

Guidance Note on Contract Price Adjustment





March 2021

This Guidance Note is intended to complement the Guidelines for Procurement of Goods and Works and related services and the Guidelines for the Procurement of Consultant Services under Islamic Development Bank Financing, approved by the Board of Executive Directors (BED) of the Islamic Development Bank, and published in April 2019. This document may be used and reproduced for non-commercial purposes. Any commercial use, including without limitation reselling, charging to access, redistribute, or for derivative Works such as unofficial translations based on these documents is not allowed.

For additional information on this document, please contact: Project Procurement (PPR) Office of the Vice-President, Country Programs The Islamic Development Bank P.O. Box 5925, Jeddah 21432 Kingdom of Saudi Arabia <u>ppr@isdb.org</u> www.isdb.org

Common Abbreviations and Defined Terms

Common abbreviations and defined terms that are used in this Guidance Note. Defined terms are written using capital letters.

Abbreviation / term	Full terminology / definition
Annex	An Annex to this Guidance Note
Bank	The Islamic Development Bank (IsDB).
Bid	An offer, by a firm or joint venture, in response to a Request for Bids to provide the required Goods, Works or Non- consulting Services.
Bidder	A firm or joint venture that submits a Bid for Goods, Works, or Non-consulting Services in response to a Request for Bids.
Bidding Documents	All documents constituting the Request for Bids issued by the Beneficiary
BDS	Bid Data Sheet (a section in the Bidding Documents)
Beneficiary	A Beneficiary is the recipient of IsDB Project Financing. This term includes any entity involved in the implementation of an IsDB financed project on behalf of the Beneficiary.
СМР	Contract Management Plan.
Consultant	A Consultant Firm or Individual Consultant that provides Consultant Services. A Consultant is independent of both the Beneficiary and IsDB.
Consulting Service(s)	A Consultant Firm or Individual Consultant that provides Consultant Services. A Consultant is independent of both the Beneficiary and IsDB.
Contractor	The entity named in the respective contracts to execute a contract for Goods, Works or Non-Consulting Services. In some contexts, such as related to Goods contracts, the term "supplier" is also used in place of "contractor."
Contract Manager	For the purpose of this guidance, "Contract Manager" is a generic term used to refer to a legal entity, a natural person/team assigned to/ authority vested on/ delegated to manage the execution of a contract.
	 Depending on the applicable contract form, "Contract Manager" may refer to: a range of contract management arrangements such as the:

Abbreviation / term	Full terminology / definition
	 o "Engineer" in FIDIC: Conditions of Contract for Construction or Conditions of Contract for Plant &Design build; "Engineer" means the person appointed by the Employer/Beneficiary to act as the Engineer for the purposes of the Contract. o "Project Manager", for example, in Bank's SPDs for Small Works, « The Project Manager is the person named in the Particular Conditions of the Contract (PCC); or the Peneficiary's internal team when assigned to manager
	a contract.
Fraud and Corruption	The sanctionable practices of corruption, fraud, collusion, coercion or obstruction defined in IsDB's <i>Guidelines on Combatting Fraud and Corruption</i> and in <i>IsDB Group Anti-Corruption Guidelines on Preventing and Combating Fraud and Corruption in IsDB Group-Financed Projects</i> .
GCC	General Conditions of Contract.
Goods	A category of Procurement that includes: commodities, raw material, machinery, equipment, vehicles, Plant, and related services such as transportation, insurance, installation, commissioning, training, and initial maintenance.
ІТВ	Instructions to Bidders (a Section in the Bidding Documents)
Non-consulting Services	Services which are not Consulting Services. Non-consulting Services are normally bid and contracted on the basis of performance of measurable outputs, and for which performance standards can be clearly identified and consistently applied. Examples include: drilling, aerial photography, satellite imagery, mapping, and similar operations.
PCC	Particular Conditions of Contract
Plant	The provision of equipped facilities, such as those executed on the basis of design, supply, installation and commissioning.
Procurement	The function of planning for, and sourcing Goods, Works, Non-consulting Services, and/or Consulting Services to meet required objectives.
Procurement Documents	A generic term used in the Guidelines to cover all Procurement Documents issued by the Beneficiary. It includes: GPN, SPN, EOI, REOI, Prequalification document, RFB and RFP, including any addenda.

Abbreviation / term	Full terminology / definition
Procurement Process	The whole Procurement lifecycle that starts with the identification of a need and continues through planning, preparation of specifications/ requirements, budget considerations, selection, contract award, and contract management. It ends on the last day of the warranty period.
Project Procurement Plan (PP)	The Beneficiary's Procurement Plan for IsDB projects, as referred to in the Guidelines (Paragraph 1.43 of the Guidelines for Procurement of Consultant Services and Paragraph 1.42 of the Guidelines for Procurement of Goods, Works and Related Services) and incorporated by reference in the Financing Agreement.
Project Procurement Strategy (PS)	A project-level strategy document, prepared by the Beneficiary, that describes how Procurement in financing operations will support the development objectives of the project and deliver VfM through the application of IsDB's core procurement principles.
SCC	Special Conditions of Contract.
Standard Bidding Documents (SBDs)	Standardized procurement documents issued by IsDB to be used by Beneficiaries for IsDB financed projects. These include IsDB's standard documents for, e.g.: GPN, SPN, Prequalification, LOI, RFB and RFP.
TOR	Terms of Reference (usually referencing a Consulting Services contract).
VE	Value Engineering.
Value for Money (VfM)	VfM means obtaining the optimum benefits with the effective, efficient, fair and economic use of resources. This requires an evaluation of relevant costs and benefits, along with an assessment of risks, and non-price attributes and/or life cycle costs, as appropriate. The lowest price alone may not necessarily represent VfM.
Works	A category of Procurement that refers to construction, repair, rehabilitation, demolition, restoration, maintenance of civil work structures, and related services such as transportation, insurance, installation, commissioning, and training.

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Section 1 - Introduction

1.1 Purpose

The purpose of this Guidance Note on Contract Price Adjustment is to explain the IsDB's Guidelines requirements on price adjustment which is a mechanism intended to protect both contracting parties from (unforeseeable) input price fluctuations (reflecting rise or fall of the costs incurred by the contractor/supplier/consultant to procure its inputs, labor and equipment for the Contract), and support Beneficiaries' knowledge and practices. It is a comprehensive technical guide with hands-on explanations.

1.2 Scope

The Contract Price Adjustment concern must be addressed throughout the Procurement and Contract Management Processes, including at the time of Contract Award. This guidance focuses on contract price adjustment aspects when preparing bidding documents and/or requests for proposals, at the time of award of contract, through implementation and payment.

1.3 Bank's requirements for contract price adjustment

The Bank's Guidelines for Procurement of Goods and Works and related services and the Bank's Guidelines for the Procurement of Consultant Services under Islamic Development Bank Financing both require adjustment of contract price under certain circumstances.

