EXTENSION OF TIME CLAIMS IN OIL AND GAS CONSTRUCTION PROJECTS

Hossam Negida

Project Manager

Holds certificates PMP, PMI-RMP, PSP, and CCP

Oil and Gas industries are one of the most critical and complicated construction projects especially during the construction phase as they contain a lot of complexities in implementation that require experienced contractor has strong abilities enabled him to work in the unusual atmosphere.

In spite of considering all major and secondary factors influencing work progress during the establishment of the baseline schedule for the project such as conducting contingency reserves for known events, Schedule slippage will occur inevitably in some activities which will be reflected on the project work progress, these causes of slippage named as EVENTS, some of these factors can be divided into two categories General Condition Which could affect all project typeS including oil and gas such for example but not limited to;

1. Force major (Expected and Unexpected events) and Strike.
2. Inefficient time estimate for some activities due to lack of experience.
3. Frequent changes in scope of work and deviation in technical specifications.
4. Unavailability of sufficient skilled resources for work execution.
5. Work suspension due to funding problem or payments delay.

And the second category is Particular Conditions which are specified for Oil and Gas projects:

1. Working condition at site:

- Handling, demolishing and rerouting of underground and above ground existing utilities that neither mentioned in tender drawings nor in as built drawings for previous executed projects.
- Failure of selecting appropriate constructability method with consideration of site condition and surrounding hazards factors and utilities.

- Issuing work permits with all related attached documents that it may take a lot of time for issuance and renewal such as Confined Space Entry (CSE),Job Safety Analysis (JSA) and Risk Assessments (RA).

2 Health, Safety, and Environment (HSE) precautions which are usually tougher than normal construction projects such as useing special Personal Protective Equipment (PPE).

3 Unanticipated Gas leakage (Specially H2S gas) in refineries and petrochemical plants which is required an immediate personal evacuation.

4 Security requirements to restricted areas such as personal access to the site.

5 Special studies required for Oil and Gas projects such as:

- SIMOPS: Simultaneous Operations, it is a study for clarifying the flow of construction process with considering other contractors within the same proposed location of the construction and considering the interfering activities within the same contractor scope of work that require high professional coordination between all project disciplines.
- HAZOP: Hazard and Operability, it is a study for identifying all proposed risks that might be affecting project resources during operation stage.
- HAZID: Hazard Identification, it is a study for identifying all potential hazards and threats effecting safety of people and environment.
- QRA: Quantitative Risk Assessment, is to identify the potential hazards and their consequences which includ evaluate risks resulting from these hazards (such as fire, explosion and toxic release etc.).
- SIL: Safety Integrity Level, is to identify risks to persons, environment, assets and considering potential hazards arising from the failure of safety instrumented systems and associated facilities in the plant.

Professional Contractor shows its professionalism to deal with all these factors as these studies have been prepared during commencement of construction activities and they may lead to modifying constructability methods.

These events are varying in terms of their impact on the project where they can be classified based on types, degree of influence and ownership, some events can cover their impacts before occurrence; for example, contractor can absorb part of these prospective events by considering additional time for some activities while schedule preparation to cover any unexpected events.

1 Record:

The first stage in preparation successful extension of time claim is to record all events during project phases irrespective of the importance or worthless of any event and this stage is considered the most important step to prepare a strong EOT claim.

For documenting events in the project, there are many types of records such as:

1. Daily, weekly and monthly reports.
2. Minutes of Meeting.
3. Official letters.
4. Transmittals and submittals.
5. Updated time schedule.
6. Electronic mails (which will be considered as a secondary document comparing to official letter).
7. Chronological depicted photos and videos.

Chronological order is very important during recording the events while preparing the database for the claim.

2 Baseline Schedule:

Approved baseline schedule is one of the most important documents which stand on during disputes. However time schedule in contract document does not cover overall construction activities for the project, thus preparation of detailed schedule (level three or four) is an essential step to get approval of that baseline schedule especially in complicated projects which need runs of arduous negotiations where each party wants to secure his side from the other; such as,

given permittivity in the implementation of the activities by place some conditions for execution, that condition is (Milestone).

