- ❑ **Compensation:** For the purposes of assessing liquidated damages, the general rule is that **contractors will not be charged** for critical delays they cause that are concurrent with owner-caused critical delays **that cannot be apportioned** in terms of responsibility and damages.
- ❑ **Liquidated Damages:** An **owner will not be responsible** for a contractor's delay damages when the contractor simultaneously caused critical delay that is concurrent with owner-caused critical delay of equal time **that cannot be apportioned**.

This is also consistent with SCL and AACE!

Does AACE allows for apportionment?

ASCE Standard ANSI/ASCE/CI 67-17 (Schedule Delay Analysis) – Compensation and LDs

8.3 CONCURRENT DELAY SHOULD BE APPORTIONED WHERE POSSIBLE

- ❑ Conditions that **allow** concurrent delays to be **apportioned** include situations where
1. There is **overlapping** of simultaneous delays on the **start or finish of either delay or both (concurrent)**
 2. When one or more of the **simultaneous delays** are **absorbed** partially by **available float** on an activity path **before** they become critical **(not previously concurrent)**
 3. When one or more of the **simultaneous delays** have **different** start **or** finish dates and **one or more** are **critical activities (not concurrent but need apportionment)**

Does it mean “primacy of delay?”

Dealing With Concurrent Delays

(Practical Implication – Concepts)



Practical – General procedure – AACE 29R-03

AACE International's Recommended Practice for forensic schedule delay analysis **recommends** the most adopted international construction industry approach and states the following:

1. **Classify** **each delay event** **individually** and **see** who is **primarily responsible** for the **cause of the delay** (**first column** from the left side in the next slide)
2. **Evaluate** whether **each delay event** is **concurrent** with **other types of delays**.

Practical – General procedure – AACE 29R-03

3. Use the **following Table** to decide whether the concurrent delay is (**second column**):

- ☐ **Excusable or non-excusable**
- ☐ **Compensable or non-compensable** to the owner and contractor

Concurrent Delay Scenarios and Net Effect

Delay Event	Concurrent With	Net Effect
Owner Delay	Another Owner Delay or Nothing	Compensable to Contractor, Non-excusable to Owner
Contractor Delay	Another Contractor Delay or Nothing	Non-Excusable to Contractor, Compensable to Owner
<i>Force Majeure</i> Delay	Another <i>Force Majeure</i> Delay or Nothing	Excusable but Not Compensable to Either Party
Owner Delay	Contractor Delay	Excusable but Not Compensable to Either Party
Owner Delay	<i>Force Majeure</i> Delay	Excusable but Not Compensable to Either Party
Contractor Delay	<i>Force Majeure</i> Delay	Excusable but Not Compensable to Either Party

Practical – General procedure – AACE 29R-03

4. Use the **following Table** to find the net effect (**third column**):

Concurrent Delay Combinations and Net Effect

Delay Event	Concurrent With	Net Effect
<i>Force Majeure Delay</i> • Time • No Compensation for Extended Overhead • No Liquidated/stipulated Damage Assessment	Contractor-Caused Delay • No Time • No Compensation for Extended Overhead • Liquidated/stipulated Damage Assessment	Excusable • Time/No Compensation for Extended Overhead • No Liquidated/stipulated Damage Assessment
<i>Force Majeure Delay</i> • Time • No Compensation for Extended Overhead • No Liquidated/stipulated Damage Assessment	Owner-Caused Delay • Time • Compensation for Extended Overhead	Excusable • Time • No Compensation for Extended Overhead • No Liquidated/stipulated Damage Assessment
Contractor-Caused Delay • No Time • No Compensation for Extended Overhead • Liquidated/stipulated Damage Assessment	Owner-Caused Delay • Time • Compensation for Extended Overhead	Excusable • Time • No Compensation for Extended Overhead • No Liquidated/stipulated Damage Assessment

Practical – General procedure – ASCE Standard ANSI/ASCE/CI 67-17

☐ These **items** should also be considered:

1. **Separate critical path**
2. **Same critical path**

Dealing With Concurrent Delays

(Practical Implication – Separate Critical Path)

Concurrent delays to separate critical paths – Definition

1. Concurrent delays to separate critical paths

□ Requirements?

1. If the **owner-caused delay** and **contractor-caused delay** affect different activities on **parallel activity paths** which are **equally critical**, and
2. As such the **owner-caused delay** and **contractor-caused delay** would each have delayed the completion date of the project, the **delays** are said to be **concurrent delays to separate critical paths**.

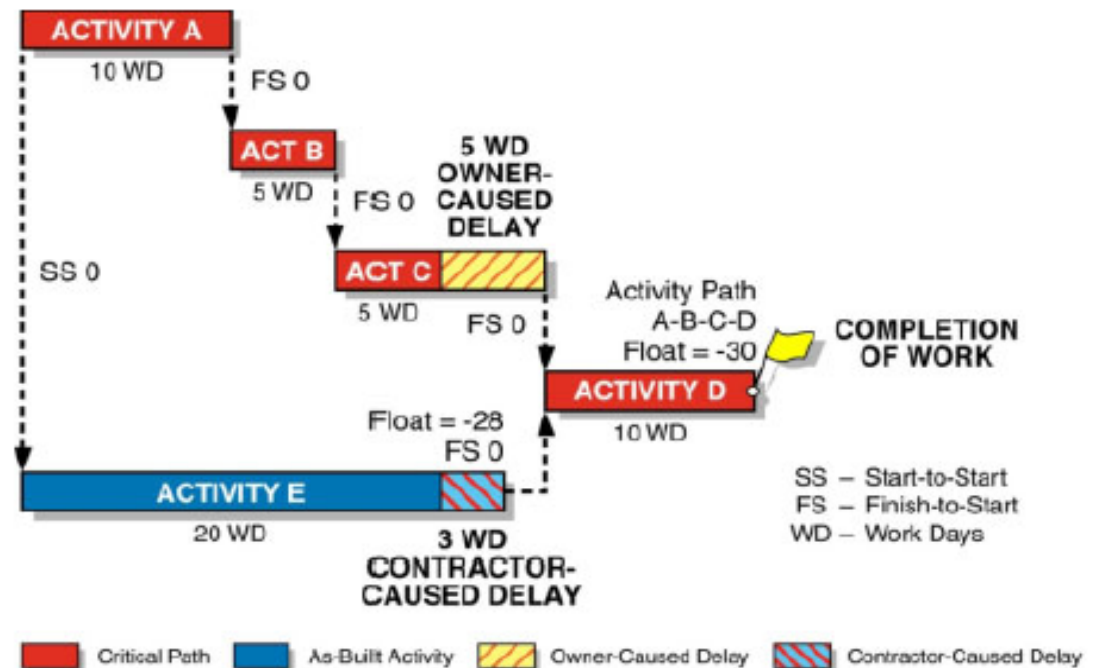


Concurrent delays to separate critical paths

- ❑ Two non-concurrent WD is **compensable** and 5 WD granted for **EOT**.