The Guidelines for Procurement of Goods and Works stipulate¹ that "Bidding Documents" shall state either that Bid prices will be fixed or that price adjustments will be made to reflect any changes (upwards or downwards) in major cost components of the contract, such as labour, equipment, materials and fuel. Price adjustment provisions are usually not necessary in simple contracts involving delivery of Goods or the completion of Goods, Works and/or related services within eighteen (18) months, but they shall be included in contracts which extend beyond eighteen (18) months. However, it is normal commercial practice to obtain firm prices for some types of equipment regardless of the delivery time; in such cases, price adjustment provisions are not needed. Prices may be adjusted by the use of a prescribed formula (or formulae) [Footnote: A different formula should be used for each currency] which breaks down the total price into components that are adjusted by price indices specified for each component or, alternatively, on the basis of documentary evidence (including actual invoices) provided by the Bidder. The use of the formula method of price adjustment is preferable to that of documentary evidence. The method to be used, the formula (if applicable) and the base date for application shall be clearly defined in the Bidding Documents. If the payment currency is different from the source of the input and corresponding index, a correction factor shall be applied in the formula to avoid incorrect adjustment.

¹ Guidelines for Procurement of Goods and Works – Paragraphs 2.43 and 2.44

The Guidelines for the Procurement of Consultant Services² stipulate that "if the contract duration is expected to exceed eighteen (18) months, a price adjustment formula shall be included in the contract to adjust the Consultant's fees for foreign and/or local inflation." Furthermore Annex A "Types of contracts and essential provisions" ³ stipulate: "No increase in the cost or rates of the Consultant Services on account of inflation shall normally [be] allowed by IsDB for a period of eighteen (18) months commencing from the date of submission of the Proposal. However, if the Consultant Services continue beyond eighteen (18) months, price adjustments on account of inflation may be made by the application of a parametric formula based on relevant published indices as stipulated in the contract. Contracts of shorter duration may include a provision for price adjustment when local and/or foreign inflation is expected to be high and/or unpredictable. »

Section 2 - General Principles of Contract Price Adjustment

2.1 When to provide for price adjustment?

Normally, price adjustment is justified for contract durations exceeding 18 months. Price adjustment may also be justified for contracts of a shorter duration when there is well known volatility in the price of inputs to the contract such as metals, fuel etc. Under such circumstances, bidders find it most difficult to bid on a fixed-price basis and while some of the candidates may inflate their bid price -- when the price would be non-adjustable -- to reflect their perception of the inflation risk during the duration of the contract performance, others may refrain from bidding, all to the detriment of the Beneficiary's interest in obtaining good competition and low bid prices.

Whenever the Beneficiary chooses to have a price adjustable contract, such provision should be planned at procurement strategy and planning stage and <u>this shall be announced</u> in the bidding documents prior to issuing them. This ensures that potential bidders will not be scared away, nor will bidders have to inflate their bid to reflect the --rather unpredictable--risk of inflation on costs of contract inputs. As an immediate consequence, the Beneficiary will reap benefits --of price adjustment-- in the bidding process. Contrary to certain views, there is no evidence that a price adjustable contract eventually costs more to the Beneficiary than a fixed-price contract, but there is evidence that an adjustable price contract attracts stronger competition, and results in less disputes and duress for the Contractor during performance. Furthermore, when the price of inputs at times decreases – as it may happen from time to time for fuel and other commodities—the Beneficiary directly benefits from this especially if a formulae-based adjustment mechanism is used.

2.2 When not to provide for Contract Price Adjustment?

Price adjustment provisions may not be necessary for:

² Guidelines for the Procurement of Consultant Services – Paragraph 2.36

³ Guidelines for Procurement of Goods and Works – Annex A Paragraph 4

- (i) simple supply contracts (i.e., not involving components that are usually affected by escalating or fluctuating prices) with short delivery periods;
- (ii) the procurement of certain types of equipment where normal commercial practice requires bidders to submit fixed prices regardless of the delivery time, which may be the case for
 - a. engineering, procurement, and construction contracting arrangements; and
 - b. fixed-price contracts that are common in projects financed by private sector financiers, who are generally reluctant to accept the risk of cost overruns, as it increases credit risk rating and reduces financial viability of the project; and
- (iii) contracts for the supply, installation, and construction of facilities wherein the value of the plant/equipment represents the major part of the estimated cost of the contract. All major equipment is usually supplied from fixed production lines; thus, an experienced manufacturer should be able to mitigate the risk of price fluctuations."

2.3 Formula based vs documentary based price adjustment

Price adjustment requirements (reflecting rise or fall of the costs incurred by the contractor to procure its inputs, labor and equipment for the contract) in contracts are best addressed through a set of formulae, which once <u>adequately designed and inserted in the contract</u>, provide for straightforward computation of the adjustment to price for each and every price certificate without the need for any discussion or negotiation between the contractor and the Beneficiary/Contract Manager -- even without relying on the contractor to provide any data or justification for the adjustment. This formula-based approach to price adjustment is deemed much preferable to a documentary-based one that was once in use in many countries.

The alternative method of price adjustment based on documentary evidence relies on the submission by the contractor of pro-forma invoices for basic inputs at the time of bid submission and actual invoices for the same at the time of payment. This method requires thorough verifications by the contract manager and still may be subject to abuse and misrepresentation.

2.4 Principles and Design of Formula-Based Price Adjustment

The bid/contract price offered by a bidder is the result of a calculation by the bidder of the various costs to be incurred by the Contractor to perform the contract. These costs include various materials/commodities (fuel, steel, cement, lubricants, tires, etc...), equipment (in this case depreciation adjusted to reflect the replacement value of the contractor-owned

equipment used for the works) and spare parts, labor, various services (logistics, freight forwarding, insurance, lease, etc...) and overheads and profit.⁴

Formula-Based price adjustment reflects the fact that the contract price is made up of the costs of various inputs to the contract. Formula-based price adjustment is a quite transparent process, where one may observe the weight of various basic inputs in the overall contract price, and the impact of increase or decrease of individual inputs prices on the price to be paid to the contractor. The formulae must always be designed with this need for transparency of the causes and effects in mind. The key to obtaining an adequate price adjustment provision is the adoption of as many formulae --or families of formulae in case the contract activities are so diverse as to require separate formulae for various components of the works as explained further below in Section 3—as there are currencies of payment. For instance, the local currency price component of the contract price --which normally reflects the contractor's costs incurred in the currency of the Beneficiary's country—will usually be made up of the costs of local labor, and purchase of aggregates (if not directly produced by the contractor), an input which is rarely imported, and other items depending on the economic activities in the Beneficiary's country and their level of competitiveness.

As per the Bank Procurement Guidelines, a bidder is free to use up to three foreign currencies to express his bid price (foreign currency component); consequently the bidder will indicate in his bid – Appendix to Bid or breakdown of price provided upon specific request from the Beneficiary—the types of inputs to be paid for under each foreign currency that the bidder requested in his bid. Indeed such data is necessary to eventually obtain adequate and equitable price adjustment formulae.

Once the nature and weight (e.g. weight in the contract price or a portion of the contract price) of each "basic contract input" is known, it is quite simple to design a price adjustment provision on the basis of a polynomial representation with weightings and variation of price indices for the basic contract inputs. However, only the materials, labor, equipment and spares, and possibly services will be considered because it is generally impractical to reflect overheads in the price adjustment provision on their own; these overheads will actually be reflected through the other basic inputs, for convenience.

Not all materials inputs to the contract need to be considered, as this would be very impractical – potentially resulting in very long a formula-- and the minor inputs (value-wise) will have very little impact on overall contractor's costs, even if they were to fluctuate. Usually, it is considered acceptable by Beneficiaries and Contractors alike to retain indices for inputs reflecting in aggregate 85-95 percent of the contract cost (excluding at the minimum, any items reimbursable at cost obviously, provisional sums and overheads, etc.).

