THE CASE OF THE PANAMA CANAL EXPANSION:
*PACTA SUNT SERVANDA VERSUS REBUS SIC STANTIBUS* IN PUBLIC WORKS PROCUREMENT
Francisco L. Hernández González*

**ABSTRACT.** The Panama Canal expansion is one of the most important public works projects in recent times. Both the awarding of the contract and its execution have been surrounded by intense controversy. The situation came to a head in February 2014 when the contractor halted construction work due to the canal authority’s failure to maintain the economic balance of the contract. This article explains the circumstances surrounding this dispute and analyses the causes and consequences of modifications to the contract. These are classic problems that affect all public procurement systems. The lessons drawn from this extraordinary case are valid for other legal systems.

**INTRODUCTION**

On 8 July 2009, the Panama Canal Authority (ACP) awarded the contract to build the third set of locks to a consortium of companies from different countries led by the Spanish construction company Sacyr. Despite procedural safeguards, the ACP’s decision was dogged by controversy, and the ability of the consortium to execute the contract was called into question. Despite these criticisms, the works went ahead without a hitch and continued over the following years until, on 7 February 2014, a serious dispute sparked off without warning, threatening the success of the entire project. The cause of the dispute was the consortium’s decision to suspend work when the

* Francisco L. Hernández González, Ph.D., is Professor of Administrative Law at the University of La Laguna (Spain). His teaching and research interests are in public utilities, government procurement and urban law. This article is part of the research project “The impact of the crisis on public procurement” (Ministry of Economy and Competitiveness of the Government of Spain; DER2012-32911).
canal authority defaulted on the obligation to restore the economic balance of the contract as a result of a cost overrun exceeding 40% of the original tender amount.

The dispute arising from this suspension of works went beyond mere contractual relationship, leading to an institutional crisis between the countries involved (mainly Panama, Spain and Italy), which required intense diplomatic deployment. On one side of the dispute was the obligation of the contractor to fulfil the terms of the signed contract, at their risk and cost (pacta sunt servanda); on the other side, the obligation of the ACP to compensate the consortium for the unilateral modifications (ius variandi) and the extraordinary events that occurred during the execution of the works (rebus sic stantibus or the principle of economic-financial balance in public contracts).

This article aims to analyse this conflict, examining both the formal and substantive issues surrounding the tender and the contract modifications that underlie the contractor's claim (and the memorandum adopted by both parties to resolve the situation). It should be noted that this article does not intend to be an abstract scholarly study of public procurement, nor of the problems posed by application of the rebus sic stantibus clause and the ius variandi prerogative (which have already been the subject of incisive analysis in legal literature worldwide). This article proposes a quite different approach: an analysis of applied legal theory that aims to look at the practical consequences of applying these principles to large-scale public infrastructure contracts. The ultimate goal is to formulate some general rules from a paradigmatic case study; rules that are global in scope, fully transferable to other legal systems, and may help improve the current regulatory framework.

THE WORKS, THE KEY PLAYERS AND THE PROBLEM

The Panama Canal Expansion Program

The Panama Canal expansion is one of the biggest public works projects of this century. Its aim is to bolster the competitiveness of one of the most important international shipping lanes against its direct competitors (the Suez Canal and US transpacific intermodal routes) by adapting it to the characteristics of the new container ships. In order to achieve this goal a new lane was needed to link the
Atlantic and the Pacific; one which would double existing maritime traffic capacity and allow both larger (from the current 4,500 TEUs to 12,600 TEUs)\(^2\) and smaller vessels to simultaneously transit the canal.

The Canal expansion program consists of three major works; the estimated total budget was 5.25 billion US dollars and the initial completion date was scheduled for October 2014, to coincide with the 100th anniversary of the opening of the Canal (it has, however, both gone over budget and fallen behind schedule).