For periods of concurrent delay, the contractor would not have entitlement to recover its delay costs and, likewise, the owner would not have entitlement to recover its liquidated damages

Concurrent Delays Affecting Activities with Different Float Values



The 3 WD Contractor-caused delay is only partially concurrent with the 5 WD Owner-caused delay.



Concurrent delays to separate critical paths

- ❑ The concept known as **primacy of delay** applies in this situation.
- ❑ The **Contractor's delay to bulk excavation** began before the Owner's delay to the shop drawings.
- ❑ Because of the **delay to excavation**, the Project **had more time** to complete the **shop drawings**, and the **delay to the shop drawings** never became critical.
- ❑ **Bulk excavation** was responsible for a **delay**, and the **Contractor** is not entitled to a **time extension** or **additional compensation**.

*The concept of primacy of delay recognizes that **critical delays** create float on **other paths of work**, and typically the terms about the **ownership of float** plays a game.*



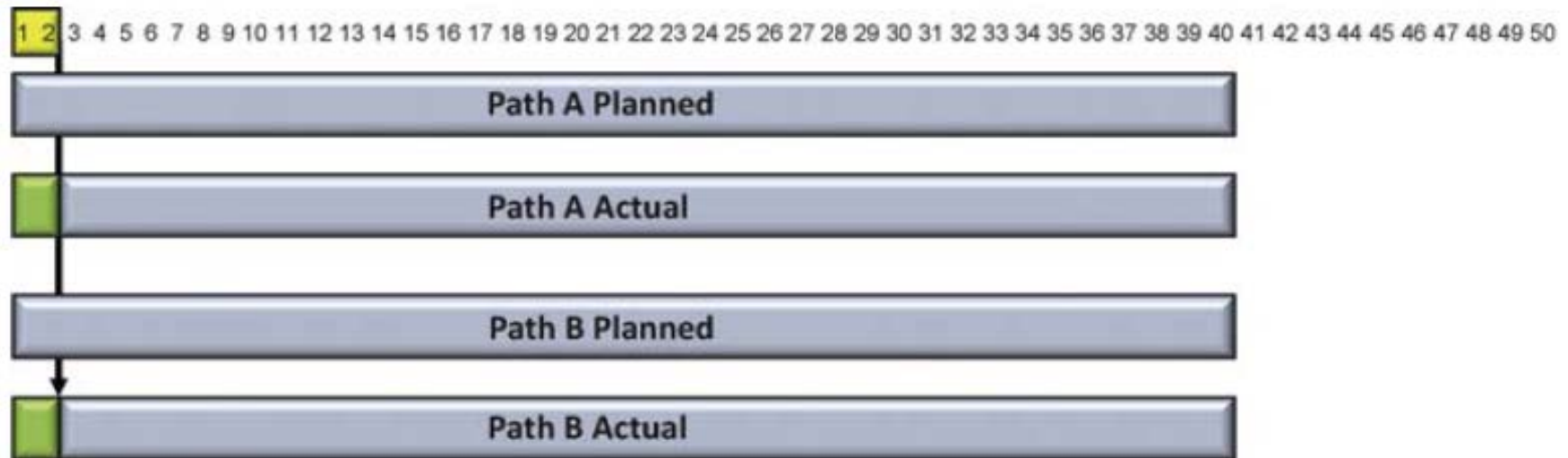
Concurrent delays to separate critical paths – Example

- ❑ Say we have a Project with a **CPM schedule**, and in that schedule, there are **parallel critical paths** of work.
- ❑ Figure below shows **Path A** and **Path B**, each with a duration of **40 days**. **Both paths** of work are scheduled to **start the same day**. Therefore, an **analysis** at the **start** of these paths would show that **both paths** are **concurrently critical**.



Concurrent delays to separate critical paths – Example

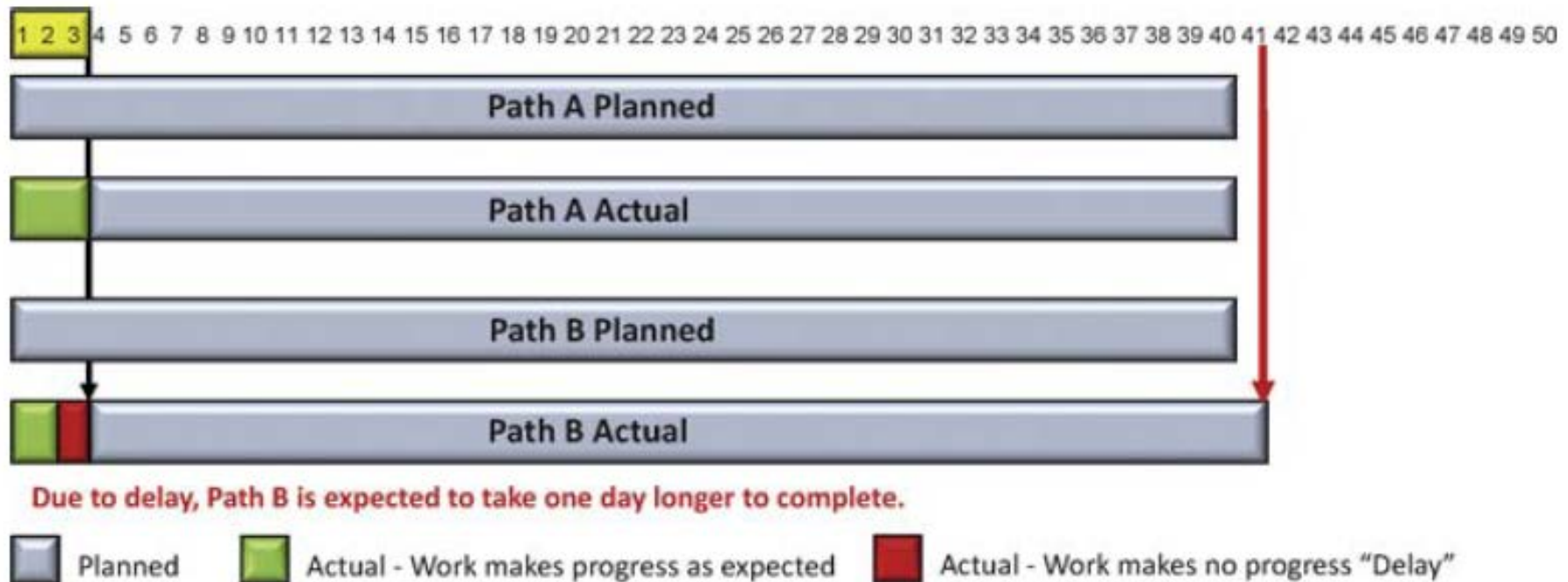
- ❑ Both paths are worked on for the first two days