⁴ This is fairly similar to the "basket of consumer products" traditionally used by Bureaus of Statistics to compute a Consumer Price Index or by some international organizations to compute a Cost-of-living Index to be used for salary adjustment for their staff – or overseas posting allowances.

Box1- Example of a Price Adjustment Formula

A Formula-based Price Adjustment reflects the facts that (i) a portion "a" of the Contract Price will not be adjusted (the fixed or non-adjustable part) and (ii) the adjustable part is directly linked to the cost fluctuation of the most representative basic inputs to the cost of the Contract as incurred by the Contractor.

If a foreign currency component (say US\$) of the contract price (or a portion of the contract price, such as pavement work) is made of the costs of fuel, bitumen, equipment and spares for 20%, 30% and 40% respectively with a fixed portion of 10%, the formula for adjustment of this US\$ portion of the Contract Price would be:

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Adjusted Price_c = Base Price^{10.1 + 0.20^{\circ}F_c/F_0} + 0.30^{\circ}B_c/B_0 + 0.40^{\circ}Eq_c/Eq_0
```

where F, B and Eq are respectively indices for fuel, bitumen and Equipment respectively whereas c refers to the current value of an index and 0 refers to the base value - at the Base Date of the contract which is normally specified as the date 28 days prior to the bid submission deadline. It is reasonable to expect that the bidder was well aware of the various costs at this Base Date when preparing and submitting the bid.

The sum of all weightings and the fixed portion must always be equal to 1 (100 percent), or else in case there would be no variation of the values of indices (or of the cost of basic inputs) the "adjusted price" would be different from the base price without cause.

In a given formula, the <u>indices should</u> preferably <u>be taken from the country of the currency</u> <u>to which the formula applies</u> (say Country A). If an index Ix for a given input (input X) from a country (country B) that is different from the country of the currency of payment (Country A) were to be used without caution, the said payment may unduly be varied on the basis of the variation of price of input X in Country B; this would be most inappropriate; <u>if it becomes</u> <u>necessary to use such index Ix which is not from the country of the currency of payment, it must then be corrected</u> as described hereafter – the correction is fairly complex. Examples of adequate and inadequate corrections are shown in Box 2. Let us observe and measure the variation of the price of Input X from country A, using its cost converted to the currency of Country A: (i) at the Base Date the measurement of index value for Input X would provide the following data:

[Ix₀*value of one unit of currency of country B in currency of country A on Base Date]

whereas (ii) at a certain current date, the measurement would provide the following data:

[Ixc*value of one unit of currency of country B in currency of country A on current Date]

Hence the variation of cost of input X measured from country A, using its cost converted to the currency of Country A would be:

[$(Ix_c^*value of one unit of currency of country B in currency of country A on current Date)/$ $(Ix_0^*value of one unit of currency of country B in currency of country A on Base Date)].$

The effect of the correction as explained in the previous paragraph (and Box 2) is to protect the Beneficiary against excessive undue adjustment of price; for example, if inflation in Country B is very high, the index adjustment as shown above moderates the (substantial) variation of Ix_c in the inverse proportion of the (presumably substantial) devaluation of Currency of Country B vs Currency of Country A, because the factor [value of one unit of currency of country B in currency of country A on current Date/value of one unit of currency of country B in currency of country A on Base Date] would be expected to be lower than 1 (one) or country B's economic competitiveness would be seriously undermined⁵. It appears that the above correction may still not be sufficient if the currency of country B is not freely convertible; therefore, the selection of a price adjustment index from a country with a nonfreely convertible currency may present certain risks and is to be prohibited. In such case, the Employer/Beneficiary should impose the use of the relevant index from the country of the currency of payment.

⁵ If this were not to be the case and the currency of country B remained fairly strong vs. the currency of Country A, in spite of high price increase for Input X in Country B, then presumably the Contractor should be looking for a cheaper source of supply for Input X, if available elsewhere.

Box 2 Examples of adequate and inadequate corrections

Country A (country of currency of payment) experiences no inflation during the period considered (i.e. from Base to current dates) whereas Country B (country of origin of indices) experiences 100% inflation for the cost of a given input. Consequently the value of IXc/Ix_0 equals 2.0, reflecting 100% inflation or doubling of price for the input.

During the same time, the Country B currency has considerably weakened against Country A currency and the following is being observed:

Value of one unit of currency of country B in currency of country A on Base Date= 0.4 Value of one unit of currency of country B in currency of country A on current Date=0.2

If no correction was to be applied, the payment would be adjusted by a factor of IXc/Ix_0 (or 2.0), unduly because the cost of the given input did not fluctuate in the currency of payment, which is the currency of Country A.

If the correction is correctly applied as follows:

 $(Ix_c*value of one unit of currency of country B in currency of country A on current Date)/ (Ix_0*value of one unit of currency of country B in currency of country A on Base Date)$

Or, by changing the sequence of calculation ($|x_c/|x_0|^*$ (value of one unit of currency of country B in currency of country A on current Date/ value of one unit of currency of country B in currency of country A on Base Date) or 2.0/(0.4/0.2) the value of which is actually 1.0, reflecting that no adjustment will be made on account of the given input. Note that in the real world, the value of this factor may be different from 1.0, but normally not very substantially.

If the correction were applied incorrectly however, for instance by using the following formula in which the sequence of "country A" and "country B" has been inverted:

 $(Ix_c^*value of one unit of currency of country A in currency of country B on current Date)/$ $(Ix_0^*value of one unit of currency of country A in currency of country B on Base Date) the$ adjustment factor would turn out to be or 2.0/((1/0.4)/(1/0.2)) or 2.0/(2.5/5) which equals 4.0!Obviously, the given payment would be unduly adjusted by an enormous factor on account ofthe given input, when actually no adjustment was justified.

Most important: the price adjustment formulae should be well prepared, and <u>must always</u> <u>be finalized at the time of contract award</u>, through pre-award discussions between the Contractor and the Beneficiary/Engineer; one should not expect that the price adjustment provision may be adopted from the winning bidder's bid without the need for scrutiny and correction of weightings and selection of indices, or for fine tuning at the time of contract award.

2.5 Specific case of Beneficiary countries with very high inflation

Beneficiary countries with high levels of inflation are often challenged in public procurement due to the difficulty for bidders to express their bid price in local currency and for contractors to perform their contracts and be paid in local currency, even when the contract provides for a formula based price adjustment. A practical and simple way to address this problem (unless the Beneficiary country laws do not allow it) is to invite bidders (in the bidding documents) to quote the local portion of the bid price in a specified foreign currency (such as Euro or US\$, etc.) in lieu of the local currency. Usually such contract does not require any additional price adjustment provision for the corresponding payments as the formulation of contract price in the specified foreign currency provides de facto the protection of price adjustment to the contractor.

Section 3 - Price Adjustment for Works Contracts

3.1 Preparation of price adjustment provision