Milestone is a significant event related to the beginning or end of the activity or set of activities which is binding the project parties; for example, fixing date for material delivery can oblige the client to deliver the material exactly on time otherwise contractor cannot commence the activity and in the other hand fixing pre-commissioning and commissioning date which oblige the contractor to complete construction activities on time otherwise the plant will be delayed from the production on the set time.

Creating performance measurements for the project are very important as we have mentioned previously, with the presence of an approved baseline schedule where we measure project performance on each periodical update against original plan and consequently discovering all present and predictable forecast deviations between the original plan and the current project status then act accordingly, sometimes all project parties conform to change or modify baseline schedule in case of major changes in the project scope of work therefore, new baseline schedule will be agreed upon and all future performance measurements will be compared with that new baseline.

In order to justify these deviations between original and updated plans, contractor has to prepare delay analysis which consists of all incorporated events that are affecting the work progress into all activities on critical path(s) of the project baseline schedule from the start date of each activity till its completion date and this process is known as time impact analysis and usually it can be displayed by bar chart, these events causing the delay can be placed as new activities and can be added to the updated schedule in order to demonstrate the delay in one or more activities, these additional events are named (FRAGMENTS) which will be clarified in figure (1).

Note: Updating time schedule in early stage enables the contractor to discover any events caused delay, also contractor should segregate all recorded events by filtering all events that negatively influencing work progress at the project and evaluating each event that could cause project delays and classifying these events according to responsibilities of each party, this step is called (Event liability for the Delay).