Planned Actual - Work makes progress as expected

Concurrent delays to separate critical paths – Example

- ❑ Path B stops work because of a design discrepancy.
- ❑ Obviously, **Path B** is the **longest path** of the two and, for our example, the **sole critical path**.
- ❖ The **critical path** shifted from Paths A and B to **just Path B**.

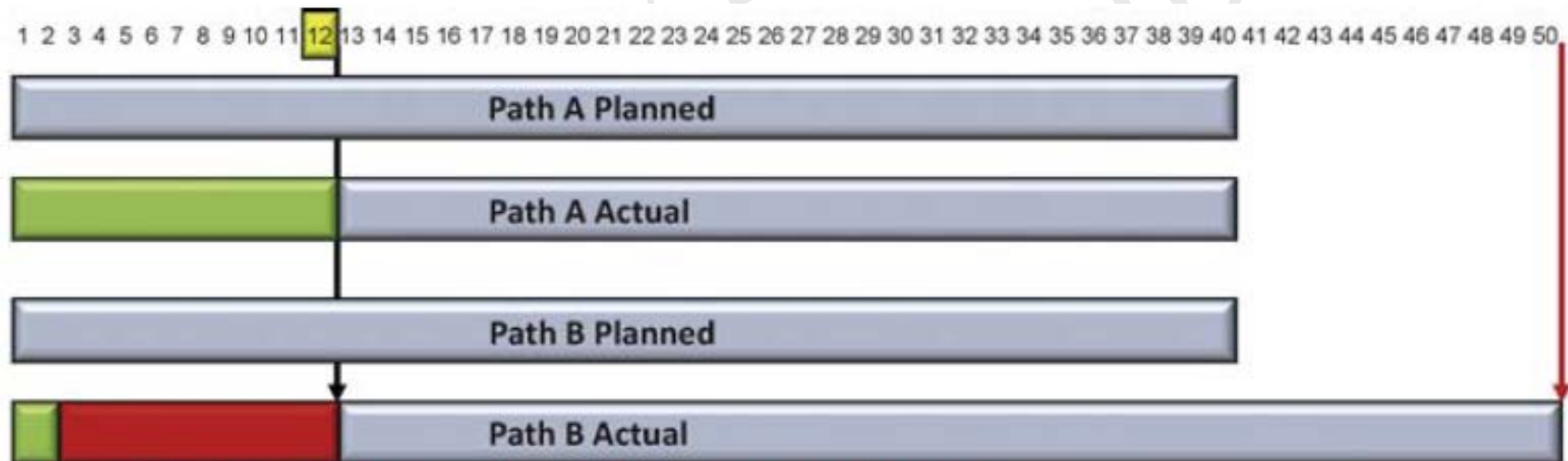




Concurrent delays to separate critical paths – Example

❑ So at the **end of day 12**, **Path A** is still forecast to **complete on day 40**, and **Path B** is now forecast to **finish on day 50**.

❖ At this point in time, **Path A has 10 days of float**.



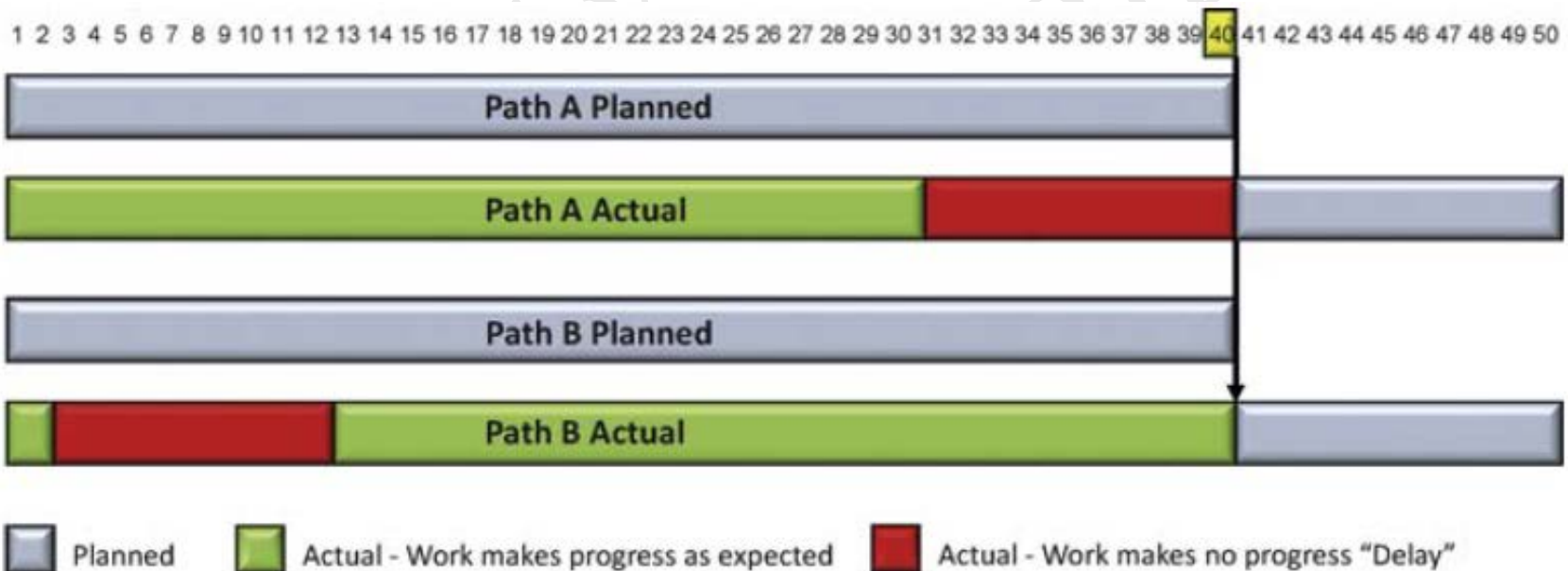
Due to 10-day delay, Path B is expected to take 10 days longer to complete.