The Bank Standard Bidding Documents for Works and Small Works both incorporate standard provisions for a formula-based method of price adjustment. However, these provisions which are generic need to be suitably adapted on a case by case and Beneficiaries and also their consultants sometimes find it difficult to do so, perhaps due to their past use of documentary-based price adjustment. It may occur that insufficient understanding leads them to applying the formula-based method in a wrong manner, at the risk of overpaying contractors. The purpose of this section is to clarify the principles and the method for designing and applying appropriate price adjustment formulae for works.

The formula or formulae for a given contract should be designed as explained in Paragraph 2.3 above, and in particular there should be separate formulae for various currencies of payment. The Beneficiary, with assistance from the Contract Manager/Engineer should clarify the indices, their sources and the respective weightings with the selected bidder and agree on them prior to contract signing.

3.2 Use of price adjustment provision

Once the price adjustment formulae are correctly prepared, they should be applied as follows: <u>a formula that applies to a payment in a given currency will produce an adjustment in the same currency;</u> it has been observed that Beneficiaries and Engineers – under Alternative A currency in SBD of Major Works (ITB 15.1 and BDS 15.1) and also when using SBD Small Works (ITB 15.1 and BDS 15.1) – apply the formulae to the amount of payment due expressed in the local currency -- e.g. before converting the amount to the currency(ies) of payment—and then wrongly add up all the amounts obtained expressed in the local currency prior to breaking down the resulting sum according to the currency split which is the method of the said Alternative A. Such a <u>mistake</u> defeats the purpose of having a different price adjustment formula for each payment currency, and may result in excessive payment to the Contractor for price adjustment in one or more of the stronger currency(ies) as the related payment may unduly "benefit" from a higher inflation in another currency – in particular if inflation rate in the country of the Borrower is a two-digit figure.

It is recommended that, when the contract provides for price adjustment, the contract should have a dedicated (earmarked) provisional sum to provide for this – re. Section 9 and the applicable payment mechanism should be applied from the first payment certificate

(except advance payment) and with no neutralization range –Beneficiaries sometimes indicate in the contract that if adjustment factor is below a certain figure, 3 or 5 percent, there would be no adjustment—as it is much preferable for concerned staff to begin utilizing the adjustment mechanism early during contract performance to get acquainted with it when the effect of adjustment is still minimal.

3.3 Currency of Bid and Currency of Payment Alternatives

The SBD of Major Works (ITB 15.1 and BDS 15.1) provides for two alternatives for currency of bid: (i) Alternative A where the bid price is expressed entirely in the currency of the Beneficiary's country, and the bidder may request percentages (specified in the bid) of the contract price to be paid in up to three foreign currencies selected by the bidder, at exchange rates specified in the bid, and (ii) Alternative B where the unit rates, and total bid price is directly expressed in the local currency and up to three foreign currencies selected by the bidder -- no percentages and exchange rates are required in such case. Whereas Alternative A is selected by most Beneficiaries, it appears that Alternative B has advantages and ought to be preferred as explained hereafter: (i) whereas under Alt A the contractor receives the same percentages of payment in the contract currencies throughout the contract duration, under Alt B the contractor receives the amounts in the various currencies matching the type of work performed during the payment period considered, including the component of the various individual work items in the various currencies; hence the contractor receives the different payment currencies at a date closer to the time when he needs to use these currencies to pay for his inputs; (ii) under Alt B, it is less likely that mistakes will occur when designing and applying the price adjustment mechanism, and in particular the mistake described in Paragraph 3.2 cannot possibly be committed because in Alt B, adjustment is always calculated in the relevant payment currency, and there is no price conversion to be made.

3.4 Price Adjustment Provision in SBD-Small Works

The generic price adjustment formula suggested in SBD-Small Works (GCC 44) is as follows:

A separate formula of the type indicated below applies to each Contract currency:

$$P_c = A_c + B_c \ Imc/loc$$

where:

 P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c."

 A_c and B_c are coefficients specified in the PCC, representing the nonadjustable and adjustable portions, respectively, of the Contract Price payable in that specific currency "c;" and

Imc is the index prevailing at the end of the month being invoiced and loc is the index prevailing 28 days before Bid opening for inputs payable; both in the specific currency "c."

The above price adjustment formula may be too rough as it does not reflect directly the impact of the cost variation of any specific input, but rather contains an aggregate index such as Consumer Price Index. In case an Employer/Beneficiary wishes to use a more refined price adjustment provision, it is quite easy to insert a price adjustment provision similar to that of the SBD of Major Works in the bidding document, even when using the SBD-Small Works.

3.5 Components of Works

When the Works are made up of substantially different work components (say bituminous pavement, concrete placement, earthworks, etc... the Beneficiary should consider having a set of price adjustment formulae for various components of the Works. However, one should not have too many such components/sets of formulae, as it may cause contract administration to become unnecessarily cumbersome and labor intensive⁶.

3.6 Adjustment for new rates

Should new rates (unit prices) have to be defined by the Beneficiary (or rather the Engineer for the Beneficiary), great caution should be exercised in deciding if and how such new rates should be subject to price adjustment. If a new rate is defined by referring to current costs of inputs required for a new work item, then the new rate is deemed to be at "current price conditions" and must not be adjusted using the standard contractual price adjustment provision. If the said new rate is to be used over a short period of time (say a few months at most), then this rate need not be adjusted; however if it is to be used for a prolonged period, it may then be declared adjustable, but the corresponding price adjustment provision should not refer to the Contract Base Date; instead it may use as a specific base date that would in this case be the time at which the new rate was established.

On the other hand, if a new rate is defined by only referring to the price breakdown of existing unit rates – typically the case of redefining the unit rate of an existing price item when the quantity to be performed decreases or increases substantially, giving rise to the Engineer having to establish a new rate as per contractual conditions-- , without any references to current costs of inputs, then the contractual price adjustment provision should normally apply to the new rate, as the said new rate is deemed having been defined under the same economic conditions as the original bid unit rates and total bid price.

3.7 Use of proxy indices

It may happen that a specific price index is not available from existing official publications, or is available but cannot be used in practice because its value is not regularly published. This

⁶ Some Employers have adopted a separate price adjustment formula for each payment item, which is most impractical and definitely not best practice.

occurs usually for local indices in some countries – i.e. indices to be used in the formula for local currency adjustment—and virtually never for foreign indices because for the latter, it is always possible to identify a replacement index from another country. In such situations, it is fairly easy to agree with the contractor at the time of award that a proxy index will be used, and/or computed for instance by surveying the cost of the corresponding input from the local market – the average monthly cost observed for the item would be used as the value of the proxy index. In any case, the Employer/Beneficiary should not rely solely on data provided by the Contractor to establish proxy indices as such data may be biased or manipulated.