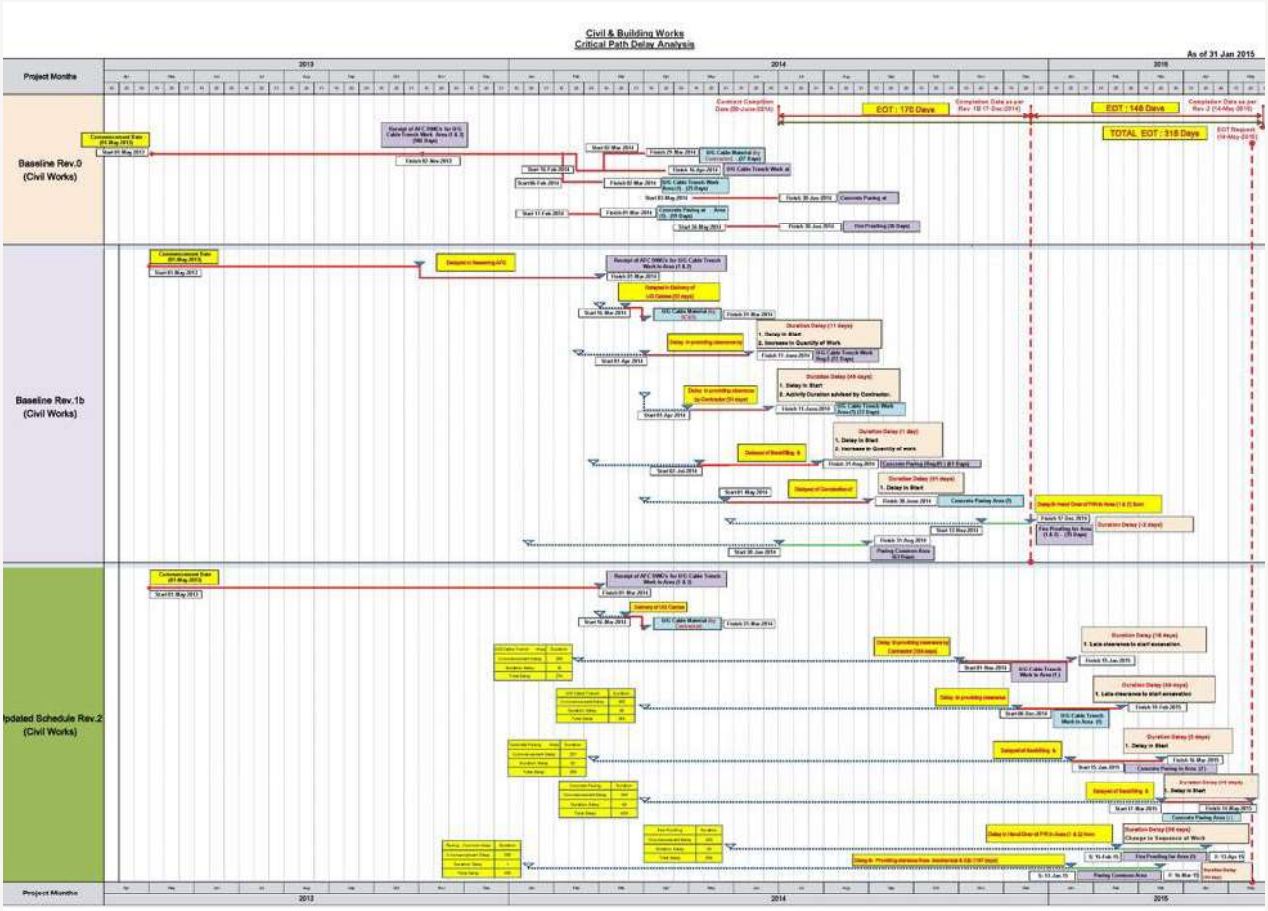


Figure 1 — Critical Path Delay Analysis
(Case Study-Author previous project)

3 Liability:

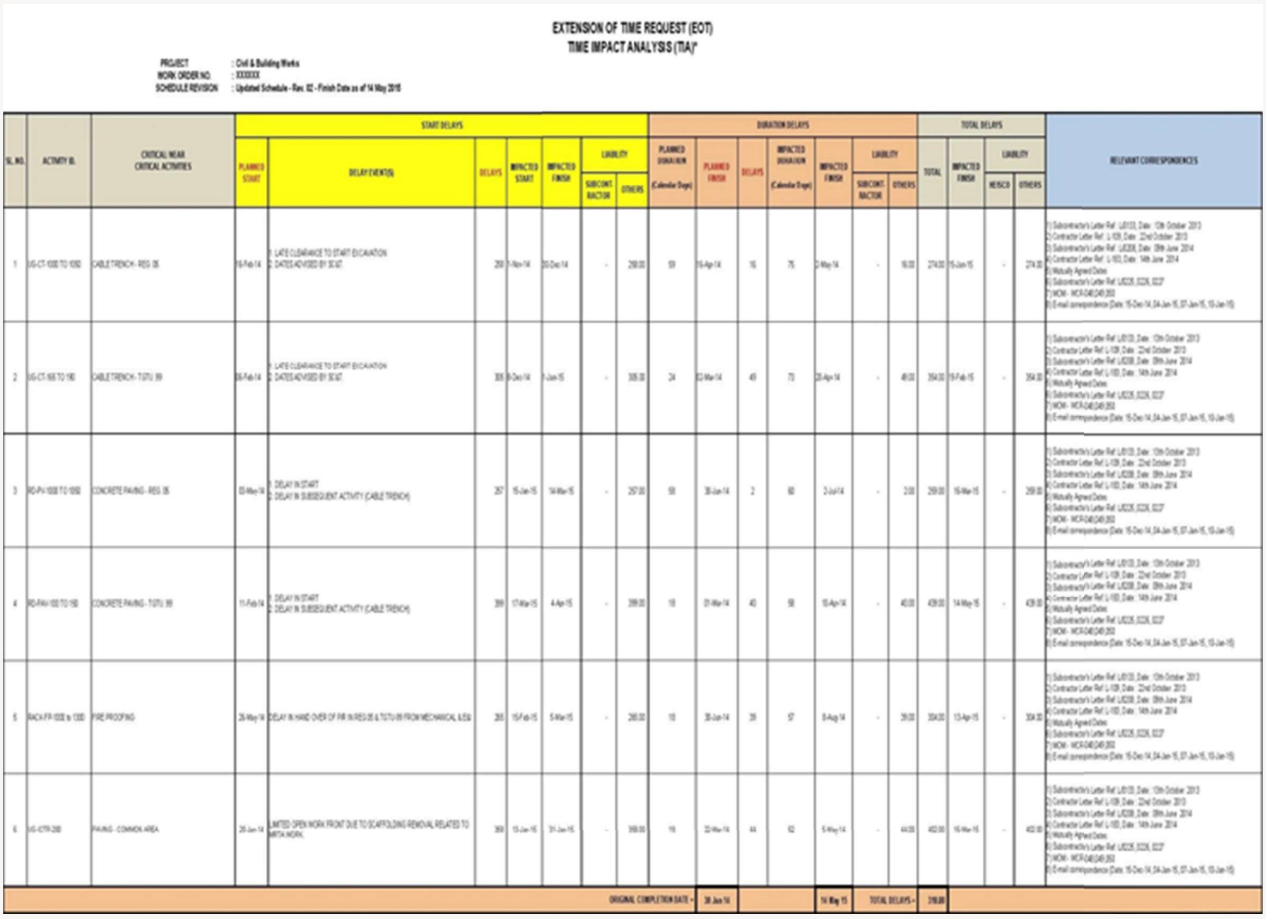
Sometimes, two ore more events might affect specific activity or more at the same time. Contractor has to specify each party liability, consequently, it is considered tas a concurrent delay, in that time, contractor is eligible for the extra time that extended beyond concurrently occurred if he succeeded to prove his eligibility of claim.

