

# Administering Extension of Time under National and International Standard Forms of Contracts: A Contractor's Perspective

Islam El-adaway<sup>1</sup>; Salwa Fawzy, M.ASCE<sup>2</sup>; Muaz Ahmed<sup>3</sup>; and Rob White<sup>4</sup>

**Abstract:** Time management is one of the most important factors contributing to the success of construction projects. It is not uncommon that many construction projects fail to meet their deadline and finish late for a variety of reasons that have been already studied extensively in the literature. To this end, it is imperative to know the different contractual procedures associated with extension of time. In spite of the fact that these provisions are usually expressly stated in each contract, they are sometimes misunderstood and/or misapplied. This can result in incurring lots of short- and long-term losses. The objective of this paper is to present contract administration guidelines for appropriate utilization and administration of the extension of time clauses under the most widely used construction contracts both nationally and internationally. The authors studied the extension of time provisions under traditional standard construction contracts and/or general conditions of the construction contracts including those published by the American Institute of Architects (AIA), ConsensusDOCS, the Engineers' Joint Contract Documents Committee (EJCDC), the International Federation of Consulting Engineers (FIDIC), the World Bank, the Joint Contracts Tribunal (JCT), and the New Engineering Contract (NEC). In doing so, the authors used a three-step research methodology that included reviewing the conditions for entitlement, the associated required procedures, and the interrelated repercussions for failure to follow notice and claim provisions. Consequently, a comparative analysis between the contracts under investigation was provided. As far as the authors are aware, this is the first study of its kind, and is the most comprehensive in its approach and associated analyses. This study should promote efficient and effective management of claims for additional time, and would better enable the contractor as well as other associated parties to mitigate time-related consequences during the course of their projects. DOI: [10.1061/\(ASCE\)LA.1943-4170.0000182](https://doi.org/10.1061/(ASCE)LA.1943-4170.0000182). © 2016 American Society of Civil Engineers.

## Introduction

It is not uncommon that many construction projects fail to meet their completion date and finish late. Usually, delay to the completion of construction projects is caused by a variety of time related events including variations, late information, excessively inclement weather, poor performance, remedial work, and hundreds of other delay-causing events that arise on the construction projects (Farrow 2007). In some statistics, it is shown that for 1,627 construction projects completed worldwide between 1974 and 1988, the completion time overrun varied between 50 and 80% (Menesi 2007). In addition, according to Assaf and Al-Hejji (2006), 70% of construction projects in Saudi Arabia, on average, experienced time

overrun. Accordingly, delay in completion of projects has become a common feature in the construction industry (Brimah 2014).

In general, delays can be either (1) excusable delays, which may be the fault of the employer, the employer's agents, or a neutral party, or (2) inexcusable delays, which are the fault of the contractor or his agents (Knowles 2005). According to Pickavance (2010), the risk allocation between the contractor and employer—as defined in the contract—dictates if a delay would classify as a basis for applying liquidated damages or granting extension of time, or not. To this effect, each construction contract clearly stipulates the date (or period) for the contractor to complete work. If the contractor fails to complete the project on the specified date (or within the stipulated period) and the delays are proven to be caused by the contractor or for which the contractor is held responsible, the employer is entitled to liquidated and ascertained damages in order to recover damages from the contractor. Thus, liquidated damages are applied to reimburse the employer for the damages incurred when the works are delayed because of a delay event under the contractor's responsibility. However, if the delays are beyond the control of the contractor and not within his responsibility, an extended completion date should be granted to the contractor to complete the work. Thus, extension of time clauses are utilized in order to reimburse the contractor for the lost time and extend the completion date without being obligated to pay liquidated damages to the employer. Extension of time provides sufficient time to complete the project, reduces or avoids liquidated and ascertained damages that could otherwise arise, maintains the owner's right to deduct liquidated damages, and establishes an entitlement to monetary compensation during the extended period.

The aforementioned situation being the case, it is of great importance for contractors to fully understand the provisions related

<sup>1</sup>Associate Professor and Construction Engineering and Management Program Coordinator, Dept. of Civil and Environmental Engineering, Univ. of Tennessee—Knoxville, 851 Neyland Dr., 417 John D. Tickle Bldg., Knoxville, TN 37996 (corresponding author). E-mail: eladaway@utk.edu

<sup>2</sup>FCI Arb, Senior Contracts Manager, Dar Al Mimar Group; Instructor, Engineering and Sciences Services, American Univ. in Cairo, 1 Abu Bakr El Seddik St., Dokki, Giza, Egypt. E-mail: salwafawzy@gmail.com

<sup>3</sup>Graduate Student, Dept. of Civil and Environmental Engineering, Mississippi State Univ., 501 Hardy Rd., Walker Engineering Bldg., Mississippi State, MS 39762. E-mail: moa31@msstate.edu

<sup>4</sup>Undergraduate Student, Dept. of Civil and Environmental Engineering, Mississippi State Univ., 501 Hardy Rd., Walker Engineering Bldg., Mississippi State, MS 39762. E-mail: raw244@msstate.edu

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to delays and extensions of time. In spite of the fact that these provisions are universal, even if their substance is not identical, and usually stated in each contract, they are sometimes misunderstood and misapplied. An informed contractor can avoid many losses by properly following the guidelines which qualify him for extensions of time. Understanding these provisions will help contractors to efficiently and effectively complete their projects (El-adaway et al. 2013).

## Goals and Objectives

The objective of this paper is to present contract administration guidelines for appropriate utilization of the extension of time clauses under most widely used standard construction contracts both nationally and internationally. It is worth noting that discussion of issues related to liquidated damages is beyond the scope of this paper. This study should promote efficient and effective management of claims for additional time, and would better enable the contractor as well as other associated parties to mitigate time-related consequences during the course of their projects through promoting better understanding of provisions related to delays and extensions of time, and consequently, avoiding promotion of disputes between the contractor and owner. As far as the authors are aware, this is the first study of its kind and is the most comprehensive in its approach and associated analyses.

## Methodology

The authors used a three-step research methodology that included reviewing the conditions for entitlement for extension of time, the associated required procedures, and the interrelated repercussions for failure to follow notice and claim provisions. This paper studies the extension of time provisions under traditional standard construction contracts and/or general conditions of the construction contracts including those published by the American Institute of Architects (AIA), ConsensusDOCS, the Engineers' Joint Contract Documents Committee (EJCDC), the International Federation of Consulting Engineers (FIDIC), the World Bank, the Joint Contracts Tribunal (JCT), and the New Engineering Contract (NEC). Ultimately, the study concludes with a comparative analysis between all contracts under investigation.

## Results and Analysis

### **American Institute of Architects Owner-Contractor General Conditions of the Construction Contract (A201)**

The American Institute of Architects (AIA) was founded on February 23, 1857. The purpose of creating the AIA was to "promote the scientific and practical perfection of its members" and "elevate the standing of the profession" (AIA 2014). Since its beginnings, the AIA has grown from just a handful of members to currently just more than 83,000 members. An area of need for the AIA in the nineteenth century was a standardized form of contract for use by the construction industry. In 1866, the first AIA standard form of general conditions of the construction contract was adopted. The document was a fee schedule that helped define the duties of an architect (AIA 2014). The AIA now has more than 100 contracts and forms that cover all phases of the design and construction process. The following document series are identified by the AIA:

- A series: owner-contractor agreements where the AIA-A201 is currently the most influential and commonly used construction contract between owner and contractor in the U.S.,
- B series: owner-architect agreements,
- C series: other agreements,
- D series: miscellaneous documents,
- E series: exhibits,
- F series: reserved, and
- G series: contract administration and project management forms.

### **Extension of Time Entitlement under AIA A201**

Article 8.3 of the general conditions of construction contracts [AIA A201 (AIA 2007)] specifically addresses delays and extension of time. Several situations are described in which an extension of time could be granted to the contractor. These situations are as follows:

- An act or neglect of the owner, or of a separate contractor employed by the owner;
- Changes ordered in the works;
- Labor disputes;
- Fire;
- Unusual delay in deliveries;
- Unavoidable casualties or other causes beyond the contractor's control;
- Delay authorized by the owner pending mediation and arbitration; and
- Other causes that the architect determines may justify delay.