The cornerstone of this program is the contract for the design and construction of the third set of locks, the aim of which is to provide a transit system for Post-Panamax vessels.\(^3\) This project comprises the installation of two lock complexes, one at the Pacific end and one at the Atlantic end of the canal. The new locks will raise the vessels to approximately 26 metres above sea level, to then lower them back to sea level at the opposite end of the canal. The raising and lowering of the vessels will be conducted in three phases through three chambers. In order to limit the amount of water lost when opening the chambers and to provide sufficient water for operations during periods of low rainfall, the new system has 9 water-saving basins for each lock, which will be filled and emptied by gravity. This will allow larger vessels to transit the canal using up to 7% less water than the existing locks. Post-Panamax locks (as they are known) will handle 12 to 14 vessels per day, which equates to more than 18,000 transits a year. The 16 lock gates (some of which weigh more than 3,000 tonnes) constitute the largest electromechanical element manufacturing project in history; once in operation, the lock chambers will open or close in 5 minutes, allowing vessels with a draught greater than 15 metres to transit the Canal in 45 minutes (the current maximum draught is 12 metres).

To connect the new locks, a 3.2 km access channel to the sea needed to be excavated on the Atlantic side, and two new channels, 6.2 km and 1.8 km respectively, on the Pacific side. In order to complete this work, four dry-excavation contracts and two dredging contracts were awarded. Altogether, 52 million m\(^3\) of earth will be moved and 4.5 million m\(^3\) of concrete will be used (González, 2008).
Key Players in the Construction of the Third Set of Locks

On 24 April 2006, the President of Panama, Martín Torrijos, formally proposed the Canal expansion program. However, according to Article 325 of the Constitution of Panama, a proposal for the construction of a new set of locks must be approved by the Government and the National Assembly and subsequently put to a referendum. Thus, that same year, both the Cabinet of Ministers and the National Assembly approved the proposal (Resolution No. 58, 6 June 2006, amended by Resolution No. 68, 10 July 2006; and Law No. 28, 17 July 2006); it was then finally ratified in a national referendum on 22 October 2006, with 76.83% of the vote (of a turnout of 43.32%).

The body charged with handling the procurement procedure is the Panama Canal Authority (ACP), an autonomous legal entity under public law, the organisation and operation of which is regulated by Law No. 19, 11 June 1997. During the March 2007 Expocomer exhibition, the ACP gave an infoconference with the purpose of publicly presenting the canal expansion program and promoting greater participation in the tendering process. It was a great success: the event was attended by 324 companies from 29 countries from America, Europe and Asia. Given the magnitude of the project and the scale of the contract to build the new locks, the ACP hired several consulting services: financial, Mizuho Corporate Bank; legal procurement, Mayer Brown; legal, financial affairs, Sherman & Sterling; and programme management, CH2M Hill. The official opening ceremony of the work to expand the Panama Canal was held on 3 September 2007.

A few days previously, the canal authority had approved a pre-qualifying tendering process, with the aim of whittling down to four the number of participants in the bidding process for the design and construction of the third set of locks. Thirty companies from 16 different countries participated in this phase, grouped into four consortia. On 14 December, the ACP Contracting Officer announced the names of the shortlisted business groups:

- CANAL, comprising the Spanish companies ACS (leader), Acciona and Fomento y Construcciones, Hochtief (Germany) and ICA (Mexico).
- The consortium formed by the American company Bechtel (leader) and the Japanese companies Taisei and Mitsubishi.

- Grupo Unido por el Canal (GUPC), composed of the Spanish company Sacyr (leader), Impregilo (Italy), Jan de Nul (Belgium) and Cusa (Panama).

- And the Atlántico-Pacífico de Panamá consortium, which finally decided to pull out of the bidding.

On 15 July 2009, after a long process of evaluation of the proposals, which lasted nearly two years, the ACP awarded the largest contract of the expansion program, the design and construction of the new set of Post-Panamax locks, to the Grupo Unido por el Canal consortium (GUPC). The proposal submitted by this consortium was not only the cheapest – the contract was awarded for 3.118 billion dollars (below the allocated 3.481 billion) – but also received the highest score in the technical proposal, with 4,088.5 points (out of 5,500); its total score came to 8,088.5 points (for additional information see Panama Canal Authority, 2009). Finally, on 11 August 2009, the contract for the design and construction of the third set of locks was signed by the ACP and GUPC, and the start date for the works was set for 25 August.

While there was no objection to the procurement procedure or against the award decision, the selection of GUPC was surrounded by much controversy. There were underlying doubts about the ability of Sacyr to complete the project. However, the technical evaluation report had been audited by Deloitte, which concluded that the results were consistent with the Panama Canal Authority’s Contracting Regulations of 4 October 1999 (hereinafter RCACP) and with the evaluation criteria in the Request for Proposals 76161.