3.8 Replacement of Indices

From time to time, the publication of a given price index is discontinued, or the index value is reset to 100. In such case the Engineer/Employer/Beneficiary need to proceed with a new index or the reset index, with some adjustment. If the source of publication of the discontinued index (say I_{old}) recommends the use of another specific index (I_{new}) from a date i, then after the date i the factor [I_{oldc}/I_{old0}] should simply be replaced with [$I_{oldi}/I_{old0}*I_{newc}/I_{newi}$]; the new index just takes over from the old one after "date i".

There are cases when a (technical) amendment to a contract may require modifying the selection of a specific index or the weightings in the price adjustment provision, e.g. lime was to be used in the original contract but is deleted early in the project and cement used instead for soil stabilization. In such cases, the formula(e) should be amended by contract amendment, to reflect the changes in both the index to be used and perhaps the weight of the corresponding inputs (the old and the new ones) in contract price whenever a renegotiation of unit rate is also necessary.

3.9 Need for Formula Redesign during Contract Performance

Normally, a price adjustment formula established at the time of award of the Contract will be used throughout the contract duration. However there may be exceptional circumstances which require that the price adjustment formula be redefined at some point in time during performance. This could happen for a long duration contract, or when the cost of a given input (Input reflected by an Index "I") is subject to an exceptionally high variation. In such case, the continued use of the same linear price adjustment formula using Index I would result in distortion, and it would be appropriate to redefine a formula with new weightings at some point in time as illustrated below:

Initial formula: Adjusted Price_c= Base Price* $[0.10+ 0.20*I_c/I_0+0.30*B_c/B_0+0.40*C_c/C_0]$.

Assuming I_c is as high as two times the value of I_0 at the Time 1, whereas the other indices are supposed not to have varied at all, the adjustment produced by the formula at Time 1 would be:

Adjusted Price₁= Base Price*[0.10+ 0.20*2+0.30*1+0.40*1] or Base Price*1.2

The redefined formula below takes account of revised weightings of the corresponding inputs:

Adjusted $Price_c =$ Base $Price^* [0.10+ (0.40^*0.9/1.10)^*I_c/I_1+(0.30^*0.9/1.10)^*B_c/B_1+(0.40^*0.9/1.10)^*C_c/C_1]$

Box 3 Case Study on Contract Price Adjustment with inadequate weightings

A 30-month Works Contract was awarded following a tendering process using a bidding document based on the SBD for Major Works with the provision on Price Adjustment described below The bidding document used Alternative A for bid currency (Bidders to quote entirely in local currency) ["The unit rates and the prices shall be quoted by the Bidder in the Bill of Quantities, entirely in the currency of the Employer's Country, (the local currency or LCu"). A Bidder expecting to incur expenditures in other currencies for inputs to the Works supplied from outside the Employer's country (referred to as "the foreign currency requirements") was to indicate in the Appendix to Bid - Table C, the percentage(s) of the Bid Price needed by the Bidder for the payment of such foreign currency requirements, limited to no more than three foreign currencies, together with the rate(s) of exchange to be used.

The Contract initial amount was LCu 500 million equivalent of which 80% payable in US\$ at a specified exchange rate (US\$1=LCu10) and 20% in the local currency.

Whereas the bidder had offered to use local indices for the adjustment of US\$ payment adjustment, the Contract retained indices from the USA to match the payment currency (US\$), which was prudent. The weightings offered by the selected Bidder were retained without modifications (a very serious error as explained further).

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Weighting
Fixed	Non adjustable			a = 0.15
LL	Local Labour	NBS (National Bureau of Statistics Employer's Country)	9150 (March 2016)	b = 0.07
FU	Fuel and Lubricants	NBS	9268 (March 2016)	c = 0.15
CE	Cement	NBS	6059 (March 2016)	d = 0.04
RS	Reinforcement Steel	NBS	3625 (March 2016)	e = 0.23
ВІ	Bitumen	NBS	19821 (March 2016)	f = 0.35
EX	Explosives	NBS	7862 (March 2016)	g = 0.01

Schedule of Adjustment Data

Table A. Local Currency

	Т	Total	1.00	
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- (1) Base Date is the date defined in the General Conditions of Contract, and the Base Value is that value at the Base Date (March 2016)
- (2) Sources of indices are attached to the Contract
- (3) Price Adjustment Formula for Local Currency Component shall be in accordance with Sub-Clause 13.8 of the GCC and will take the form:
 Pn=0,15 + 0.07 (LLn/9150.0675)+ 0.15(FUn/9267.6142)+ 0.04(CEn/6059.4712)+0.23(RSn/3630.7532)+

Pn=0,15 + 0.07 (LLn/9150.0675)+ 0.15(FUn/9267.6142)+ 0.04(CEn/6059.4712)+0.23(RSn/3630.7532)+ 0.35(BIn/19821.2320)+0.01(EXn/7861.5837)

where:

Pn is a price adjustment factor to be applied to the amount in LCu for the payment of the work carried out in the subject month, determined in accordance with sub-clause 13.8 and 14.3(a) of the Conditions of Contract

LLn, FUn, CEn, RSn, Bin and EXn are the respective current cost indices or reference prices of *Local Labour, Fuels and Lubricants, Cement, Reinforcement Steel, Bitumen and Explosives* in Employer's Country for month "n" determined pursuant to sub-clause 13.8 of the Conditions of Contract, applicable to each cost element.

Index Code	Index Description	Source of Index	Base Value and Date	Bidder's Weighting
Fixed	Non adjustable			a = 0.15
EL	Expatriate Labour	US.BLS (USA)	125.6 (March 2016)	b = 0.04
FU	Fuel and Lubricants	US.BLS (USA)	119.4 (March 2016)	c = 0.10
CE	Cement	US.BLS (USA)	230.3 (March 2016)	d = 0.05
EQ	Contractor's Equipment and Spares	US.BLS (USA)	218.7 (March 2016)	e = 0.25
RS	Reinforcement Steel	US.BLS (USA)	157.9 (March 2016)	f = 0.10
EX	Explosives	US.BLS (USA)	220.8 (March 2016)	g = 0.01
BI	Bitumen	US.BLS (USA)	108.7 (March 2016)	h = 0.30
			Total	1.00

Table B. Foreign Currency (FC)

(1) Base Date is the date defined in the General Conditions of Contract, and the Base Value is that value at the Base Date (March 2016)

- (2) Sources of indices are attached to the Contract
- (3) Price Adjustment Formula for Foreign Currency Component (US\$) shall be in accordance with Sub-

Clause 13.8 of the GCC and will take the form: Pn=0,15+0.04(ELn/125.6)+0.10(FUn/119.4)+0.05(CEn/230.7)+0.25(EQn/218.7)+0.1(RSn/157.9)+0.01(EXn/108 .7)+0.30(Bln/108.7)

where:

Pn is a price adjustment factor to be applied to the amount in US\$ for the payment of the work carried out in the subject month, determined in accordance with sub-clause 13.8 and 14.3(a) of the Conditions of Contract

ELn, FUn, CEn, EQn, RSn, EXn, and BIn are the respective current cost indices or reference prices of *Expatriate Labour, Fuels and Lubricants, Cement, Contractor's Equipment and Spares, Reinforcement Steel, Explosives and Bitumen* in the specific currency of origin (in this case Indices from the USA were adopted) for month "n" determined pursuant to sub-clause 13.8 of the Conditions of Contract, applicable to each cost element.

3. The above provision was designed consistent with the bidding document, the bid submitted, the breakdown of payment in LCu and US\$. However, the weight of bitumen in both formulae for LCu and US\$ adjustments was highly inflated, for the following reason: bitumen accounted for 35% in LCu portion and 30% in the US\$ portion, i.e. 31% overall (35%*0.2 + 30%*0.8), whereas the bills which utilized bitumen were Bill 15 (Bituminous surface treatment and surface dressing) and Bill 16 (Bituminous mixes) which amounted to LCu 286 million and LCu 704 million respectively, or LCu 990 million in aggregate. Bitumen alone in the CPA provision weighted 132% of Bills 15+16 which was an aberration! Furthermore Bills 15 and 16 included other inputs, such as labour, equipment depreciation and maintenance, fuel and lubricants meaning that the weight of bitumen in the CPA provision was perhaps 2.5 to 3 times too high. On the other hand, Fuel and Lubricants accounted for 11% in the CPA provision which was perhaps slightly on the low end⁷.