It would be impossible to list every possible cause of delay in a contract, so the architect is presented with the task of using judgment for what would be deemed appropriate grounds for extension of time. There are several other specific instances in the contract that give way for extension of time throughout the contract. These can be found in the following articles:

- 3.2.4: clarifications or instructions the architect issues in response to the contractor's notices or requests for information;
- 3.7.4: site conditions differ from what was specified in the contract;
- 3.7.5: human remains, burial markers, archaeological sites, or wetlands that were not identified in the contract are found;
- 5.2.3: the owner or architect rejected a proposed subcontractor from the contractor, although the subcontractor is reasonably capable of performing the work;
- 6.1.1: the owner performing construction and awarding separate contracts in connection with other portions of the project;
- 7: changes in the work;
- 9.7: the architect does not issue a certificate for payment, though the contractor has diligently performed all of his duties;
- 10.3.2: hazardous material onsite;
- 10.4: an emergency that may cause harm to persons or property;
- 14.3: suspension of work by the owner for convenience; and
- 15.1.5.2: adverse unexpected weather conditions.

These events alone do not automatically entitle a contractor to an extension of time. To ensure that the contractor receives the extension he is seeking, he must perform the duties laid out for him in the contract. If the contractor fails to perform one of these actions, it may disqualify the contractor's entitlement. Article 3.2.4 says that if the contractor does not submit a notice or request for information upon finding an error or inconsistency in the contract documents, or when it is discovered that a portion of the contract documents does not adhere to laws or ordinances, as is stated in articles 3.2.2 and 3.2.3, the contractor will not be eligible for an extension of time resulting from the error that was found. Conversely, the contractor will be held liable for the costs and damages that would have been avoided had the findings been reported (El-adaway et al. 2013).

Another example, which is stated in article 5.2.1, says the contractor is required, as soon as practical after the award of the contract, to furnish to the owner, through the architect, the names of persons or entities proposed for each principal portion of the work. The owner or architect can reject, for reasonable cause, this proposal; in which case, the contractor should propose another to whom the owner or architect has no reasonable objection, under article 5.2.3. If the proposed subcontractor was reasonably capable of performing the work, the contractor shall be entitled to the adjustments in the contract sum and contract time, as appropriate, through a change order that should be issued before commencement of the substitute subcontractor's work (El-adaway et al. 2013). The contract also states in article 5.2.3 "no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required."

Ultimately, the AIA A201 does not have a set extension of time laid out in the contract, rather the phrase "the Contract Time shall be extended appropriately" is given. The architect is given the responsibility for determining the appropriate extension of time for each situation on its own merit. This is clearly defined in article 8.3.1 which states that "the Contract Time shall be extended by Change Order for such reasonable time as the Architect may determine." Because no two projects are exactly alike and each situation differs, this is a reasonable way to go about dealing with delays.

#### **Extension of Time Procedures under AIA A201**

As previously stated, a delay does not alone give a contractor the right to an extension of time. Article 15 in the AIA standard general conditions of construction contract lays out the procedure the contractor is required to follow to be awarded an extension of time. Article 15.1.5 states "If the contractor wishes to make a Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one claim is necessary" (AIA 2007). This is stating that the contractor is responsible for submitting a claim to gain this entitlement. It should be noted that this claim must include an estimate, or it could otherwise be rejected by the architect. In the case of adverse weather conditions, article 15.1.2 says that a claim must be submitted by the contractor with data substantiating that weather conditions were abnormal for that time of year, could have not been reasonably anticipated, and had an adverse effect on the scheduled construction. Article 15.1.2 also gives a timescale for claims to be submitted. It states "all claims must be submitted to the other party, initial decision maker, and a copy sent to the architect, if the architect is not the initial decision maker, within 21 days of the event that causes the claim, or 21 days after the claimant becomes aware that the event will cause a delay."

The AIA refers to the initial decision maker for the initial decision of a claim. Article 15.2.1 states that the architect will serve as the initial decision maker, unless otherwise indicated in the contract. The initial decision maker is required by article 15.2.2 of the contract to review the claim, and within 10 days of receipt of the contract to take one or more of the following actions:

- Request additional supporting data from the claimant or a response with supporting data from the other party;
- Reject the claim in whole or in part;
- Approve the claim;
- Suggest a compromise; or
- Advise the parties that the initial decision maker is unable to resolve the claim if there is not enough evidence, or if he

determines that it is inappropriate for him to make a ruling on the claim.

When evaluating a claim, the initial decision maker can request from either party additional information, or refer to a third party with expertise or special knowledge that may assist in making a decision. According to article 15.2.4, the response for additional information must be received within 10 days, and must either provide the information, advise when the information will be available, or advise the initial decision maker that no additional information will be provided. When a decision is rendered, the initial decision maker will, in writing, notify the claimant of the reasons for the decision and notify the parties and the architect, if the architect is not the initial decision maker (article 15.2.5). Either party then has the right to file for mediation of the initial decision, subject to the terms of article 15.2.6.1. The terms laid out in this article are

- Within 30 days from the date of the initial decision, either party may demand that the other party file for mediation within 60 days of the initial decision; and
- If such a demand is made and the other party fails to file for mediation within the 60 days, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

#### **ConsensusDOCS Owner-Contractor Construction Contract (ConsensusDOCS 200)**

ConsensusDOCS was initially published on September 28, 2007, after some negotiations and drafting sessions followed by many updates. The participating associations represent designers, owners, contractors, and sureties that literally spell the "DOCS" in ConsensusDOCS (ConsensusDOCS 2014). The contracts were originally endorsed by 20 organizations. Today, ConsensusDOCS is the product of more than 40 leading design and construction industry associations, dedicated to identifying and utilizing best practices in the construction industry for standard construction contracts. ConsensusDOCS offers more than 100 different design and construction contract documents covering all methods of project delivery. The ConsensusDOCS 200 is the owner-contractor construction contract agreement.

#### **Extension of Time Entitlement under ConsensusDOCS 200**

In the ConsensusDOCS 200, delays and extensions of time are addressed under paragraph 6.3, which provides different events in which the contractor will be entitled to an extension of time due to delay. The events listed are as follows:

- Acts or omissions of the owner, the architect / engineer, or others;
- Changes in the work or the sequencing of the work ordered by the owner, or arising from decisions of the owner that impact the time of performance of the work;
- Transportation delays not reasonably foreseeable;
- Labor disputes not involving the contractor and general labor disputes impacting the project but not specifically related to the worksite;
- Fire, terrorism, epidemics, adverse governmental actions, and unavoidable accidents or circumstances;
- Adverse weather conditions not reasonably anticipated;
- Encountering hazardous materials;
- Concealed or unknown conditions;
- Delay authorized by the owner pending dispute resolution; and
- Suspension by the owner.

The aforementioned events will entitle the contractor to an extension of time if the delay happens at any time in the commencement or progress of the work by a cause beyond the control of the contractor, its subcontractors, and material suppliers. It is important



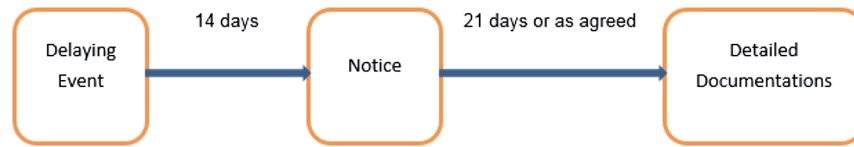


Fig. 1. Extension of time under the ConsensusDOCS

to note that this list of events is not exhaustive. It would be illogical to list all the possible events under which the contractor will be entitled to extensions of time. A question will arise here: What will happen in case of events which are not expressly stated? In the ConsensusDOCS, it is not mentioned who will be responsible, on behalf of the owner, for responding to the contractor's notice of delay and granting extensions of time. So the owner, or whoever is agreed in the contract, will be responsible for judging the validity of causes of delay, which are not expressly stated.