In figure 2, we can understand how each party owns the reason for the delay and in which exact time it is affecting, whether at the start or during execution of the activity and consequently, how its impact on the project final completion date.

4 Type of Claim

Since most contracts stipulate clauses for claims reconciliations, contractor should be fully understand what he wants from the owner's claim such as worth value or not, which type of claim he will pursue (there are many types of claims such as excusable, compensable/non-compensable).

Excusable and compensable, the contractor is claiming for both time extension and prolongation cost; for example, the additional scope of work which is required more time and cost or sometimes client request



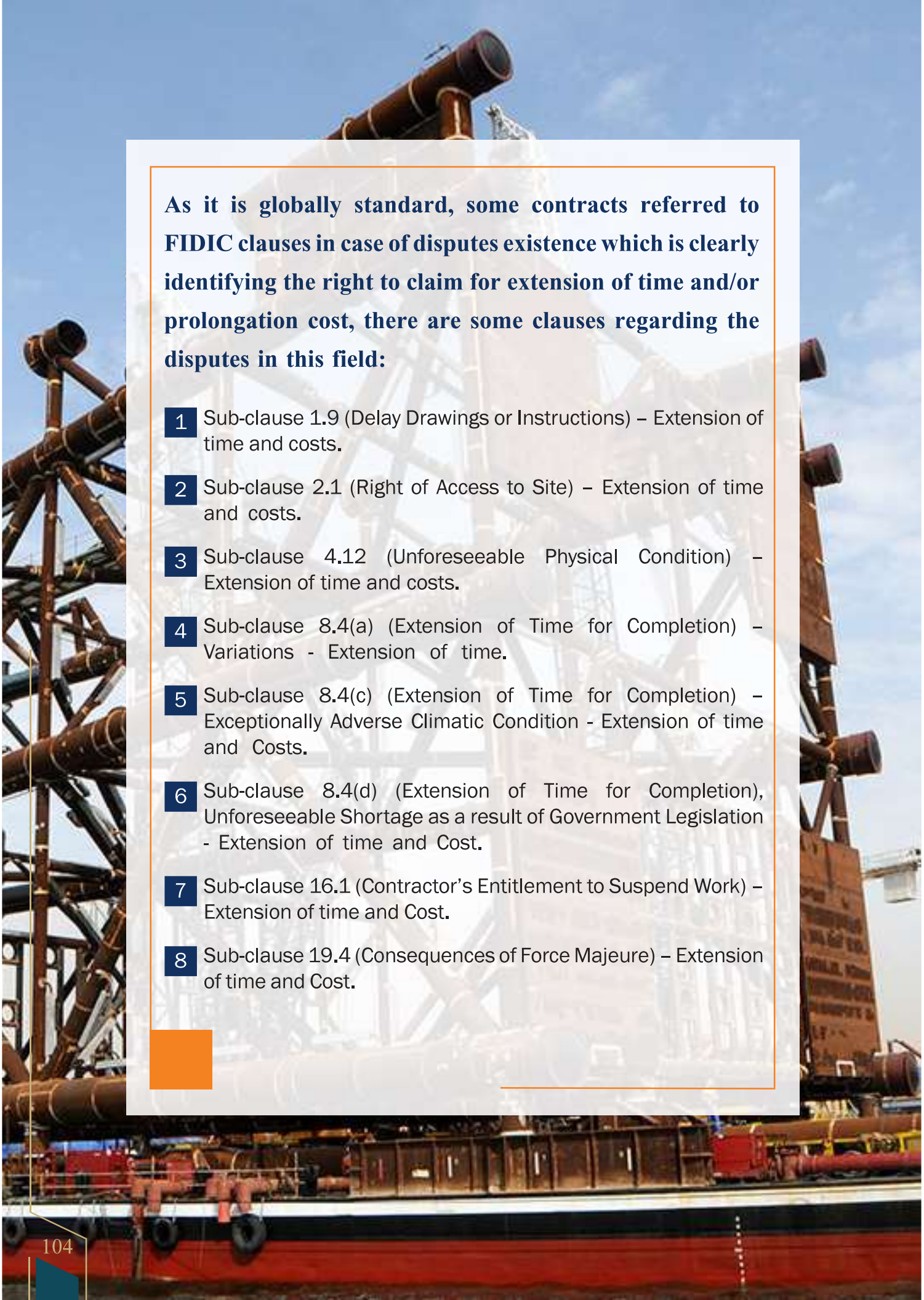
EXTENSION OF TIME REQUEST (EOT)
TIME IMPACT ANALYSIS (TIA)"