Planned
 Actual - Work makes progress as expected
 Actual - Work makes no progress "Delay"

Concurrent delays to separate critical paths – Example

Which one is responsible for 10 days of delays?

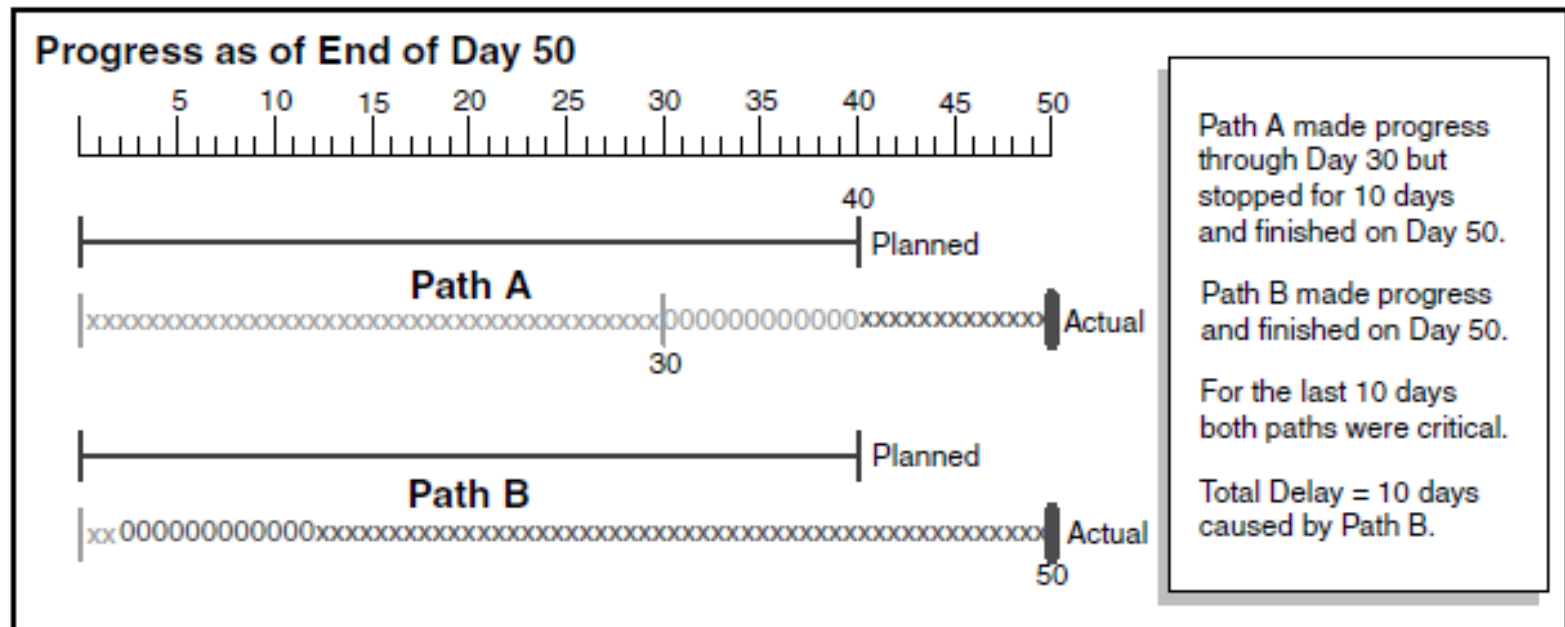
- Our **earlier analysis** showed that **Path A** had picked up **10 days of float**. Therefore, **even though it experienced 10 days** of delay, it caused **no overall delay**.



Concurrent delays to separate critical paths – Example

- ❑ If an analyst had solely looked at the start and finish dates of these two paths of activities, the analyst might conclude that they both delayed the Project by 10 days, since they both were scheduled to finish on day 40 and both actually finished on day 50.

BUT.....SEE THE NEXT SLIDE



Concurrent delays to separate critical paths – Example

- ❑ The **more detailed analysis** clearly shows that **this is not the case**.
- ❑ **No delay** was caused by **Path A**, and **all 10 days of delay** were caused by **Path B**.
- ❑ The **analyst** should perform the analysis on a **day-by-day basis** to correctly ascertain the exact activities that caused the delay and the **correct magnitude** of those delays.

Concurrent delays to separate critical paths – Conclusion

The **bottom line** is that analyzing **concurrent delays to separate critical paths** is best done by using a **technique** to analyze delays that will **identify the critical path** of the project every day.

Dealing With Concurrent Delays

(Practical Implication – Same Critical Path)

Concurrent delays to the same critical path

2. Concurrent delays to the same critical path

❑ Requirements?

1. If the **owner-caused delay** and **contractor-caused delay** affect the same activity, and
2. As such the **owner-caused delay** and **contractor-caused delay** would each have delayed the completion date of the project, the **delays** are said to be **concurrent**.



Concurrent delays to the same critical path – Example

- ❑ As of the **schedule update of June 1**, **demolition** should be finished on **June 15**, but delayed from **June 1 to June 16** because of **strike** + **concurrently owner failed to obtain a permit**.
- ❑ Two causes of delays are **concurrent** and **run for the same period**.
 - ❖ One **non-excusable** and **non-compensable** (*strike*)
 - ❖ Another is **excusable** and **compensable** (*permit*)

What to do?