#### Extension of Time Procedures under ConsensusDOCS 200

An event in itself does not qualify the contractor for an extension of time. The contractor must follow the contract's procedures. Under the ConsensusDOCS 200, and as shown in Fig. 1, it is important to highlight that the procedures for extension of time are the same as those for additional payment. To this end, both procedures are addressed under Article 8.4 (claims for additional cost and time), which states the following:

The Contractor shall give the Owner written notice of the claim within fourteen (14) Days after the occurrence giving rise to the claim or within fourteen (14) Days after the Contractor first recognizes the condition giving rise to the claim, whichever is later. Except in an emergency, notice shall be given before proceeding with the Work. Thereafter, the contractor shall submit written documentation of its claim, including appropriate supporting documentation, within twenty-one (21) Days after giving notice, unless the parties mutually agree upon a longer period of time.

After receiving the Contractor's claim, it is the owner's responsibility to respond to it. The ConsensusDOCS 200 also provides timescales for the owner to respond to the contractor's claim in paragraph 8.4 which states the following: "The owner shall respond in writing denying or approving the contractor's claim no later than fourteen (14) Days after receipt of the Contractor's claim." So the owner, or whoever agreed to act on the owner's behalf, shall respond to the contractor's claim no later than 14 days after receipt of the claim. The response must be in writing, either denying or approving the claim for extension of time. This will lead us to a question: What if the contractor fails to follow the aforementioned procedures (timescales)? Similar to most of the contracts, the ConsensusDOCS is silent regarding failure to follow notice and claim provisions by the owner or the contractor. However, this may simply result in waiver or forfeiture of a claim. To this effect, it is important to note that there is no explicit wording in the ConsensusDOCS about the procedures in case of events which have a continuing effect.

#### Engineers Joint Contract Documents Committee Owner-Contractor Construction Contract (C700)

The Engineers' Joint Contract Documents Committee (EJCDC) has existed since 1975. It is a joint venture of four organizations of professional engineers and contractors: the American Council of Engineering Companies (ACEC), the National Society of

Professional Engineers (NSPE), the American Society of Civil Engineers (ASCE), and the Associated General Contractors of America (AGC). EJCDC volunteers represent a major portion of professional groups engaged in the practice of providing engineering and construction projects services and participate in one or more of 15 other professional engineering design, construction, owner, legal, and risk management organizations. Since its existence, EJCDC has developed and updated fair and objective standard documents that represent the latest and best thinking in contractual relations between all parties involved in engineering design and construction projects with a focus on horizontal infrastructure in the United States (EJCDC 2014). The C700 is the owner-contractor construction contract agreement.

#### Extension of Time Entitlement under EJCDC C700

The EJCDC C700 lists some events which could possibly raise entitlement to extension of time. The events mentioned, under paragraph 12.03, are as follows:

- Acts or neglect by owner, acts or neglect by utility owners or other contractors performing other work for owner;
- Fires, floods, epidemics, abnormal weather conditions, or acts by God;
- If the owner, engineer, other contractors, or utility owners performing other work for the owner, or anyone for whom owner is responsible, delays, disrupts, or interferes with the performance or progress of the work; and
- Acts or failures to act of utility owners even if not under the control of the owner, or other causes not the fault of and beyond control of the owner and the contractor.

Many events may entitle the contractor to an extension of time, and this list of events is not exhaustive as mentioned under the same paragraph 12.03 "not be limited to." Furthermore, the EJCDC contract is stating, under paragraph 12.03, that the contractor will not be entitled to any extension of time if delays are within the control of contractor, subcontractor, or supplier. This is making the contractor responsible for any delay by his subcontractor or supplier unless if they are performing other work for owner.

On the other hand, according to paragraph 12.02 "any claim for an adjustment in the contract times shall be based on written notice submitted by the party making the claim to the engineer or the other party to the contract in accordance with the provisions of paragraph 10.05." Also, paragraph 12.03 states that "the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A." Therefore, it is essential for contractors working under EJCDC contract to understand the contractual procedures for submitting claims in order to maintain their right for an extension of time.

#### Extension of Time Procedures under EJCDC C700

Contractors working under the EJCDC C700 should comply with the contractual procedures in submitting their claim for an extension of time in order to maintain their right. Under EJCDC, the engineer is given the responsibility for making the decision regarding the contractor's claim for extension of time and determining the amount of time to be awarded according to paragraph 10.05 which states as follows, "All claims . . . shall be referred to the engineer for

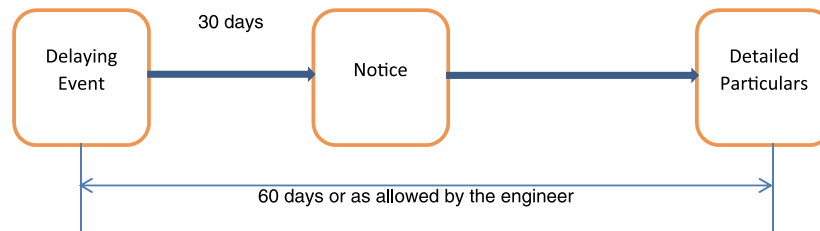


Fig. 2. Extension of time under EJCDC C700

decision. A decision by engineer shall be required as a condition precedent to any exercise by owner or contractor of any rights or remedies." EJCDC gives timescale for the contractor in submitting his claim and for the engineer in replying to the contractor's claim. According to paragraph 10.05.B, "the contractor shall submit a written notice of claim to the engineer and the other party of the contract within 30 days after the start of the event giving rise thereto. Within 60 days after the occurrence of the delaying event or as allowed by the engineer, notice of the amount or extent of the claim, with supporting data shall be delivered by the contractor to the engineer and the other party of the contract." It is noted that there is no clear provision about the procedure in case of an event which has a continuing effect. Fig. 2 illustrates the aforementioned procedure.

After receiving the contractor's claim, the engineer will review the claim and, within 30 days after receipt of the last submittal from the contractor, shall reply to it, in writing, with one of the following as stated in paragraph 10.05.C:

- Approve the claim,
- Deny the claim in whole or in part, and
- Notify the parties that the engineer is unable to resolve the claim and it will be deemed a denial.

A question will arise here: What will happen in case of failure by the contractor or the engineer to comply with the aforementioned timescale? If the contractor failed to follow the timescale in submitting his claim for an extension of time, the claim will be considered invalid according to paragraph 10.05.F which states "No claim for an adjustment in contract price or contract times will be valid if not submitted in accordance with this paragraph 10.05." On the other hand, if the engineer failed to take action on a claim with the aforementioned timescale of 30 days, the claim will be deemed denied according to paragraph 10.05.D. It is important to note that, according to paragraph 10.05.E, the engineer's action on a claim or denial is final and binding upon the owner and contractor. The contractor or the owner has the right to dispute the engineer's decision within 30 days of such action or denial. The aforementioned procedure for extension of time is the same as that for additional payment under the EJCDC C700.

### **International Federation of Consulting Engineers Owner-Contractor Construction Contracts**

FIDIC is the French acronym for the International Federation of Consulting Engineers. It was founded in 1913 by three national associations of consulting engineers in Europe. There are now 97 member associations from all over the world. FIDIC is well known for its work in drafting a standard form of conditions of contract for the worldwide construction industry (FIDIC 2014). Generally, the FIDIC forms of contract have been developed in order to provide efficient provisions and to reduce the financial provision for unfamiliar contract provisions (Bunni 2005; Booen 2000). The first edition for the standard conditions of contract

for works of civil engineering construction was published in 1957. It was especially for use in international construction projects. This first edition is known as the Red Book because of its red cover. The second edition was published in 1963 and the third in 1977. Later, the fourth edition of the Red Book "FIDIC 4th" was published for the Annual Conference of FIDIC held in Lausanne, Switzerland, in 1987 (FIDIC 1987). Many amendments were made, even the word "international" was deleted from the title of the document, and subsequently, it was used in domestic contracts as well as international ones (Bunni 2005). In 1999, FIDIC published the new suite of standard contracts "FIDIC 99 (FIDIC 1999). FIDIC 99 includes the *Conditions of Contract for Construction*, which is recommended for building and engineering works designed by or on behalf of the employer, and some elements of design may be given to the contractor through the document known as the Red Book (FIDIC 99). Also, FIDIC 99 includes another important element which is the appointment of the engineer to supervise the works, certify payment, and monitor the quality of the works (Caldwell 2009). Revisions have been made to the standard forms in order to attain greater certainty in the intention of the wording or to respond to the needs of the parties (Bunni 2005). In 2005, the World Bank prepared the Standard Bidding Documents for Procurement of Works (SBDW) in projects funded in whole or in part by the World Bank. The Conditions of Contract included in the SBDW are based solely on the *Conditions of Contract for Construction* published by the International Federation of Consulting Engineers, or FIDIC (1999). The SBDW is based on the Master Bidding Documents for Procurement of Works and the User's Guide adopted by the multilateral development banks (MDBs) and international financing institutions (World Bank 2010).