PROJECT : Civil & Building Works
WORK ORDER NO. : XXXXX
SCHEDULE REVISION : Updated Schedule - Rev. 02 - Finish Date as of 14 May 2015

SL NO.	ACTIVITY ID.	CRITICAL NEAR CRITICAL ACTIVITIES	START DELAYS						DURATION DELAYS							TOTAL DELAYS				RELEVANT CORRESPONDENCES
			PLANNED START	DELAY EVENT(S)	DELAYS	IMPACTED START	IMPACTED FINISH	LIABILITY: SUBCONT. FACTOR	LIABILITY: OTHERS	PLANNED DURATION (Calendar Days)	PLANNED FINISH	DELAYS	IMPACTED DURATION (Calendar Days)	IMPACTED FINISH	LIABILITY: SUBCONT. FACTOR	LIABILITY: OTHERS	TOTAL	IMPACTED FINISH	LIABILITY: RESCO	LIABILITY: OTHERS	
1	UG-CT-100 TO 130	CABLE TRENCH - RES 35	10-Feb-14	1. LATE CLEARANCE TO START EXCAVATION 2. DATES ADVISED BY SCAT	259	7-Nov-14	30-Dec-14	-	259.00	51	15-Apr-14	15	75	2-May-14	-	16.00	274.00	15-Jun-15	-	274.00	1) Subcontractor's Letter Ref : LO133, Date : 13th October 2013 2) Contractor Letter Ref : L-109, Date : 22nd October 2013 3) Subcontractor's Letter Ref : LO208, Date : 09th June 2014 4) Contractor Letter Ref : L-163, Date : 14th June 2014 5) Mutually Agreed Dates 6) Subcontractor's Letter Ref : LO229, 0230, 0237 7) MOM - MCR-DAE(M)-050 8) E-mail correspondence (Date: 15-Dec-14, 24-Jun-15, 07-Jun-15, 15-Jun-15)
2	UG-CT-160 TO 190	CABLE TRENCH - TOTAL 39	10-Feb-14	1. LATE CLEARANCE TO START EXCAVATION 2. DATES ADVISED BY SCAT	308	9-Dec-14	1-Jun-15	-	308.00	24	02-Mar-14	43	73	23-Apr-14	-	48.00	356.00	15-Feb-15	-	356.00	1) Subcontractor's Letter Ref : LO133, Date : 13th October 2013 2) Contractor Letter Ref : L-109, Date : 22nd October 2013 3) Subcontractor's Letter Ref : LO208, Date : 09th June 2014 4) Contractor Letter Ref : L-163, Date : 14th June 2014 5) Mutually Agreed Dates 6) Subcontractor's Letter Ref : LO229, 0230, 0237 7) MOM - MCR-DAE(M)-050 8) E-mail correspondence (Date: 15-Dec-14, 24-Jun-15, 07-Jun-15, 15-Jun-15)
3	RC-PV-100 TO 105	CONCRETE PAVING - RES 35	13-May-14	1. DELAY IN START 2. DELAY IN SUBSEQUENT ACTIVITY (CABLE TRENCH)	257	15-Jun-15	14-Mar-15	-	257.00	51	30-Jun-14	2	60	2-Jul-14	-	2.00	259.00	15-Mar-15	-	259.00	1) Subcontractor's Letter Ref : LO133, Date : 13th October 2013 2) Contractor Letter Ref : L-109, Date : 22nd October 2013 3) Subcontractor's Letter Ref : LO208, Date : 09th June 2014 4) Contractor Letter Ref : L-163, Date : 14th June 2014 5) Mutually Agreed Dates 6) Subcontractor's Letter Ref : LO229, 0230, 0237 7) MOM - MCR-DAE(M)-050 8) E-mail correspondence (Date: 15-Dec-14, 24-Jun-15, 07-Jun-15, 15-Jun-15)
4	RC-PV-100 TO 150	CONCRETE PAVING - TOTAL 39	11-Feb-14	1. DELAY IN START 2. DELAY IN SUBSEQUENT ACTIVITY (CABLE TRENCH)	399	17-Mar-15	4-Apr-15	-	399.00	51	01-Mar-14	40	91	10-Apr-14	-	40.00	439.00	14-May-15	-	439.00	1) Subcontractor's Letter Ref : LO133, Date : 13th October 2013 2) Contractor Letter Ref : L-109, Date : 22nd October 2013 3) Subcontractor's Letter Ref : LO208, Date : 09th June 2014 4) Contractor Letter Ref : L-163, Date : 14th June 2014 5) Mutually Agreed Dates 6) Subcontractor's Letter Ref : LO229, 0230, 0237 7) MOM - MCR-DAE(M)-050 8) E-mail correspondence (Date: 15-Dec-14, 24-Jun-15, 07-Jun-15, 15-Jun-15)
5	BACK FP-100 to 130	FIRE PROOFING	26-May-14	DELAY IN HAND OVER OF FIR IN RES 35 & TOTAL BY FROM MECHANICAL & ELE	261	15-Feb-15	5-Mar-15	-	261.00	51	30-Jun-14	39	97	8-Aug-14	-	39.00	334.00	13-Apr-15	-	334.00	1) Subcontractor's Letter Ref : LO133, Date : 13th October 2013 2) Contractor Letter Ref : L-109, Date : 22nd October 2013 3) Subcontractor's Letter Ref : LO208, Date : 09th June 2014 4) Contractor Letter Ref : L-163, Date : 14th June 2014 5) Mutually Agreed Dates 6) Subcontractor's Letter Ref : LO229, 0230, 0237 7) MOM - MCR-DAE(M)-050 8) E-mail correspondence (Date: 15-Dec-14, 24-Jun-15, 07-Jun-15, 15-Jun-15)
6	UG-CTP-200	PAVING - COMMON AREA	25-Jun-14	LIMITED OPEN WORK FRONT DUE TO SCAFFOLDING REMOVAL RELATED TO ARTA WORK	359	15-Jun-15	31-Jun-15	-	359.00	15	22-Mar-14	44	62	5-May-14	-	44.00	403.00	15-Mar-15	-	403.00	1) Subcontractor's Letter Ref : LO133, Date : 13th October 2013 2) Contractor Letter Ref : L-109, Date : 22nd October 2013 3) Subcontractor's Letter Ref : LO208, Date : 09th June 2014 4) Contractor Letter Ref : L-163, Date : 14th June 2014 5) Mutually Agreed Dates 6) Subcontractor's Letter Ref : LO229, 0230, 0237 7) MOM - MCR-DAE(M)-050 8) E-mail correspondence (Date: 15-Dec-14, 24-Jun-15, 07-Jun-15, 15-Jun-15)
									ORIGINAL COMPLETION DATE =		30-Jun-14			14-May-15	TOTAL DELAYS =		318.00			

Figure 2 — Time Impact Analysis
(Case Study-Author previous project)

from the contractor to accelerate work progress by increasing the productivity, therefore, the contractor will add more recourses to crash the schedule and complete the work before the original completion date. For excusable but non-compensable, sometimes contractor requests additional time due to some circumstances beyond his control in that time, acceptance from the client to postpone completion date without applying any penalties is very important.