Time extension + no compensation

Concurrent delays to the same critical path – Example

- ❑ If compensable and non-compensable delays are **concurrent**, and **unless otherwise** specified in the contract,

neither the owner nor the contractor is **entitled** to delay **damages** if they **cannot** be **separated** by proof.

Dealing With Concurrent Delays

(My Choice)



My recommendation on meaning and how to deal with concurrent delay

- ❑ While **functional theory** is much more **easier** **Primacy of delay** is more **accurate**

It **depends** on you, your project, and your effort could be taken!

1. Contemporaneous analysis (Prospective)

- ❖ No need of functional if you analyze as **late as delay starts**
- ❖ Functional is preferred when you have to analyze **long before a delay starts**

2. After-the-fact (Forensic or Retrospective)

- ❖ AACE approach with apportionment and the adjustment of “primacy of delay”
 - ✓ This principle of “primacy of delay” states that **whatever activity caused the delay first** is the **primary and sole driver** of delay and creates float to the other paths of work
 - Similar to one the **SCL Protocol recommends!**

My recommendation on meaning and how to deal with concurrent delay - Contemporaneous

- ❑ The purpose of **contemporaneous analysis** is more of **business decisions** to manage the **time and claims**

however, the purpose of **forensic analysis** is more **technical proof**

- ❑ The **functional theory** is “closely **attuned** to delay **methodologies** that use modeled **CPM schedules** as their basis and utilize some form of **time impact analysis**.”

- ❑ No need to develop a **separate concurrency analysis**

because there would be **no difference in EOT calculation** if **functional theory** is considered.

❖ The “**primacy of delay**” is **not important** here!

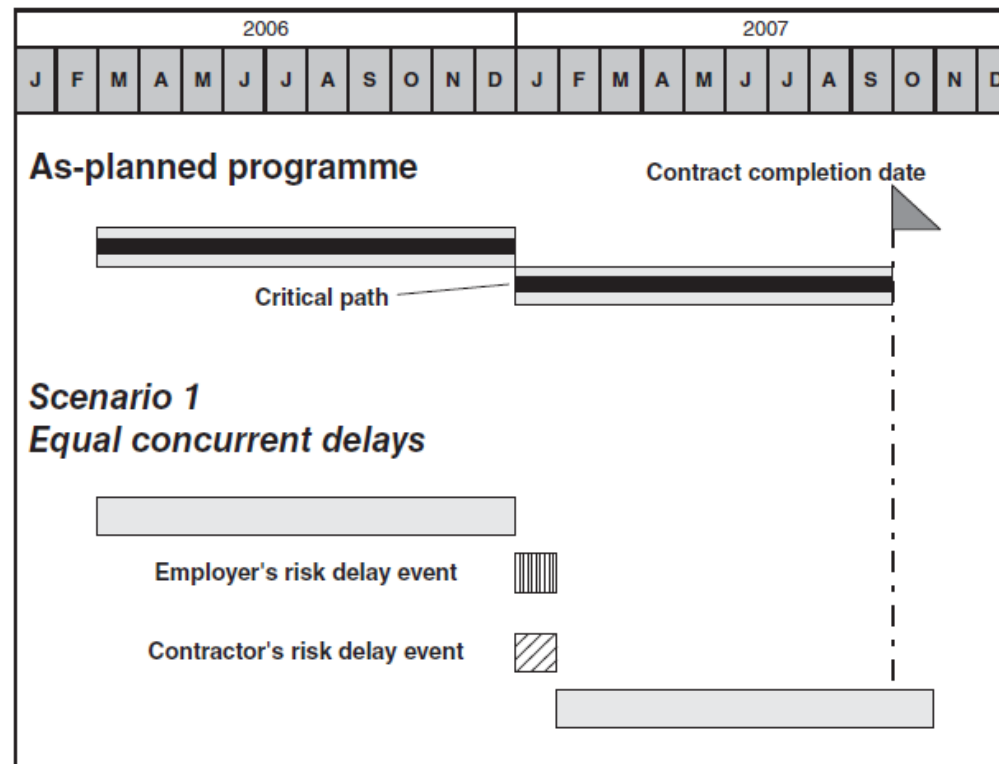
- ❑ The **functional theory** allows that CPM schedules,

even if properly maintained, are **not perfect**, and **near critical delays** may in fact be **concurrent**.”

My recommendation on meaning and how to deal with concurrent delay - Forensic

❑ Scenario 1: Both similar start and finish date (“true concurrent”)