### **Extension of Time Entitlement under FIDIC 4th**

In order for the contractor to manage claims, it is of great importance to note the clauses which raise the contractor's entitlement to extensions of time. FIDIC 4th lists the delay events that raise entitlement to extension of time, under subclause 44.1, as follows:

- The amount or nature of extra or additional work;
- Any cause of delay referred to in these conditions;
- Exceptionally adverse climatic conditions;
- Any delay, impediment, or prevention by the employer; or
- Other special circumstances which may occur, other than through a default of or breach of contract by the contractor or for which he is responsible.

Any such event must be such fairly to entitle the contractor to an extension of the time for completion of the works, or any section or part thereof.

Bunni (2005) highlighted the associated clauses that may raise the contractor's entitlement to an extension of time, as follows:

- 6.3 and 6.4: delay in supply of documents,
- 12.2: adverse physical obstructions or physical conditions,
- 27.1: fossils and articles of value and antiquity,

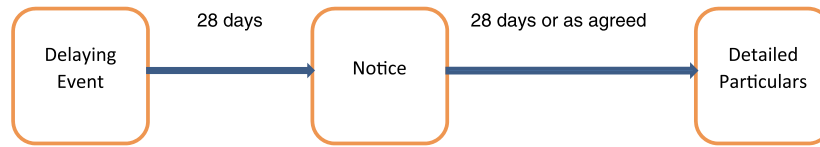


Fig. 3. Extension of time under FIDIC 4th

- 36.5: tests required but not provided for,
- 40.2: suspension of the progress of the works,
- 42.2: failure to give possession of site,
- 41.1: commencement of works, and
- 69.4: contractor's entitlement to suspend work or reduce rate of work.

Furthermore, Bunni (2005) noted that the statement "other special circumstances" has caused problems in interpretation and application. In this regard, Bunni (2005) mentioned some delays, which FIDIC 4th makes no explicit provision related to, as follows:

- Discrepancies in or divergence between contract documents;
- Errors in drawings, technical specifications;
- Changes in law/legislation;
- Delays caused by other contractors employed by the employer or nominated subcontractors/suppliers; and
- Delays caused by public bodies/authorities.

Regarding classification of such delays as special circumstances or not, Bunni (2005) suggested that this would be "a matter for the engineer's consideration and at his discretion." However, his decision must be fair to entitle the contractor to an extension of time for completion of the works (Fawzy and El-adaway 2012). It is also of great importance to note that FIDIC 4th is giving the responsibility to the engineer to assess the contractor's claim for extension of time according to subclause 44.1, which states as follows: "the engineer shall... determine the amount of such extension and shall notify the contractor accordingly, with a copy to the employer."

#### Extension of Time Procedures under FIDIC 4th

Under FIDIC 4th, it is interesting to highlight that the procedures for extension of time are not the same as those for additional payment. The procedures for extension of time are addressed under subclause 44.2, and are further illustrated in Fig. 3. Subclause 44.2 states:

provided that the Engineer is not bound to make any determination unless the Contractor has (a) within 28 days after such event has first arisen notified the Engineer with a copy to the Employer, and (b) within 28 days, or such other reasonable time as may be agreed by the Engineer, after such notification submitted to the Engineer detailed particulars of any extension of time to which he may consider himself entitled in order that such submission may be investigated at the time.

The procedures for events with continuing effect are handled under subclause 44.3 and as shown in Fig. 4. Subclause 44.3 states that:

provided also that where an event has a continuing effect such that it is not practicable for the Contractor to submit detailed particulars within the period of 28 days referred to in 44.2 (b), he shall nevertheless be entitled to an extension of time provided that he has submitted to the Engineer interim particulars at intervals of not more than 28 days and final particulars within 28 days of the end of the effects resulting from the event.

It is essential to highlight that under FIDIC 4th, there is no time-scale for the engineer to reply to the contractor's claim. He is only obligated to make determination for extension of time and reply to the contractor's claim within a reasonable time and without undue delay. It is also of great importance to note that according to subclause 44.2, the engineer may, but is not bound to make any determination for extension of time, unless the contractor has followed the procedures for extension of time. Hence, FIDIC 4th is not considering a proper notice and details as a condition precedent to the contractor's entitlement to extension of time (Fawzy and El-adaway 2012).

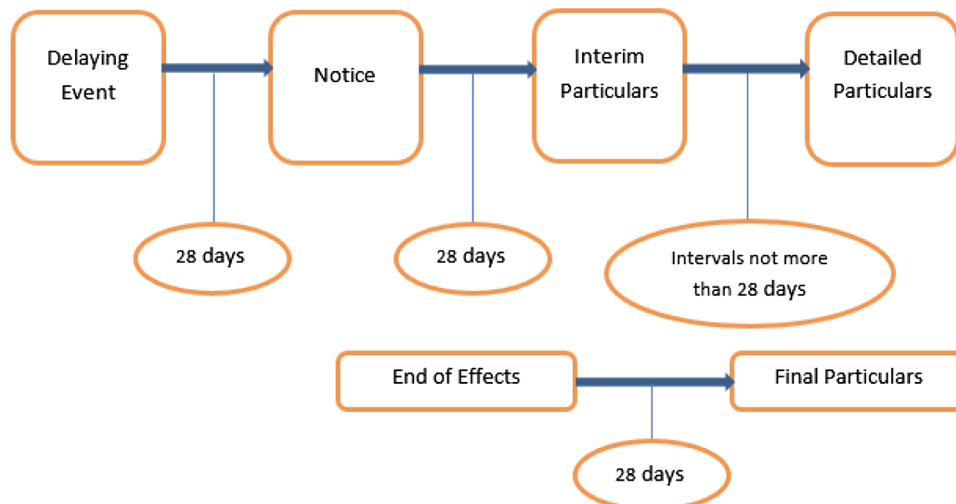


Fig. 4. Extension of time for events having continuing effect under FIDIC 4th

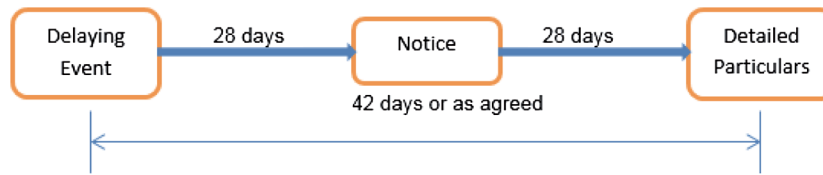


Fig. 5. Extension of time under the FIDIC 99 (and World Bank Contract)

### Extension of Time Entitlement under FIDIC 99 (and World Bank Contract)

The FIDIC 99 provides a list of occurrences that could entitle a contractor to an extension of time, which is found in subclause 8.4, as follows:

- A variation [unless an adjustment to the time for completion has been agreed under 13.3 (Variation Procedure)] or other substantial change in the quantity of an item of work included in the contract;
- A clause of delay giving an entitlement to extension of time under a subclause of these conditions;
- Exceptionally adverse climatic conditions;
- Unforeseeable shortages in the availability of personnel or goods caused by epidemic or governmental actions; or
- Any delay, impediment, or prevention caused by or attributable to the employer, the employer's personnel, or the employer's other contractors.