The Origin of the Dispute: Suspension of Works by GUPC

After three and a half years of work, the Panama Canal expansion once again made international headlines on 1 January 2014, when the consortium led by Sacyr sent the ACP a notice of intent to suspend work on the new Post-Panamax locks, for “serious breaches attributable to the canal authority” as a result of not recognising a cost overrun of 1.625 billion dollars (about 50% of the contract budget). This revived the debate about the wisdom of awarding the contract to GUPC.
In the letter sent to the ACP, the consortium gave the canal authority 21 days to pay the cost overruns before suspending work. The additional costs were attributed to “inaccuracies in the information provided to the consortium concerning the execution of the project, and that have been acknowledged by the Authority” and to repeated breaches of the obligation to “maintain and restore the financial balance (of the contract) with GUPC due to unforeseen events that have arisen during the work.” These additional costs are due mainly to problems encountered in the subsoil (along 2.5 km on the Pacific side), which were not detected in the geotechnical study prepared by the ACP, and to the aggregates used in the preparation of the marine structural concrete used in the work.

The ACP’s response was swift. In a brief statement it rejected any kind of pressure, and demanded that the consortium respect the terms of the signed contract. It clarified that, in accordance with the provisions of the contract, the settlement of their claims is subject to the mediation of the Dispute Adjudication Board, which has a period of 84 days to reach a decision, and subsequent arbitration by an international tribunal based in Miami. The canal authority reacted to the notice to suspend work by issuing a warning that it was ready to execute the bonds put up by GUPC, amounting to 600 million dollars (backed by Zurich American Insurance Company), and to continue the works with a new contractor.

However, the bond amount was clearly insufficient. According to information published by the parties involved, a breach of contract would mean an additional cost of 2 billion euros and would delay completion of the works until 2018. It was therefore clear that termination of the contract would not benefit either party. The announcement of suspension of works caused an 8.95% drop in Sacyr shares in the first trading session of 2014 (when only a few months earlier, in September 2013, it had been a growth leader on the IBEX 35, with a gain of 119% in one year). Meanwhile, on the other side of the Atlantic, the cessation of work had become a key topic of debate in the Panamanian presidential elections (held on 4 May).

From that moment a battle of words ensued, reaching a critical point when the consortium made its notice to suspend work effective. With the exception of maintenance work, all construction activity was suspended on 7 February. At that time, GUPC had already completed
two thirds of the expansion project and had been paid 66% of the original contract amount: the ACP had paid 2.048 billion dollars (of the 3.118 billion of the original proposal) and had handed over 784 million dollars in advances (of which GUPC had only paid back 52 million). Furthermore, the ACP claimed to have paid two additional costs: one for the amount of 156 million dollars to cover variations in the price of fuel and the cost of steel; and another 20 million for staffing needs. Now the canal authority was only prepared to disburse another 283 million dollars, compared to more than 1.6 billion demanded by the contractor.

In an attempt to find a solution to the conflict the insurer, Zurich, attempted – unsuccessfully – to reconcile the two positions, offering to convert the 600 million dollar bond to loans to the consortium, on the condition that the ACP temporarily cease to demand repayment of the advances and disburse the more than 500 million dollars in payments pending from the budget. With this proposal, Zurich would convert its bond risk to loan risk; the ACP would not have to spend more than the amount outstanding in the budget; and GUPC would contract debt while waiting for the mediation body specified in the contract or international arbitration, if necessary, to settle its claims. All with a commitment to complete the works in June 2015. However, the main obstacle lay in the moratorium on repayment of the advances (the ACP insisted that they be repaid on conclusion of the works).

Finally, after fifty days of negotiations and mediation between the governments of Spain, Italy and Panama, on 20 February 2014 a preliminary agreement was reached, which enabled construction of the third set of locks to resume. On 13 March, the Board of the ACP consented to the signing of the resulting Memorandum of Understanding, setting a new deadline for the completion of works in December 2015 (Resolution No. 14/672).