❖ No apportionment

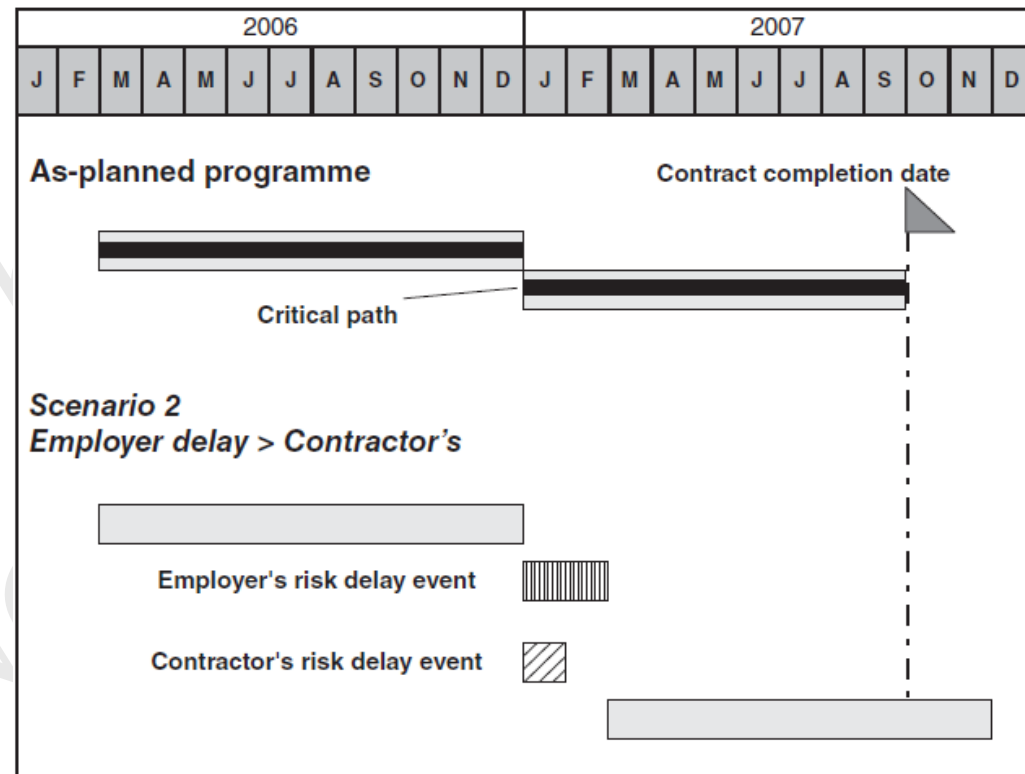


Equal concurrent delay.

My recommendation on meaning and how to deal with concurrent delay - Forensic

❑ **Scenario 2: Same start but different finish date** (*some saying “true concurrent”*)

❖ Apportionment with no need of “primacy of delay”

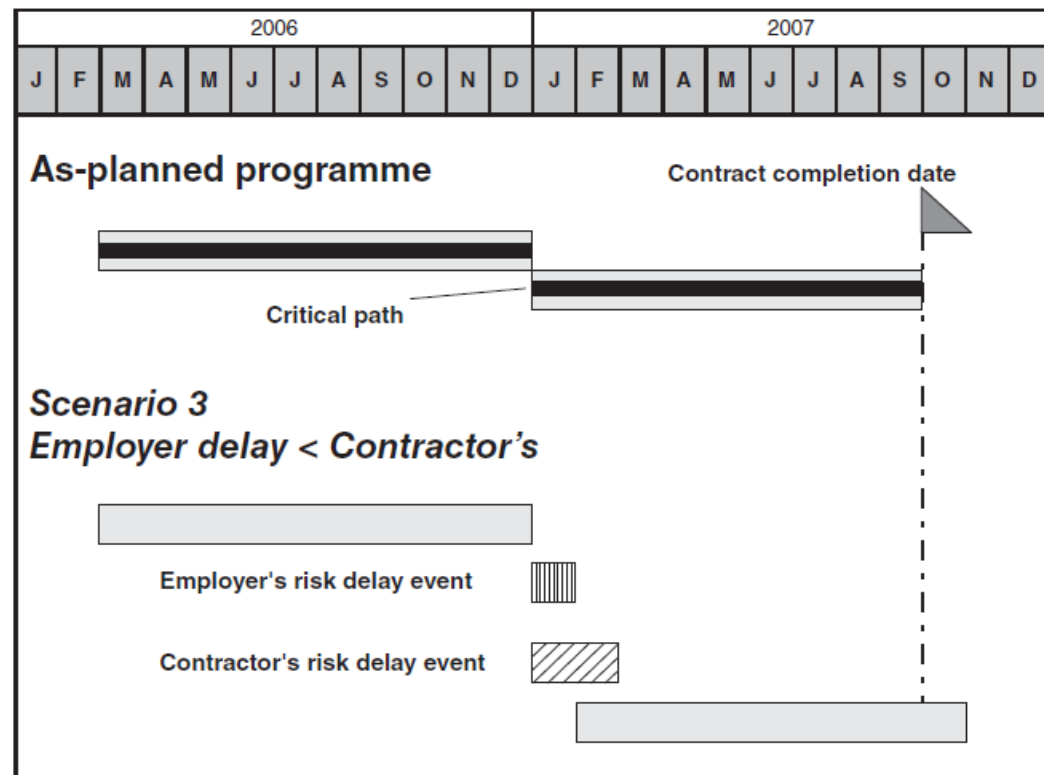


Concurrent delay scenario 2.

My recommendation on meaning and how to deal with concurrent delay - Forensic

❑ **Scenario 3: Same start** but **different** finish date (*some saying “true concurrent”*)

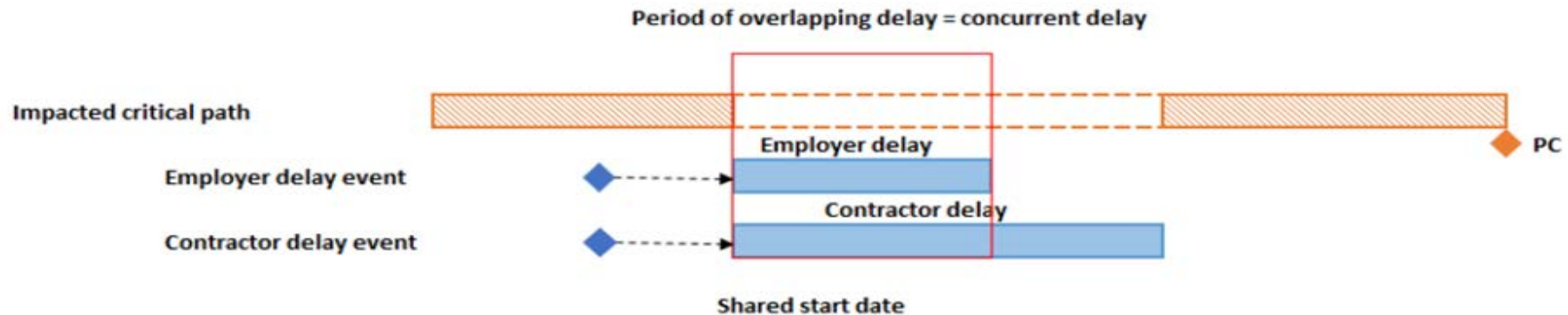
❖ Apportionment with **no need** of “primacy of delay”



Concurrent delay scenario 3.