It is critically important for contractors to take note of subparagraph (b) in the contract which states, "a cause of delay giving an entitlement to extension of time under a Sub-Clause of these conditions." This subparagraph is important because it gives more situations in which an extension of time could be warranted, but could easily be overlooked by a contractor (Fawzy and El-adaway 2012). Bunni (2005) lists these subclauses as follows:

- 1.9: delayed drawings or instructions,
- 2.1: delay in giving access to or possession of the site,
- 4.7: error in specified referenced points,
- 4.12: adverse unforeseeable physical conditions,
- 4.24: fossils,
- 7.4: delayed testing caused by the employer,
- 8.5: delays caused by authorities,
- 8.9: a suspension initiated by the employer,
- 10.3: interference by employer in tests on completion,
- 13.1: variations,
- 13.7: adjustments for changes in legislation,
- 16.1: contractor's entitlement to suspend work,
- 17.4: employer's risk, and
- 19.4: force majeure.

As was mentioned before in the FIDIC 4th, Bunni (2005) noted that the statement "other special circumstances" caused problems in its interpretation and application. To remove such ambiguity, the FIDIC 99 does not make any reference to other special circumstances. Instead, subclause 8.4 and the subclauses referred to in subparagraph (b), "a case of delay giving an entitlement to extension of time under a Sub-Clause of these Conditions," provide a wider range of delay events which gets rid of the ambiguity of the "other special circumstances" statement and gives specific instances when there is entitlement to an extension of time (Fawzy and El-adaway 2012).

### Extension of Time Procedures under FIDIC 99 (and the World Bank Contract)

Under FIDIC 99 and the World Bank Contract, the procedures for extension of time are the same as those for additional payment.

Subclause 20.1 covers these issues as shown in Fig. 5. Subclause 20.1 states that:

If the Contractor considers himself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give notice to the Engineer, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 28 days after the Contractor became aware, or should have become aware, of the event or circumstance. Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Engineer, the Contractor shall send to the Engineer a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed.

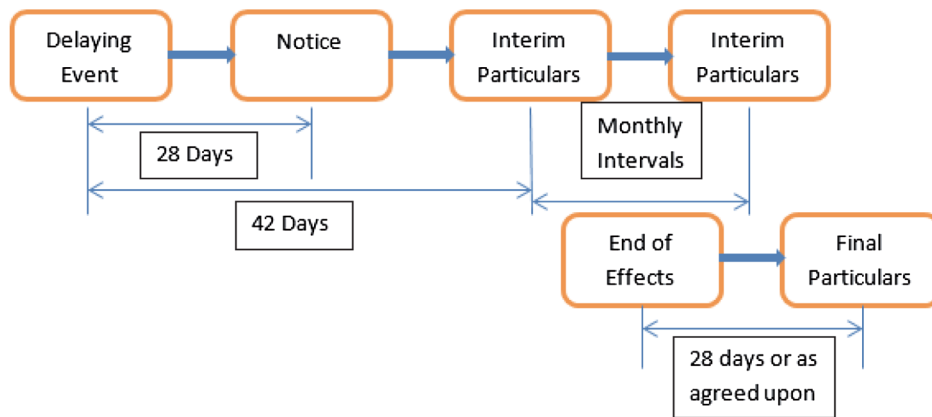
If the delay event causes a continuing delay effect, the contract provides specific procedures, also in subclause 20.1. These procedures are

- This fully detailed claim shall be considered as interim;
- The contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the engineer may reasonably require; and
- The contractor shall send a final claim within 28 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the contractor and approved by the engineer.

As stated before, it is imperative for contractors to know what is required of them in order to be awarded an extension of time. If the contractor fails to give notice of a claim within a period of 28 days, the time for completion shall not be extended. Hence, the service of a proper notice is considered a condition precedent to the contractor's entitlement to extension of time. Furthermore, the contract is putting the responsibility on the contractor to submit to the engineer interim claims at monthly intervals with the accumulated delay and/or the amount claimed, and to send a final claim within 28 days of the end of the event. If the contractor fails to properly follow the procedures pertaining to providing the details of the claim for extension of time in relation to any claim, any extension of time and/or additional payment shall take account of the extent, if any, to which the failure has prevented or prejudiced proper investigation of the claim. The engineer is given 42 days after receiving a claim to approve or disapprove the contractor's claim, and must provide detailed comments with his response. The procedure is detailed as follows in FIDIC 99 and the World Bank Contract, and is further illustrated in Fig. 6:

The Engineer shall proceed in accordance with Sub-Clause 3 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry)





**Fig. 6.** Extension of time for events having continuing effects under FIDIC 99 and the World Bank Contract

in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled to under the Contract.

### Joint Contracts Tribunal Owner-Contractor Building Contract (JCT 2011)

The Joint Contracts Tribunal (JCT) was established in 1930 by the Royal Institute of British Architects (RIBA) and the National Federation of Building Trades Employers (NFBTE). Since 1931, JCT has produced standard forms of construction contracts for use by the construction industry. Today JCT provides a larger and more comprehensive range of contract documentation than any other contract-producing body in the United Kingdom construction industry. In 1998, it became a limited company, and the organization is comprised of seven members representing the sectors of the industry who are the key participants. The JCT members are the British Property Federation, the Contractors Legal Group Limited, the Local Government Association, the National Specialist Contractors Council, the Royal Institute of British Architects, the Royal Institution of Chartered Surveyors, and the Scottish Building Contract Committee Limited. The last edition for the building contract was issued in 2011 and is hereinafter referred to as JCT 2011.

### Extension of Time Entitlement under JCT 2011

Many events in the construction industry can lead to the contractor's entitlement to extension of time. The JCT Standard Building Contract with Quantities 2011 (JCT 2011) describes relative events under which the contractor is entitled to extensions of time in clause 2.29 as

- Variation and any other matters or instructions which under these conditions are to be treated as, or as requiring a variation;
- Architect/contract administrator's instructions;
- Deferment of the giving of possession of the site or any section under clause 2.5;
- Compliance with clause 3.22.1 or with architect/contract administrator's instructions under clause 3.22.2;
- The execution of work for which an approximate quantity is not a reasonably accurate forecast of the quantity of work required;
- Suspension by the contractor under clause 4.14 of the performance of any or all of his obligation under this Contract;
- Any impediment, prevention or default, whether by act or omission, by the employer, the architect/contract administrator, the

quantity surveyor or any of the employer's person's, except to the extent caused or contributed to by any default, whether by act or omission, of the contractor or any of the contractor's persons;

- The carrying out by a statutory undertaker of work in pursuance of its statutory obligations in relation to the works, or the failure to carry out such work;
- Exceptionally adverse weather conditions;
- Loss or damage occasioned by any of the specified perils;
- Civil commotion or the use or threat of terrorism and/or the activities of the relevant authorities dealing with such event or threat;
- Strike, lock-out, or local combination of workmen affecting any of the trades employed upon the works or any of the trades engaged in the preparation, manufacture or transportation of any of the goods or materials required for the works or any persons engaged in the preparation of the design for the contractor's design portion;
- The exercise after the base date by the United Kingdom Government of any statutory power which directly affects the execution of the works; and
- Force majeure.

The previous events do not in themselves entitle the contractor to an extension of time. According to clause 2.28.6.1, which states that "the Contractor shall constantly use his best endeavors to prevent delay in the progress of the Works or any Section, however caused, and to prevent the completion of the Works or Section being delayed or further delayed beyond the relevant Completion Date," the JCT 2011 is putting the responsibility upon the contractor to do his best to keep the project on schedule and prevent the delay of the completion date of the project before being entitled to an extension of time.

In contrast with most forms of contracts, and to remove the ambiguity in case of omissions which may lead to a reduction in the project duration, the JCT 2011 gives discretion to the architect/contract administrator in case of omissions as stated in clause 2.28.4:

the Architect/Contract Administrator may by notice to the Contractor . . . fix a Completion Date for the Works or that Section earlier than that previously so fixed if in his opinion the fixing of such earlier Completion Date is fair and reasonable, having regard to any Relevant Omissions for which instruction have been issued after the last occasion on which a new Completion Date was fixed for the Works or for that Section.



### Extension of Time Procedures under JCT 2011

Under the JCT 2011, it is important for the contractors to understand the procedure for claiming extensions of time. Clause 2.27 (Notice by contractor of delay to progress) states:

1) if and whenever it becomes reasonably apparent that the progress of the Works or any Section is being or is likely to be delayed the Contractor shall forthwith give notice to the Architect/Contract administrator of the material circumstances, including the cause or causes of the delay, and shall identify in the notice any event which in his opinion is a Relevant Event, 2) . . . give particulars of its expected effects, including an estimate of any expected delay in the completion of the Works.