THE TENDER PROCEDURE AND CONDITIONS OF THE CONTRACT

Selection of the Contractor

The tendering process for the third set of locks was carried out under the provisions of the Panama Canal Authority’s Contracting Regulations, as mentioned above, the purpose of which is to guarantee the principles of fair and equal competition to all
participants (and which is supplemented by the 2006 Panamanian public procurement law). In keeping with the provisions of said Regulations (art. 47A), on 27 August 2007 the canal authority issued the Request For Qualifications (RFQ) No. 73902, which resulted in the four shortlisted consortia: CANAL, Bechtel-Tasei-Mitsubishi, GUPC and Atlántico-Pacifico de Panamá.

After the pre-selection of tenderers, on 21 December 2007 the ACP drew up Request For Proposals (RFP) No. 76161: the document prepared by internal experts and external consultants laying out the administrative and technical requirements, conditions and criteria for awarding the contract. However, given the complexity of the project, various meetings – both individual and collective – were held for approval of this document, the purpose of which was to grant the shortlisted consortia the opportunity to ask questions or make comments or suggestions for improvement (as contained in RCACP art. 58). As a result of this process of dialogue, which lasted over a year, the contracting authority introduced 24 amendments to the RFP.

After the deadline for submission of proposals, only the first three aforementioned consortia submitted proposals (on 3 March 2009), with the aforementioned outcome. The three consortia presented their proposals during a well-attended public event (over 400 people) attended by the President of Panama. This event was chaired by the ACP Contracting Officer and supervised by the ACP Inspector General, a contracts expert from the contracting authority, a notary public and a representative of the external auditor Deloitte. To guarantee the integrity of the bids, the technical proposals were transferred to a specially designated building, where an inventory of the presented documents was drawn up and compliance with the conditions of the RFP was verified. Meanwhile, the envelopes containing the price proposals were deposited in the vault of a branch of the National Bank of Panama, along with a separate envelope containing the amount of funds allocated to cover the base price of the tender.

The contractor was selected in accordance with the “non-negotiated best value process”: the best proposal was considered to be that which, taken as a whole, obtained the highest score by combining the technical proposal, which was assigned 55% of the total score, and the price proposal, which was assigned the remaining 45%.
As per schedule, on 20 June 2009 the technical proposal was evaluated by the Technical Evaluation Board, composed of 15 ACP engineers divided into three teams: the first team evaluated the overall execution plan, the design-build execution methodology, the construction plan, and operations and maintenance; the second team evaluated the design of the works, the design plans for valves, electrical systems and control and communications, and training of personnel; the third team was charged with evaluating the design plans for the approach channels, locks, gates and fender systems. The final score awarded to each consortium for the technical proposal (the sum of the scores awarded by the three evaluation teams) was given by the Contracting Officer, under the supervision of the Inspector General and the international auditor, Deloitte, which audited the entire procedure. During this process, the Board received technical advice from more than 50 ACP and international experts, and 317 requests for additional information were made to the three candidate consortia (for detailed information see Panama Canal Authority, 2009).

A few days later (8 July), the envelope containing the amount allocated to the tender process and the envelopes containing the price proposals were publicly opened in the presence of representatives of the tenderers and of the internal and external auditors. The ACP Contracting Officer noted that the total base price for the best value proposal did not exceed the amount allotted to the contract, and so on 11 August 2009 the contract for the design and construction of the third set of locks was awarded to the winning consortium, the GUPC business group (which was the only one that did not exceed the allocated amount). As mentioned above, no objections were filed against the contractor selection procedure by the tenderers.

**Main Features of the Contract**

The conditions of the contract for the design and construction of the third set of locks for the Panama Canal were based on the model developed by the International Federation of Consulting Engineers (FIDIC), titled *Conditions of Contract for Plant & Design-Build* (first edition, 1999), to which the corresponding adaptations were added. There is no need to give a detailed account of the contractual conditions (with all the nuances and exceptions); they may be consulted on the ACP website. Rather, I shall limit myself to a
summary of the aspects related to the compliance and completion of the contract that are most relevant to this article.

**Execution of the Contract at the Risk and Cost of the Contractor**

The selected consortium had to execute the work at its own risk and cost in accordance with the Accepted Baseline Programme approved by the ACP, which comprises the design and construction milestones provided for under the conditions of the contract. Consequently, the Contractor is responsible for not only executing the contract in accordance with the agreed terms (taking on, as a rule, both the greatest profits and the greatest losses generated by the business venture), but also for the care and conservation of the works until the taking-over certificate has been issued. It will also be held liable for compensation for all damages caused to persons or property that occur as a result of the design and execution of works that is attributable to any act or omission by the contractor, subcontractor or any staff hired directly or indirectly by any of the former; as well as for claims relating to intellectual or industrial property rights (thus releasing the canal authority and their respective agents, consultants and employees from these obligations).