4. The Interim Payment certificates prepared (or approved) by the Engineer were prepared correctly (i.e. as per the Contract) and the price adjustment formulae were computed correctly. The CPA provision in the contract was applied separately for each payment currency, and the amount of adjustment obtained for each currency was paid in the given currency, which reflected a correct use of the CPA provision.

5. As per IPC 22 showing progress at the end of March 2020 (40 months after Contract signing), overall progress of contract implementation appeared to be only 48% (Total of Work done less provisional sums= LCu 2.019 bn vs LCu 4,2 bn in Contract) and progress on Bills 15 and 16 was 40%. CPA already paid was LCu 84 million and US\$ 7,1 million, which represented respectively 21% and 45% of the base value of work—LCu and US\$ portions. Clearly the US\$ price adjustment was an anomaly, due to the grossly inflated weight of bitumen.

6. If the weight of bitumen had been reduced to 50% of the aggregate of Bills 15+16 (from 132%), the CPA amounts up to IPC 22 would have been respectively LCu 78.3 million (vs 84 million actual) and US\$ 4.84 million (vs 7.10 million actual).

⁷ A Reinforcement Steel index appeared in both the LCu and US\$ payment portions. This in itself is not a concern, as we may assume that the Contractor had intended to purchase the corresponding inputs partly in Employer's Country and partly abroad. The source of indices was not the same for LCu and for US\$, which makes sense. The total weight of the Reinforcement Steel input in the total contract payment should be considered. The weight of reinforcement steel is (0.23*0.20+0.10*0.80)= 12.6% which was surely on the high side.

Section 4 - Price Adjustment for Plant Contracts

The Bank SBD for Plant also incorporates a standard provision for a formula-based method with a generic formula provided in a dedicated Annex 2 to the Contract Agreement titled Price Adjustment e.

This provision should be used by Beneficiaries in line with the recommendations formulated in Section 2 above. The payment provision for a contract for Plant typically uses several Price Schedules: Schedules 1 and 2 for Plant and Equipment to be supplied from abroad and from the Beneficiary's country respectively, Schedule 3 for Design Services and Schedule 4 for Installation Services.

The price adjustment provisions should be separate and distinct for each Schedule. Schedules 1, 2 and 3 may or may not require price adjustment, even if Schedule 4 requires price adjustment due to the expected duration of the contract performance. In such case, Schedules 1 and 2 may be adjusted in a manner similar to Goods (re. Section 5), Schedule 3 (seldom warranting price adjustment) may be adjusted in a manner similar to Consultant Services (re. Section 6), whereas Schedule 4 may be adjusted in a manner similar to Works (re. Section 3).

Box 4 Case Study on Contract Price Adjustment for Plant

A 48-month Contract was awarded for the construction of a hydropower plant, including all related civil works following a tendering process using a bidding document based on the SBD for Plant with a provision for Price Adjustment described below.

The Contract initial amount was US\$ 120 million with portions payable in Euro, US\$ and the local currency respectively.

Contract Price Adjustment (as described in the relevant annex to the Contract Agreement, negotiated prior to Contract Signing)

The price to be paid to the Contractor under the Contract shall be subject to adjustment during the performance of the Contract to take into account changes in the cost of labor and material components, using the following generic formula

$$P_{1} = P_{0} \mathbf{x} \left(a + b \frac{L_{1}}{L_{0}} + c \frac{M_{1}}{M_{0}} \right) - P_{0}$$

in which :

P1= additional amount payable to the Contractor

P0= Contrat Amount (base amount)

a= non-adjustable fixed element (a=10%),

b= estimated percentage of labour costs in the contract amount

c= estimated percentage of supplies, materials and equipment in the contract amount

L₀, L₁= labour cost indices applicable to the corresponding industry in the country of origin, at the Base Date and the date of price adjustment respectively

M₀,M₁= raw material cost indices applicable in the country of origin, respectively at the Base Date and at the date of price adjustment

The sum of all coefficients *a*, *b*, and c must equal one (1) in any application of the formula.

Price Schedule for Design Services

For the Design component of the Price Schedule, the adjustment will be calculated using the following coefficients and indices:

a= 10 %

b=90 %

c=0%

Index L = South Africa Consumer Price Index (CPI)

For the purpose of calculating the adjustment of the € portion of the price, the South African index value ratio will be adjusted for conversion to the Euro index value ratio by the ratio of (value of 1 Euro in SA Rand at the base date)/(value of 1 Euro in SA Rand at the adjustment date) And

For the purpose of calculating the adjustment of the US\$ portion of the price, the South African index value ratio shall be adjusted for conversion to the US\$ index value ratio by the ratio of (value of US\$ 1 in SA Rand at the Base Date)/(value of US\$ 1 in SA Rand at the adjustment date)

Price Schedule for Equipment and Plant

For the Equipment and Plant component, applicable to all items in the Supply Schedule regardless of currency, the price adjustment will be calculated using the following coefficients and indices:

a= 10 % b= 55 % c= 35 % Indices: DESTATIS (Germany) L = Index GP 62221-0001, WZ08-28 and, M = GP Index 2009, GP09-2452

For the purpose of the adjustment of the US\$ price portion, the L and M index value ratio of Germany shall be adjusted for conversion to the US\$ index value ratio by the ratio of (value of 1 US\$ in \notin at the original date)/(value of 1 US\$ in \notin at the adjustment date)

Price Schedule for Installation Services - Erection

For the Installation Services - Erection component the price adjustment will be calculated using the following coefficients and indices:

a= 10 % b= 75 % c= 15 % Indices: DESTATIS (Germany) L = Index GP 62221-0001, WZ08-28 and, M = GP Index 2009, GP09-2452 For the purpose of the adjustment of the

For the purpose of the adjustment of the US\$ price portion, the L and M index value ratio of Germany shall be adjusted for conversion to the US\$ index value ratio by the ratio of (value of 1 US\$ in \in at the Base Date)/(value of 1 US\$ in \in at the adjustment date)

Price Schedule for Installation Services - Civil Works

For the Installation Services – Civil Works component, the price adjustment will be calculated using the following coefficients and indices:

a= 10 %

b= 25 %

c= 65 %

Indices: National Institute of Statistics (Client's country)

L = Index of all products

M = Housing, water, gas, electricity and other fuels index

For the purpose of calculating the adjustment of the \in portion of the price, the L and M index value ratio of the Employer's Country shall be adjusted for conversion to the Euro index value ratio by the ratio of (value of 1 Euro in the Employer's Country currency at the Base Date)/(value of 1 Euro in the Employer's Country currency at the adjustment date)

And

For the purpose of calculating the adjustment of the price of the US\$ Unit, the L and M index value ratio of the Employer's Country shall be adjusted for conversion to the US\$ index value ratio by the ratio of (value of US\$ 1 in the Employer's Country currency at the Base Date)/(value of US\$ 1 in the Employer's Country currency at the adjustment date)

Conditions applicable to price adjustments

"The Bidder shall indicate the origins of the indices for labor and raw materials, supplies, equipment, etc. and the value of the original indices (or the last known value) in its bid."

ArticleOrigin of the indices usedValue of indices at o	rigin
--	-------

Design	South Africa Consumer Price Index (CPI)	L = 102.7
position	http://www.statssa.gov.za	19/04/2017
Materials and	DESTATIS (Germany)	L = 103.6
mechanical	https://www.destatis.de/EN/Homepage.html	1st Quarter 2017
equipment		M = 101.1
item		May 2017
Electrical	DESTATIS (Germany)	L = 103.6
equipment	https://www.destatis.de/EN/Homepage.html	1st Quarter 2017
and materials		M = 101.1
item		May 2017
Position	DESTATIS (Germany)	L = 103.6
Assembly	https://www.destatis.de/EN/Homepage.html	1st Quarter 2017