This aforementioned clause gives responsibility to the contractor to notify the architect/contract administrator in case of a delaying event which entitles him to an extension of time, and give particulars of its expected effects, including an estimate of any expected delay which may be required by the architect/contract administrator. These will lead us to the question: What would be the procedure for extensions of time in case of event which has a continuing effect? The JCT 2011 has no explicit wording in case of events with continuing effect. However, the authors see that clause 2.27.3 implicitly gives the procedure in such a case of an event with continuing effect by stating that:

the Contractor shall forthwith notify the Architect/Contract Administrator of any material change in the estimated delay or in any other particulars and supply such further information as the Architect/Contract Administrator may at any time reasonably require.

After receiving the notice from the contractor, it is the responsibility of the architect/contract administrator to respond to the contractor's notice, which shall state in the decision the following as per clause 2.28.3: (1) the extension of time that he has attributed to each relevant event, and (2) the reduction in time that he has attributed to each relevant omission (in case of omissions).

Although the JCT 2011 is not providing any timescale for the contractor in submitting his notice for claiming the extensions of time, it provides a timescale for the architect/contract administrator to make determination with respect to extension of time under clause 2.28.2. It is noted here that the architect/contract administrator shall respond to the contractor's notice within 12 weeks of receipt of the required particulars or prior to the completion date, whichever is the earliest. To this effect, clause 2.28.2 states:

Whether or not an extension is given, the Architect/Contract Administrator shall notify the Contractor of his decision in respect of any notice under clause 2.27 as soon as is reasonably practicable and in any event within 12 weeks of receipt of the required particulars. Where the period from receipt to the Completion Date is less than 12 weeks, he shall endeavor to do so prior to the Completion Date.

### New Engineering Contract (NEC 3)

The New Engineering Contract (NEC) is a suite of standard forms of construction contracts created by the Institution of Civil Engineers. There have been three editions: the first in 1993, the second in 1995, and the most recent—NEC 3—in June 2005. The contracts available within the suite are: Engineering and Construction Contract (ECC), Engineering and Construction Subcontract Contract (ECS), Engineering and Construction Short Contract (ECSC),

Engineering and Construction Short Subcontract (ECSS), Professional Services Contract (PSC), Framework Contract (FC), Term Service Contract (TSC), Term Service Short Contract (TSSC), Supply Contract/Short Supply Contract (SC/SSC), Adjudicator's Contract (AC), and the Guidance Notes and Flowcharts. NEC 3 is now used for many major construction and engineering projects in the United Kingdom and overseas.

### Extension of Time Entitlement under NEC 3

It is essential for contractors to understand the provisions of the contract under which they are working, in order to maintain their contractual rights and obtain the relief to which they may be entitled. The Engineering and Construction Contract (NEC 3) mentions a variety of events under which the contractor will be entitled to compensation, extension of time, additional payment, or a combination of these remedies. The compensation events are addressed under clause 60.1 as follows:

1. The project manager gives an instruction changing the works information except
  - a. A change made in order to accept a defect or
  - b. A change to the works information provided by the contractor for his design which is made either at his request or to comply with other works information provided by the employer.
2. The employer does not allow access to and use of a part of the site by the later of its access date and the date shown on the accepted program.
3. The employer does not provide something which the employer is to provide by the date for providing it shown on the accepted program.
4. The project manager gives an instruction to stop or not to start any work or to change a key date.
5. The employer or others
  - a. Do not work within the times shown on the accepted program,
  - b. Do not work within the conditions stated in the works information, or
  - c. Carry out work on the site that is not stated in the works information.
6. The project manager or the supervisor does not reply to a communication from the contractor within the period required by the contract.
7. The project manager gives an instruction for dealing with an object of value or of historical or other interest found within the site.
8. The project manager or the supervisor changes a decision which was previously communicated to the contractor.
9. The project manager withholds an acceptance (other than acceptance for a quotation for acceleration or for not correcting a defect) for a reason not stated in the contract.
10. The supervisor instructs the contractor to search for a defect and no defect is found unless the search is needed only because the contractor gave insufficient notice of doing work obstructing a required test or inspection.
11. A test or inspection done by the supervisor causes unnecessary delay.
12. The contractor encounters physical conditions . . . which an experienced contractor would have judged at the contract date to have such a small chance of occurring that it would have been unreasonable to have allowed for them.
13. A weather measurement is recorded . . . the value of which, by comparison with the weather data, is shown to occur on average less frequently than once in ten years.
14. An event occurs which is an employer's risk stated in the contract.

15. The project manager certifies takeover of a part of the works before both completion and the completion date.
16. The employer does not provide materials, facilities, and samples for tests and inspections as stated in the works information.
17. The project manager notifies a correction to an assumption which he has stated about a compensation event.
18. A breach of contract by the employer which is not one of the other compensation events in the contract.
19. An event which:
  - a. Stops the contractor from completing the works or
  - b. Stops the contractor from completing the works by the date shown on the accepted program, and which
  - c. neither party could prevent, and
  - d. an experienced contractor would have judged at the contract date to have had such a small chance of occurring that it would have been unreasonable to have allowed for it, and is not one of the other compensation events.

It is important to note that the contractor may give an early warning by notifying the project manager (project manager) of any other event which may delay the completion date according to clause 16.1 which states that “the contractor and the project manager give an early warning by notifying the other as soon as either becomes aware of any matter which could . . . delay Completion.” The intention of this clause is to ensure that the contractor does not benefit from failing to give early warning because in some cases the early warning may have a mitigating effect on the compensation event. It is worth noting that any of the aforementioned events will make the contractor eligible for compensation, additional cost, extension of time or a combination of these remedies, depending on the event itself. But the contractor must comply with the procedures mentioned in the contract to maintain his rights.

### Extension of Time Procedures under NEC 3

The procedure in NEC 3 is slightly different from other contracts. Both the project manager and contractor are under the obligation to notify the other according to clauses 61.1 and 61.3. The project manager notifies the contractor of the compensation event at the time of giving the instruction or changing the earlier decision as per clause 61.1. Clause 61.3 states the following: “The Contractor notifies the Project Manager of an event which has happened or which he expects to happen as a compensation event if

- The contractor believes that the event is a compensation event and
- The project manager has not notified the event to the contractor.”

NEC 3 gives a time-bar of 8 weeks for the contractor give notice of a compensation event according to clause 61.3. Failure by the contractor to comply with this time period in submitting his notification to the project manager will leave him with no entitlement for extension of time unless the project manager should have notified the event to the contractor. The notification is considered as a condition precedent according to clause 61.1 which states:

If the Contractor does not notify a compensation event within 8 weeks of becoming aware of the event, he is not entitled to a change in the Prices, the Completion Date or a Key Date unless the Project Manager should have notified the event to the Contractor but did not.

After receipt of notification from the contractor, the project manager shall notify the contractor of his decision and either the completion date will not be changed or he will otherwise instruct the contractor to submit quotations, according to clause 61.4 which states the following:

If the Project Manager decides that an event notified by the contractor

- arises from a fault of the Contractor,
- has not happened and is not expected to happen,
- has no effect upon Defined Cost, completion or meeting a Key Date or
- is not one of the compensation events stated in this contract he notifies the Contractor of his decision that the Prices, the Completion Date and the Key Dates are not to be changed. If the Project Manager decides otherwise, he notifies the Contractor accordingly and instructs him to submit quotations.

Also, the NEC 3 provides a timescale within which the project manager shall notify the contractor of his decision. According to clause 61.4, the project manager shall notify the contractor of his decision within either one week of the contractor’s notification or a longer period to which the contractor has agreed. In case of failure by the project manager to notify the contractor of his decision within the aforementioned period, the contractor may notify the project manager to this effect. If the contractor has not received a reply to his notification within two weeks, the situation will be interpreted as acceptance by the project manager that the event is a compensation event and an instruction to submit quotations. At this point, the contractor shall submit quotations within 3 weeks of being instructed by the project manager, and the project manager shall reply within two weeks of the submission according to clause 62.3. The project manager’s reply can be one of the four following alternatives as mentioned in clause 62.3:

- An instruction to submit a revised quotation;
- An acceptance of a quotation;
- A notification that a proposed instruction will not be given or a proposed changed decision will not be made; or
- A notification that he will be making his own assessment.