My recommendation on meaning and how to deal with concurrent delay - Forensic

- ❑ These three Scenarios do not need “Primacy of Delay”
- ❑ If they **start** at the **same point**, the identical period is **concurrent** and the **rest** is not (rest should be summed)



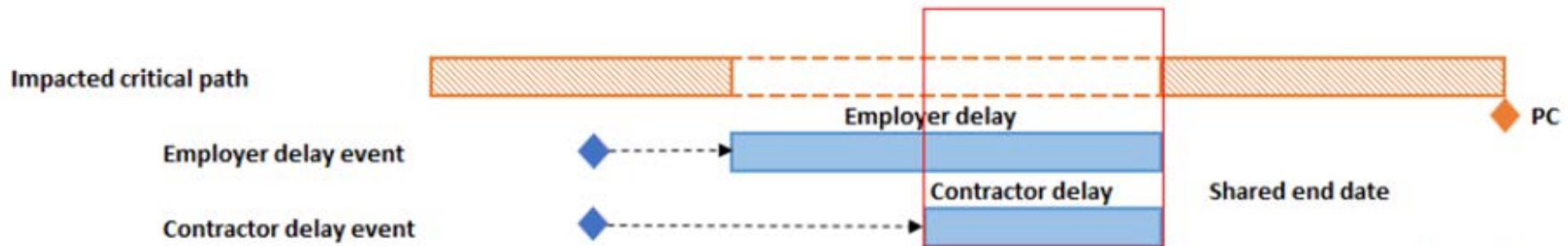
My recommendation on meaning and how to deal with concurrent delay - Forensic

❑ **Scenario 4: Different start date, but same finish date**

❖ *Because of when delays exist on two separate paths*

❑ **What could be done?**

1. Apportionment with the need of “primacy of delay” when they are on **two separate paths** (2-3-2 and 3-2-3)
2. All delays go to the party that starts the delay (*remember the SCL recommendation because it is not true concurrent*)
 - ✓ If you chose this, there is no concurrency



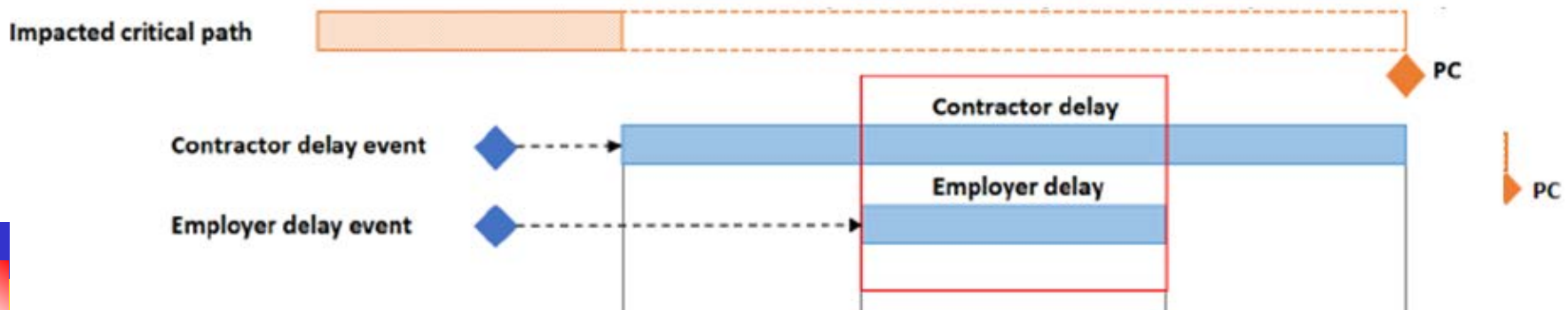
My recommendation on meaning and how to deal with concurrent delay - Forensic

❑ **Scenario 5:** Having **different start** date and **different finish** date

❖ *Because of when delays exist on two separate paths*

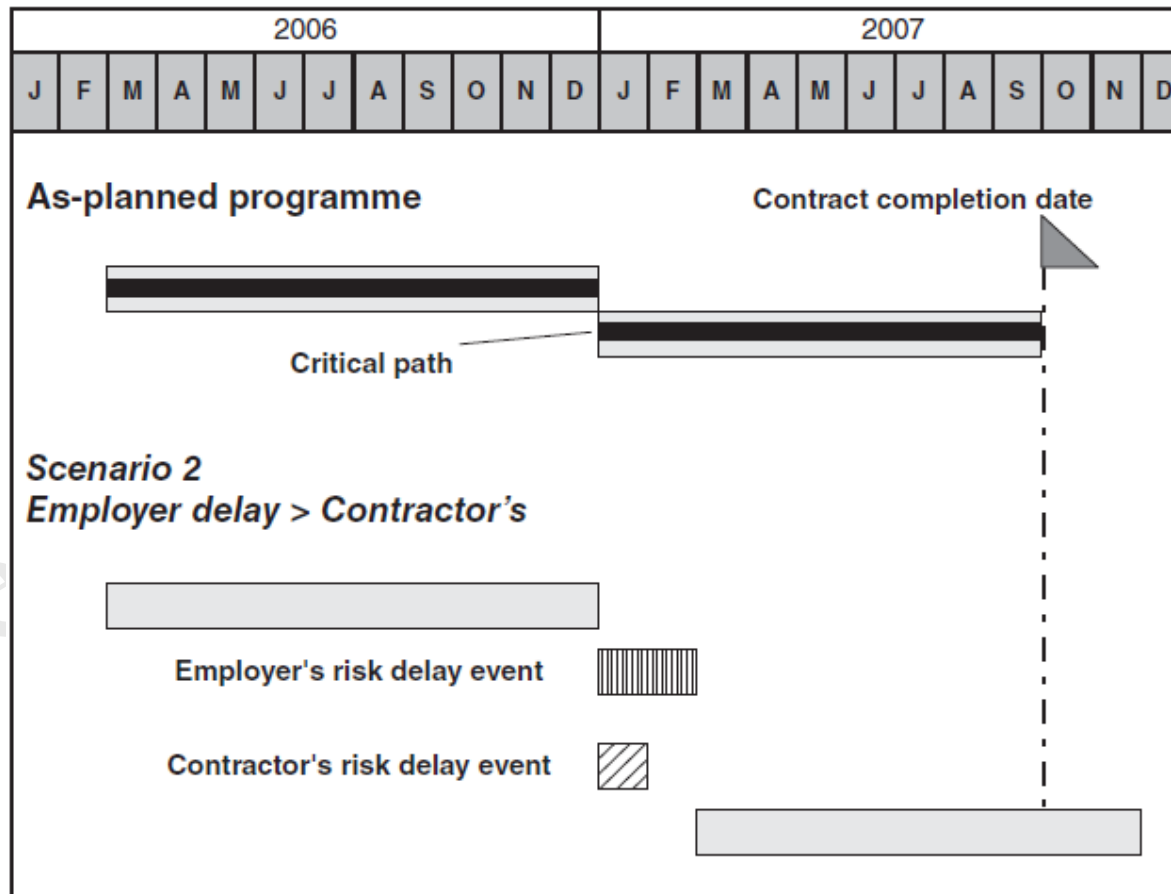
❑ **What could be done?**

1. Apportionment with the need of “primacy of delay” when they are on **two separate paths** (2-3-2 and 3-2-3)
2. All delays go to the party that **starts the delay** (*remember the SCL recommendation and maybe ASCE approach?*)
 - ✓ If you chose this, there is no concurrency