As it is globally standard, some contracts referred to FIDIC clauses in case of disputes existence which is clearly identifying the right to claim for extension of time and/or prolongation cost, there are some clauses regarding the disputes in this field:

1. Sub-clause 1.9 (Delay Drawings or Instructions) – Extension of time and costs.
2. Sub-clause 2.1 (Right of Access to Site) – Extension of time and costs.
3. Sub-clause 4.12 (Unforeseeable Physical Condition) – Extension of time and costs.
4. Sub-clause 8.4(a) (Extension of Time for Completion) – Variations - Extension of time.
5. Sub-clause 8.4(c) (Extension of Time for Completion) – Exceptionally Adverse Climatic Condition - Extension of time and Costs.
6. Sub-clause 8.4(d) (Extension of Time for Completion), Unforeseeable Shortage as a result of Government Legislation - Extension of time and Cost.
7. Sub-clause 16.1 (Contractor's Entitlement to Suspend Work) – Extension of time and Cost.
8. Sub-clause 19.4 (Consequences of Force Majeure) – Extension of time and Cost.

5 Claim Preparation

In order to prepare a compelling claim, Contractor has to ensure to prepare log of all events that occurred during project life cycle in chronological order then contractor has to incorporate all these events on the approved baseline schedule, as described before, to check whether any implications negatively affected the progress or not by utilizing delay analysis method.

In case of the existence of any impacts from these events, Contractor has to analyze each event to check each party liabilities, therefore who owns the delay, also contractor has to notify the client regarding each event that affecting project progress with clarifying all consequences of these events whether they will impact time or cost or both.

According to sub-clause 20.1 (Construction Claims) mentioned in FIDIC, client has to notify the client for the event that affecting work progress within 28 days from learning about that event and if the contractor notifies the client after 28 days from that event, the contractor has no right to claim for any consequences or implications that resulted from that event.

Also based on the same FIDIC sub-clause, Contractor has to send full claim within 42 days from his knowledge about that event and that claim should contain all demonstrated documents that proving their eligibility to claim such as correspondences, MOM, photos, contract clauses pertaining to disputes and delay analysis.

Contractor may submit one or more claims based on the sequential order events and their impacts on the project also, a presentation of the claim should be well prepared in a chronological manner.

6 Response

Owner has to reply whether he accepts or rejects based on its evaluation of contractor's claim. Based on sub-clause 20.1 (Construction Claims) mentioned in FIDIC, Owner (or Engineer) in a period not exceeding 42 days has to replay to the contractor by acceptance or rejection and sometime engineer prepares counterclaim if he has some evidence that contractor is responsible for occurrence of some events that caused project delay.

In this case analyzing of these concurrent delays should be conducted by each or both parties in order to specify liabilities, and consequently reached to a mutual agreement that concluded to whether contractor entitled for compensation or not.

7 Settlement

Once receiving and analyzing contractor's claim by owner, project parties will proceed with negotiation phase which is considered the most difficult phase in claim procedure as each party defends his position.

In some cases, negotiations do not lead to any positive result, both parties should restore to a trusted party that both parties agreed on its experience in this field.

Sometimes both parties invoke to third party that experienced in claiming issues - some claiming authors called this phase as an amicable settlement.

Eventually, in case of failure of the negotiations, both parties will be resorted to arbitration that takes a long time to be adjudicated and this final stage in claiming considered the most expensive stage.

8 Conclusion

Success of extension of time claims are associating with many factors especially in oil and gas Projects which it relies primarily on the experienced contractor in that field. However, the most important is to get approved baseline schedule from client, chronologically record all events and finally, notify the client regarding these events with their impact in early as occurrence.