Again according to clause 62.6, a failure by the project manager to reply to the submitted quotations within two weeks of the submission will lead to the same aforementioned scenario. The contractor may notify him to this effect, and if there is no reply within two weeks of the notification, it will be considered as an acceptance of the quotation by the project manager. This will lead us to a question: What if the contractor fails to submit a quotation within 3 weeks of being instructed by the project manager? According to clause 64.1 (The project manager’s assessments) states the following:

- The Project Manager assesses a compensation event
- if the contractor has not submitted a quotation and details of his assessment within the time allowed

Accordingly, a failure by the contractor to comply with the timescale in submitting his quotation will give the discretion to the project manager to assess the compensation event. Eventually, if the project manager either accepts the contractor’s quotation or notifies the contractor of his own assessment, or if the quotation is treated as having been accepted, the compensation event will be implemented according to clause 65.1. It is also of great importance to highlight that all the notifications in NEC 3 must be in writing according to clause 13.1 which states “Each instruction, certificate, submission, proposal, record, acceptance, notification, reply and other communication which this contract requires is communicated in a form which can be read, copied and recorded. Writing is in the language of this contract.” It is imperative to note that notices should be communicated separately from other communications, according to clause 13.7, which states “A notification which this contract requires is communicated separately from other communications.” Accordingly, a notice of a compensation event cannot be simply included in a progress report or a program; instead, a separate communication is required for the compensation event. Fig. 7 illustrates the aforementioned procedures.

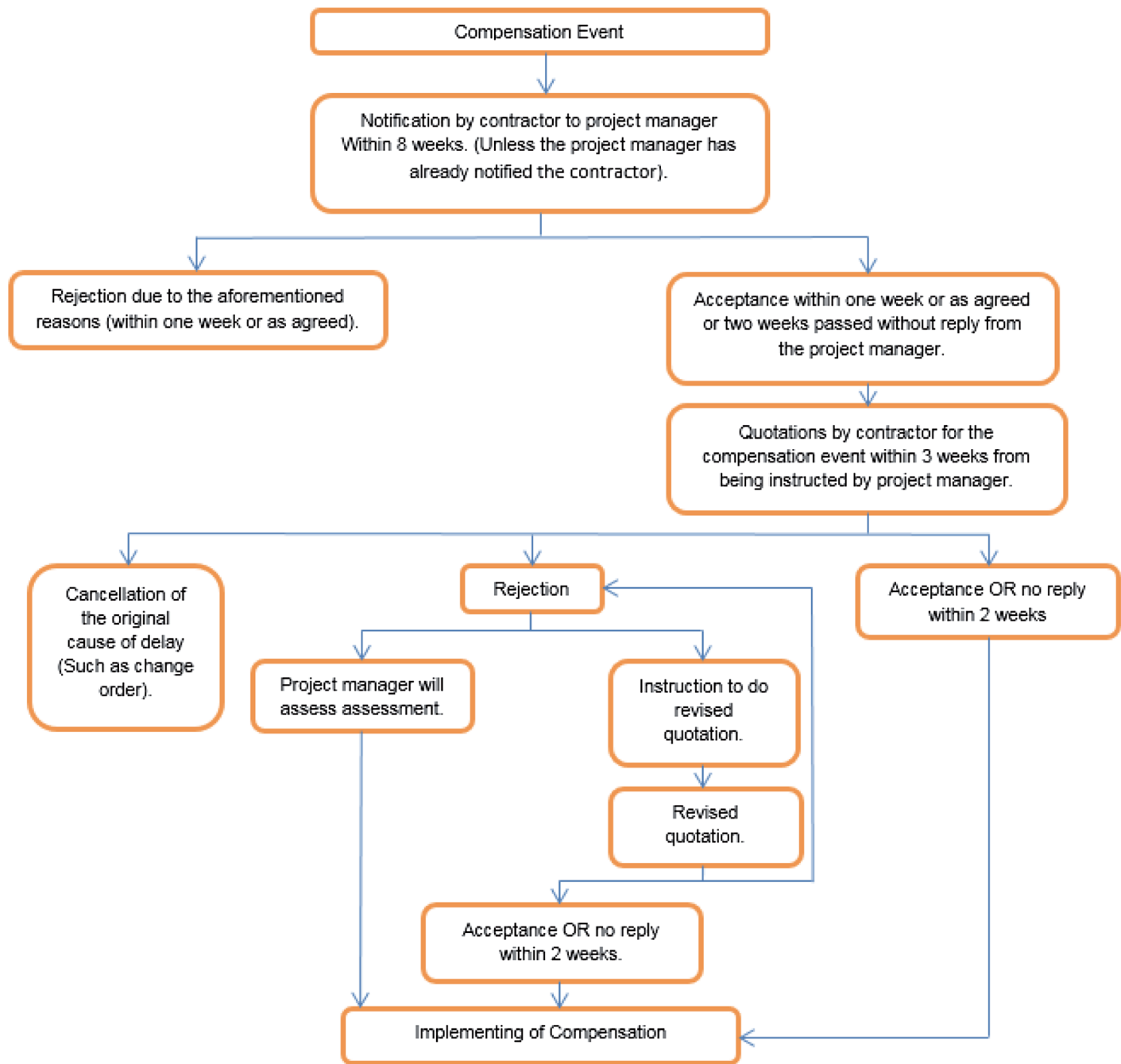


Fig. 7. Compensation events under NEC 3

### Summary of Contractual Procedures

Table 1 presents contractual guidelines associated with requesting extension of time under the different contracts under investigation for this research. Contractors should find these notes of great value in managing their projects that happen to be governed by any of these contracts.

### Discussion

A question usually asked is, what if the owner/the owner's representative or the contractor fails to follow the provisions of the contract with respect to extensions of time? Some of the aforementioned contracts are silent in this matter, and there are not any provisions addressing failure to follow notice and claim provisions

by any of the parties except the EJCDC C700, NEC 3, World Bank, and FIDIC 99.

In case of failure to follow notice and claim provisions by the contractor, Knowles (2005) states: "Where a contractor or subcontractor fails to serve a proper delay notice, this will not result in the loss of rights to an extension of time unless the contract expressly states that the service of a notice is a condition precedent to such rights." Furthermore, it was held that if the contractor fails to give written notice of the delay, this failure may simply result in waiver or forfeiture of a claim "see London Borough of Merton v Stanley Hugh Leach Ltd (1985) 32 BLR 51." It is thought that the decision holds good for JCT 2011, as well. This decision also made clear that the giving of the notice is not a precondition to the award of an extension of time unless the contract expressly states so (Chappell 2007). Accordingly, if the contractor fails to serve a proper delay



**Table 1.** Contractual Guidelines for Administering Extension of Time under Different Standard Contracts

Contract	Procedure
AIA (general conditions of the construction contract)	Occurrence of the delaying event Submitting the claim to the initial decision maker and a copy to the architect within 21 days of the occurrence of the delaying event or 21 days after contractor becomes aware of the delaying event Submitting supporting data whenever requested by the initial decision maker
ConsensusDOCS	Occurrence of the delaying event Submitting written notice of the claim to the owner after 14 days of recognizing the delaying event Submitting written documentation of the claim within 21 days (or as agreed) after giving the notice of the claim
EJCDC	Occurrence of the delaying event Submitting written notice of the claim to the engineer within 30 days after the occurrence of the delaying event Submitting detailed particulars to the engineer within 60 days of the occurrence of the delaying event or as allowed by the engineer
FIDIC 4th	Occurrence of the delaying event Submitting notice to the engineer within 28 days of the occurrence of the delaying event with a copy to the employer Submitting detailed particulars to the engineer within 28 days after submitting the notice of the claim In case of events having a continuing effect, the interim particulars shall be submitted at intervals of not more than 28 days and the final particulars within 28 days after the end of effects resulting from the delaying event
FIDIC 99 and World Bank	Occurrence of the delaying event Submitting of notice of the claim to the engineer within 28 days after the contractor became aware, or should have become aware, of the delaying event Submitting of fully detailed particulars within 42 days after becoming aware of the delaying event In case of events having a continuing effect, the fully detailed particulars shall be considered as interim, submitting interim particulars at monthly intervals and the final particulars within 28 days after the end of the effects resulting from the event
JCT Standard Building Contract with Quantities 2011	Occurrence of the delaying event Notice by the contractor to the architect/contract administrator including the cause of the delay and its effect Submitting detailed particulars in such notice or otherwise as soon as possible thereafter
NEC 3	Occurrence of the compensation event Submitting notification of the compensation event within 8 weeks of its occurrence to the project manager, unless the project manager had already notified the contractor of the event Submitting quotations for the compensation event within 3 weeks after being instructed to do so by the project manager (or after a failure to reply by the project manager and the contractor notifies the project manager and the project manager does not reply within two weeks) Submitting revised quotations whenever instructed by the project manager, within 3 weeks of being instructed to do so