Services -		M = 101.1
Works		May 2017
Position	National Institute of Statistics (Client's	L = 115.96
Assembly	country)	May 2017
Services -	http://www. INSPMOA	M = 106.46
Civil	.bi/index.php/publications/price-indices/ipc	May 2017
Engineering		

The Base Date shall be the deadline for submission of tenders minus thirty (30) days.

For the Equipment and Plant, the adjustment date shall be the date between the start and completion dates of the respective periods of manufacture of the supplies.

For **for Installation Services – Erection and Civil Works**, the adjustment date will be the date of performance of the works.

The following conditions will apply:

- a) No price increase shall be allowed beyond the original Delivery Date, unless an extension of time has been granted by the Employer in accordance with the Contract. No price increase shall be allowed for delays attributable to the Contractor. The Employer shall, however, be entitled to any price reductions resulting from such delays.
- b) If the currency in which the Contract Price, Po, is expressed is different from the currency of the country of origin of the labor and/or material indices, a correction factor will be applied to the relevant index avoid incorrect adjustments of the Contract Price. The correction factor will correspond to the ratio of exchange rates between the two currencies on the Base Date and the day of the price adjustment as defined above.
- c) No price adjustment shall be applicable to the portion of the Contract Amount for which an advance payment has been made to the Contractor.

Section 5 - Price Adjustment for Goods Contracts

5.1 Generic case

Price adjustment is seldom warranted for Goods contracts, which typically have a duration shorter than 18 months. However, the Bank SBD for Goods incorporates an optional provision for a formula-based method with a generic formula provided in a dedicated Annex to the Particular Conditions of Contract titled Price Adjustment Formula.

This provision should be used by Beneficiaries in line with the recommendations formulated in Section 2 above.

Box 5 Case Study on Contract Price Adjustment for Goods

A three year Contract was awarded for the supply of electric cables for a rural electrification program following a tendering process using a bidding document based on the SBD for Goods with a provision for Price Adjustment described below.

Contract Price Adjustment (as described in an annex to the Particular Conditions, negotiated prior to Contract Signing)

If in accordance with GCC 15.1, prices shall be adjustable, the following method shall be used to calculate the price adjustment:

Prices payable to the Supplier, as stated in the Contract, shall be subject to adjustment 15.1 during performance of the Contract to reflect changes in the cost of labor and material components in accordance with the formula:

$$P_1 = P_0 \left[a + \underline{bL}_1 + \underline{cM}_1\right] - P_0$$
$$L_0 \qquad M_0$$

in which:

P_1	=	adjustment amount payable to the Supplier.	
P ₀	=	Contract Price (base price).	
а	=	fixed element (15%).	
b	=	30% estimated percentage of labor component in the Contract Price.	
С	=	55% estimated percentage of material component in the Contract Price.	
L ₀ , L ₁	=	*labor indices applicable to the appropriate industry in the country of origin	
		on the base date and date for adjustment, respectively.	
M_0 , M_1	=	*material indices for Aluminium (the major raw material) on the base date	
		and date for adjustment, respectively, in the country of origin.	
The Bidder shall indicate the source of the indices and the base date indices in its bid.			
	C: . : .	ate a la sural a se sura sificad have the Davash as a sura se fallower.	

The coefficients a, b, and c as specified by the Purchaser are as follows:

a = 0,15

b= (),35			
c= 0	,55			
Base	Base date = thirty (30) days prior to the deadline for submission of the bids.			
Date the p	e of adjustment = <i>four</i> weeks prior to date of shipment (representing the mid-point of period of manufacture).			
The follo	above price adjustment formula shall be invoked by either party subject to the wing further conditions:			
(a)	No price adjustment shall be allowed beyond the original delivery dates. As a rule, no price adjustment shall be allowed for periods of delay for which the Supplier is entirely responsible. The Purchaser will, however, be entitled to any decrease in the prices of the Goods and Services subject to adjustment.			
(a)	If the currency in which the Contract Price P_0 is expressed is different from the currency of origin of the labor and material indices, a correction factor will be applied to avoid incorrect adjustments of the Contract Price. The correction factor shall be: Z_0 / Z_1 , where,			
	Z_0 = the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price P_0 on the Base date, and			
	$Z_{1 =}$ the number of units of currency of the origin of the indices which equal to one unit of the currency of the Contract Price P ₀ on the Date of Adjustment.			
(c)	No price adjustment shall be payable on the portion of the Contract Price paid to the Supplier as advance payment			

5.2 Adjustment in particular situations

There may be circumstances when the Beneficiary wishes to ensure that the Contractor or Supplier of goods be protected against the cost fluctuation of one (or more) specific input(s), such as fuel for a works contract, copper for the supply of cables or paper for the supply of textbooks, but with the understanding that other inputs and overheads will not need to be adjusted. A simple way to achieve this consists in adopting a price adjustment formula with one single index – the index reflecting the targeted input—with a weighting reflecting the cost of the corresponding input in the total price and a fixed component which is the complement to 1. For instance:

 $P_c = P_0^*[(1-f)+f^*F_c/F_0]$ where f is the weight of fuel in the total price, and F_c , F_0 the values of the fuel index at the current and Base Dates, respectively.

Section 6 - Price Adjustment for Consultant Services Contracts

The Bank Standard Form of Contract for Consulting Services (Time Based Remuneration only) incorporates a standard optional formulae-based adjustment provision for the remuneration part of the payment (GCC/SCC 42.3), separately for local currency payment and foreign currency payment. The formulae use a single index which is expected to reflect variation of expert costs both locally and abroad. Reimbursable items should never be subject to price adjustment, for obvious reasons.

A specificity of adjustment in consultant contracts is that the adjustment is calculated on a yearly basis and applied after each period of 12 months.

For consulting service contracts, these provisions are defined in IsDB's standard request for proposals and should normally be based on the index of the country of the payment currency, regardless of the consultant's nationality, residence, or location of the services.

if the PA shall be apply for remuneration of a Time-based contract with Individual Consultant of contract duration above 18 months for better understanding of the users

The remuneration of a Time-based contract with an Individual Consultant when contract duration exceeds 18 months may also provide for price adjustment (to be applied after each period of 12 months) which may be based on a simple mechanism for adjustment of salaries if available in the country of the currency of payment.

Box 6 Case Study on Contract Price Adjustment for Consulting Services

A three year Contract was awarded for the supervision of works following a selection process using a request for proposals based on the SRFP with a provision for Price Adjustment described below.

Contract Price Adjustment (as described in the Particular Conditions, negotiated prior to Contract Signing)

Price adjustment on the remuneration applies

{Payments for remuneration made in Canadian Dollars and LCu shall be adjusted as follows:

(1) Remuneration paid in Canadian Dollars (CAN\$) on the basis of the rates set forth in Appendix C shall be adjusted every 12 months (and, the first time, with effect for the remuneration earned in the 19th calendar month after the date of the Contract Effectiveness date) by applying the following formula:

$$R_f = R_{fo} \times \frac{I_f}{I_{fo}}$$
 {or $R_f = R_{fo} \times [0.1 + 0.9 \frac{I_f}{I_{fo}}]$ }

where

 R_f is the adjusted remuneration; R_{fo} is the remuneration payable on the basis of the remuneration rates (**Appendix C**) in CAN\$;