My recommendation on meaning and how to deal with concurrent delay - Forensic

Do we have the **same problem** here and do we **need primacy** of delay here?
Now, you know why this could also be “true concurrent”



Concurrent delay scenario 2.

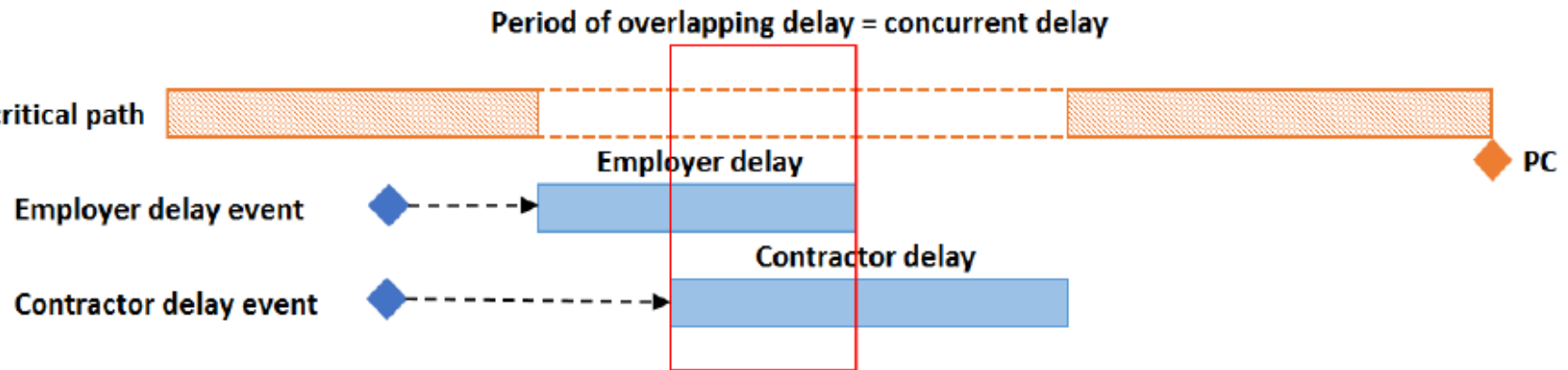
Question

What would you do here?

Critical path



Impacted critical path



My recommendation on meaning and how to deal with concurrent delay - Forensic

1. No LDs
2. No compensation
3. EOT

ALL

1. SCL
2. ASCE
3. AACE

are **consistent** in this manner

Pacing Delays

❑ **Pacing delay** is the situation when the one party causes delay to the critical path (parent delay),

and the other party opts to relax its performance of work to the extent that it **does not affect project completion**.

❑ **Pacing delay** is project delay that have **some flavor of concurrent delays**.

❖ "Why hurry up and end up waiting" is normally used to justify pacing.

❑ Concurrent delays by definition are **involuntary delays** by both parties (AACE RP 29R-03 2011),

however, pacing delay is **voluntary** (ASCE Standard).

Do you know why this is important?

In pacing delays the contractor may be eligible for

both EOT and compensation,

However, in concurrent delays may not

*In some courts, they do **not allow for compensation**, if pacing delays exist!*

Why?

*Because they believe that contractors are not entitled to compensable delay
when the result was **merely to consume float**.*

Is it acceptable in case law?

- ❑ They responded **just-in-time**, and there was **no reason to hurry up and wait**.
- ❑ Both the **employers and contractors** can argue that their delays **were not relevant** because they were **simply pacing** their work **with pre-existing delays**.
 - ❖ Thus, **potentially avoiding unnecessary costs** associated with the alternative of speeding up
- ❑ **Both of these scenarios** are sometimes **valid and both have limited** support in **US and English case law**.

What is needed to demonstrate this case?



Demonstration

- ❑ If either a contractor, or an employer's professional team, seeks to rely on this argument then the **following** should be **demonstrated by the relevant party**:
- **Knowledge** of the **more critical excusable delay**.
 - **Evidence** of an **express decision** to pace its works.
 - **Notification** to the **employer/contractor** that its works **would be paced** so as **not to cause further delay and/or disruption** to the works.
 - **Ability** to **reinstate normal outputs** if the pre-existing delay was **mitigated or avoided**.

When usually this claim is made?



Demonstration

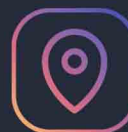
- ❑ Pacing arguments are **most often made** at the **end of a project**,
- ❑ when an **as-built programme analysis** reveals that activities which **were not affected by**
 1. **Any employer** instructed variations or
 2. **Other excusable events**

appear to **have been delayed** and **voluntary done!**
- ❑ **When pacing is argued**, it should be treated with both **caution and skepticism**, especially when the assertion is **unsupported by contemporaneous records**.
- ❖ **Proving** the elements **can only be done** with **contemporaneous records**.

موسسه مهندسی و مدیریت ساخت علوی پور (ACEMI)

دفتر آموزش

تهران، بلوار فردوس شرق، مجتمع آبگینه، طبقه سوم اداری، واحد C42



+۹۸ ۲۱ ۴۶ ۱۰۰ ۴۴۵



+۹۸ ۲۱ ۴۶ ۱۰۰ ۴۵۰



info@dralavipour.com



www.dralavipour.com



@alavipour_pm



@acemi_social



@alavipour_pm



@IRANACEMI