notice, this would not result in the loss of rights to an extension of time under the JCT 2011, ConsensusDOCS 200, and FIDIC 4th. The EJCDC, NEC 3, World Bank, and FIDIC 99 follow a different approach. Contractors working under the FIDIC 99 and World Bank must comply with the procedures laid out in the contract to maintain their right to make a claim. The contract specifically addresses this in subclause 20.1 by stating that “If the Contractor fails to give notice of a claim within such a period of 28 days, Completion shall not be extended, the Contractor shall not be entitled to additional payment, and the Employer shall be discharged from all liability in connection with the Claim.” Under the EJCDC C700, if the contractor failed to follow the timescale in submitting his claim for an extension of time, the claim will be considered invalid according to paragraph 10.05.F which states “No claim for an adjustment in contract price or contract times will be valid if not submitted in accordance with this paragraph 10.05.” Furthermore, the NEC 3 considers failure by the contractor to comply with the contractual time period (8 weeks) in submitting his notification of the compensation event to the project manager as time-barring and will thus leave the contractor with no entitlement for extension of time unless he had already been notified by the project manager. Therefore, it is vitally important for the contractors to follow the EJCDC C700, NEC 3, World Bank, or FIDIC 99 contractual procedures, or they will forfeit all their rights associated with them.

Under the EJCDC contract, if the engineer fails to take action on a claim with the aforementioned timescale of 30 days, the claim will be deemed denied according to paragraph 10.05.D. According to Booen (2000), under the FIDIC 99, if the engineer fails to

determine extensions of time in accordance with the provisions of the contract, “(a) there would thereafter be no time for completion (time is said to be “at large”); (b) the Contract would be construed accordingly; and (c) the contractor’s obligation would be to complete the project within a time which was reasonable in all circumstances.” This will make the contractor lose the entitlement for liquidated damages and will leave the contractor to finish the work within a reasonable time. It is important to notice that this situation will exist only if the contractor has the right to be granted an extension of time and the contractor can prove that right. Furthermore, it was held in *Assoland Construction Pte Ltd v. Malayan Credit Properties Pte Ltd* (1993) 3 SLR 470 that failure by the architect to respond to the contractor’s notice of claim for additional time within a specified period resulted in that the architect’s exercise of his power to grant an extension of time was invalid and accordingly there was no date from which liquidated damages could be computed and no liquidated damages were recoverable (Bunni 2005). The same decision would apply to the World Bank Contract, the FIDIC 4th and the AIA A201.

It was held in *Token Construction Co Ltd v. Charlton Estates Ltd* (1973) 1 BLR 48 that the architect was not entitled to deduct liquidated damages until he had first adjudicated upon all the contractor’s applications for extensions of time. The wording of the relevant clauses in this case was similar to JCT 63 provisions (Chappell et al. 2005). It is thought that the decision holds good for JCT 2011, as well. Thus, under JCT 2011 the employer would not have the right to deduct liquidated damages until all of the contractor’s applications for extension of time have been decided (Fawzy and El-adaway 2014).

However, it is often said that the time period of 12 weeks, for the architect/contract administrator to grant extension of time after the receipt of the required particulars, is merely directory, not mandatory, “see *Temloc Ltd v Errill Properties Ltd* (1987) 39 BLR 30.” Accordingly, an extension of time granted outside such a period is still valid (Murdoch and Hughes 2008). As a result, the architect/contract administrator would still have the right to grant extension of time and deduct liquidated damages, after the period has expired. This would, in return, affect the contractor’s plan for the progress of the works. This view, however, should be treated with caution because the court expressed this view in a situation in which the employer was attempting to use to its own advantage the architect’s failure to act (Chappell et al. 2005; Chappell 2007). Judge Thornton later confirmed the 12-week deadline in the case of “see *Cantrell v Wright & Fuller Ltd* (2003) 91 Con LR 97.” It is recommended that later editions of the JCT include an express provision that such time periods are mandatory (Fawzy and El-adaway 2014).

As for NEC 3, if the project manager fails to notify the contractor of his decision within the duration stipulated in clause 61.4, either one week of the contractor’s notification, or a longer period to which the contractor has agreed, the contractor may notify the project manager to this effect. If the contractor has not received a reply to his notification within two weeks, the situation will be interpreted as acceptance by the project manager that the event is a compensation event and an instruction to submit quotations. Furthermore, if the project manager fails to reply to the submitted quotations within two weeks of the submission, the contractor may notify him to this effect, and if there is no reply within two weeks of the notification, it will be considered an acceptance of the quotation by the project manager.

## Conclusion

Most construction projects experience delay in completion, and time overrun has become a global epidemic in the construction industry. On-time project completion has always been an indicator of a project’s success. However, any construction project will be subject to unpredictable circumstances that may hinder the timely completion of the construction processes. Delays in construction activities may give rise to a need for an application of extension of time. In preparing the extension of time application, the contractor must in the first place determine the associated contract provision under which there is an entitlement to claim.

This paper presented contract administration guidelines for appropriate utilization of the extension of time clauses under most widely used construction contracts both nationally and internationally. Contractors often deal with different standard forms of contract. It is imperative to know the different procedures, if a claim is going to be pursued. By knowing these procedures, it will greatly improve a contractor’s ability to receive the time and compensation to which they are contractually entitled. Disputes between the contractor and owner can also be avoided by knowing and following procedures. Disputes are often lengthy and expensive which means no one comes out as winner. It is each party’s professional responsibility to know what the contract states. Disputes during a project can be greatly reduced just by knowing this information and accordingly making the project all around more successful.

To this effect, the AIA A201 requires the contractor to submit a claim to the initial decision maker and a copy to the architect within 21 days of the delay event, and to submit supporting data whenever requested by the initial decision maker. The ConsensusDOCS 200

requires the contractor to provide written notice within 14 days of recognizing the delaying event, followed by written documentation within 21 days. The EJCDC C700 gives a 30-day period after the delaying event and detailed particulars to be submitted within 60 days following the event. The FIDIC 4th requires 28 days for a notice to be submitted after the contractor becomes aware of the delay, and 28 days after that for the particulars of the delay to be submitted. In case of delay events having a continuing effect, the contractor is required to submit particulars at intervals not exceeding 28 days. The FIDIC 99 (and the World Bank Contract) give the contractor 28 days to submit a notice following becoming aware of the delay, and 42 days to submit particulars. The JCT requires a contractor to notify the architect/contract administrator with the causes and effects of the delay, followed by the detailed particulars of the delay. The JCT 2011 does not provide a timescale for the contractor in making his claim. Lastly, the NEC 3 requires notice to be given within 8 weeks of the delay occurrence, followed by submitting quotations for compensation 3 weeks after the project manager requests them.

Eventually, it is important to highlight that the analyses conducted in this study is limited to the provisions of extensions of time of the studied standard forms of contracts. However, in some instances, applicable law may impact the enforceability of the contract language. Therefore, the authors recommend consultation with qualified legal counsel.

## References

### List of Cases

- London Borough of Merton v Stanley 1036Hugh Leach Ltd (1985) 32 BLR 51.  
 Temloc Ltd v Errill Properties Ltd (1987) 39 BLR 30.  
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