 I_f is the official Consumer Price index in Canada for the first month for which the adjustment is supposed to have effect; and

 I_{fo} is the official Consumer Price index in Canada for the month of the date of the Contract.

The Consumer Price index is the "Global CPI" published by the Bank of Canada.

(2) Remuneration paid in LCu pursuant to the rates set forth in Appendix D shall be adjusted every 12 months (and, for the first time, with effect for the remuneration earned in the 19th calendar month after the date of the Contract Effectiveness date) by applying the following formula:

$$R_l = R_{lo} \times \frac{I_l}{I_{lo}} \qquad \{ \text{or} \qquad R_l = R_{lo} \times \left[0.1 + 0.9 \frac{I_l}{I_{lo}} \right] \}$$

where

*R*_l is the adjusted remuneration;

 R_{lo} is the remuneration payable on the basis of the remuneration rates (**Appendix D**) in LCu;

 I_l is the official Consumer Price Index in the Client's country for the first month for which the adjustment is to have effect; and

 I_{lo} is the official Consumer Price Index in the Client's country for the month of the date of the Contract.

The Consumer Price index in the Client's country is published by the Central Bank of the Country of the Client.

Section 7 - Price Adjustment for Non-Consulting Services s Contracts

The Bank Standard Form of Contract for Non-Consulting Services incorporates a standard optional formulae-based adjustment provision for the remuneration part of the payment (GCC/SCC 6.6), separately for local currency payment and foreign currency payment.

This provision should be used by Beneficiaries in line with the recommendations formulated in Section 2 above.

Box 7 Case Study on Contract Price Adjustment for Non-Consulting Services

A three year Contract was awarded for the mapping services following a bidding process using bidding document based on the SBD for Non-Consulting Services with a provision for Price Adjustment described below. The Contract Amount is payable part in Local Currency and part in Euro.

Contract Price Adjustment (as described in the General (GCC 6.6) and Particular Conditions)

The provision in PCC was negotiated prior to Contract Signing)

GCC 6.6.1: Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the SCC.** If so provided, the amounts certified in each payment certificate, after deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type indicated below applies to each Contract currency:

$P_c = A_c + B_c Lmc/Loc + C_c Imc/loc$

Where:

 P_c is the adjustment factor for the portion of the Contract Price payable in a specific currency "c".

 A_c , B_c and C_c are coefficients specified in the SCC, representing: A_c the nonadjustable portion; B_c the adjustable portion relative to labor costs and C_c the adjustable portion for other inputs, of the Contract Price payable in that specific currency "c"; and

Lmc is the index prevailing at the first day of the month of the corresponding invoice date and Loc is the index prevailing 28 days before Bid opening for labor; both in the specific currency "c".

Imc is the index prevailing at the first day of the month of the corresponding invoice date and loc is the index prevailing 28 days before Bid opening for other inputs payable; both in the specific currency "c".

If a price adjustment factor is applied to payments made in a currency other than the currency of the source of the index for a particular indexed input, a correction factor Zo/Zn will be applied to the respective component factor of pn for the formula of the relevant currency. Zo is the number of units of currency of the country of the index, equivalent to one unit of the currency payment on the date of the base index, and Zn is the corresponding number of such currency units on the date of the current index.

PCC 6.6: Price adjustment is in accordance with Sub-Clause 6.6.

The coefficients for adjustment of prices are:

(a) For local currency:

 $A_{\text{\tiny L}}$ is 0.20

 $B_{\text{L}}\ is\ 0.40$

C_L is 0.40

 L_{mc} and L_{oc} are the index for Labor from the Client's Country

 I_{mc} and I_{oc} are the index for fuel from the Client's Country

Both indices are those published by the Central Bank of Country of the Client

(b) For foreign currency (Euro)

A_L is 0.20

B_L is 0.60

C_L is 0.20

 L_{mc} and L_{oc} are the index for Engineering Services (SYNTEC Index) published by the Fédération Syntec (France)

 I_{mc} and I_{oc} are the index for Equipment (MATP Index) published by INSEE (France)

Section 8 – Other circumstances requiring Adjustment of Price

8.1 Adjustments for changes in laws

The Bank standard forms of contract stipulate that the contract price must be adjusted to account any increase or decrease in cost take of incurred by the contractor/supplier/consultant due to changes in laws in the Beneficiary's country (solely in the Beneficiary's country), including their interpretation and/or application from the date 28 days prior to bid submission deadline. This provision in a contract for Works result from the FIDIC Construction contract- GCC 13.6 which is incorporated in the SBD of Major Works, whereas for Small Works it is spelled out in GCC 42. For Plant, a similar provision is in GCC 6.6, for Goods in GCC 31 and for Consultant Services -Time-Based remuneration GCC 37 applies whereas for Lump Sum remuneration GC 34 applies.

In such situation the parties to the contract are expected to reach agreement on the effect of the changes in laws in the Beneficiary's country subject to the contract Dispute Resolution provision.

8.2 Adjustment due to extension of bid validity

Another particular situation is specified in the Bank's Guidelines for Procurement of Goods and Works (Paragraph 2.92) when the Beneficiary request bidders to extend the validity of their bids in the case of fixed price contracts: "In the case of fixed-price contracts, requests for second and subsequent extensions will be permissible only if the request for extension provides for an appropriate mechanism to adjust the quoted price to reflect changes in the cost of inputs for the contract over the period of extension".

The Bank's SBDs reflect this requirement, for example the SBD-Goods in ITB 18.3 (a) stipulates: "if the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, ... in the case of fixed price contracts, the Contract price shall be the bid price adjusted by the factor specified in the BDS.

Usually, the Beneficiary <u>specifies in the BDS</u> as per guidance provided in the relevant BDS that "the local currency portion of the Contract price shall be adjusted by a factor reflecting local inflation during the period of extension, and the foreign currency portion of the Contract price shall be adjusted by a factor reflecting the international inflation (in the country of the foreign currency) during the period of extension". It is recommended that the Beneficiary use verbatim the above language in the BDS, rather than attempting to figure out a percentage adjustment beforehand.

Section 9 – Managing Contracts with Price Adjustment Provision

9.1 Need for Specific Provisional Sum

Whenever a contract is intended to include a price adjustment provision, the Beneficiary should insert a specific Provisional Sum for Price Adjustment in the relevant Price Schedules of the contract. Such provisional sum may be used only for the purpose of paying for price adjustment as per the relevant contract provision. The Beneficiary may estimate the amount of the Provisional Sum based on inflation forecasts, i.e. if inflation is foreseen to be in the order of 20 percent per annum and the contract duration is expected to be 36 months, a rough estimate of price adjustment needs would be [Adjustable contract amount in base value $x 0.20 \times 1.5$ (reflecting that 18 months equals the midpoint of contract implementation period) = 0.30 adjustable contract amount in base value]

If no such Provisional Sum for Price Adjustment is inserted in the contract, the contract cannot actually be managed without periodic contract amendments, which can be time consuming and most inconvenient.

9.2 When Provisional Sum is not sufficient

However if and when the amount of price adjustment exceeds the contract's Provisional Sum for Price Adjustment an amendment to the contract would eventually be required to allow for payment of price adjustment in excess of the initial dedicated Provisional Sum.



For any additional information, such as Standard Bidding Documents (SBDs), Guidance, training materials and briefing, please see

www.isdb.org/procurement