All the companies that make up the consortium are jointly and severally liable to the ACP for the due and punctual performance of each and every one of the obligations, warranties, duties and undertakings of the contractor according to the conditions of the contract. This liability will remain unaltered and in full force and effect in the event of insolvency or dissolution of the consortium, modification or suspension of the works, modification of the contract deadlines or price, termination of contract, etc. The lead member of the consortium, which must be noted in the contract (in this case, Sacyr, which has a 48% share in GUPC) has sufficient authority to bind all other members of the consortium to the provisions of the contract.

In this regard, the contractor acknowledges that it has had ample time and unrestricted opportunity to diligently examine the contract site and the employer’s requirements, including design criteria and calculations and items of reference for the setting out. Notwithstanding, on receiving notice of commencement of works, it has a period within which it may give notice of any error, fault or other
defect, in order that the ACP may determine whether to modify or adjust the conditions of the contract.

Conversely, the ACP assumes no liability for the sufficiency, suitability or completeness of the information provided to the contractor regarding physical conditions, subsurface, hydrogeological, topographical or environmental conditions, with the sole exception of the geotechnical characterisation and interpretation set out in the Geotechnical Interpretive Report and the information contained in the Topographical Data insofar as it relates to the area defined by the footprint of the lock structures (which is the basis of some of the compensation claims on the part of the consortium undertaking the works).

Consequently, the contractor is responsible for the accuracy and completeness of the specifications, designs, drawings and other documentation drawn up or written on its behalf as part of the works; and for the correction of any error, inconsistency, omission, ambiguity, inadequacy or other defect, which it shall promptly report to the canal authority.

Similarly, the contractor is also required to remedy – at its own risk and cost – defects or damage caused during the works, and notified by the ACP, if and to the extent that it is attributable to one of the following causes: a) errors in the design of the works (not attributable to the canal authority); b) improper use of the plant, quality of materials or workmanship; c) improper operations or maintenance on the part of the contractor; d) failure to comply with any other obligation in the contract. In all other circumstances, the established procedure for contract modifications must be followed.

Failure by the contractor to achieve a milestone date shall entitle the ACP to deduct the corresponding amount – specified in the Appendix – from the following payment certificate (in the case of failure to achieve a milestone by the corresponding date) or to claim delay damages for every day that elapses between the time for completion and the date indicated in the taking-over certificate, up to the maximum amount stated in the Appendix (if noncompliance affects the time for completion of the works).
**Contract Price Adjustments**

The contract price is determined by the total base price established in the price proposal submitted by the contractor, which, as previously mentioned, was 3.118 billion dollars (less than the 3.481 billion for which the work was originally tendered). As specified in the RFP, this includes taxes, duties, fees, charges and contributions to be borne by the contractor (including those corresponding to products and materials imported to be incorporated into the works, unless exempt from import duties). It also includes all incidental and contingent expenses and risks of all kinds necessary to comply with all obligations under the contract, not only limited to the design, construction, completion and maintenance of all works and the correction of defects.

However, the contract price is subject to adjustments that may arise, in accordance with the provisions contained within the conditions of contract: either as established in the "price adjustment timetable" for materials, which the contractor must submit with the price proposal (as is the case of cement or steel); or because "provisional sums" have been used for the execution of certain elements of the work, in accordance with the instructions given by the canal authority; or because the contract price has become more burdensome as a result of modification of the contract or other unexpected and unforeseeable circumstances, which will be discussed further in the next section.

Among other issues, it is also worth noting that the contractor is entitled to receive advance payments, as interest-free loans, for mobilisation and for start-up and development of activities related to the design, manufacture, handling and shipping of plant. The advance payment for mobilisation shall become due and payable upon receipt of the security; while the advance payments for plant shall be made 182 days (the first) and 364 days (the second) after the commencement date of the contract, provided that the work is progressing according to the agreed schedule. Amounts received as advances will be repaid by the contractor through percentage deductions in payment certificates. Both advances are conditional on the contractor issuing the corresponding securities (advance payment bonds, amounting to 150 million dollars).
**Grounds for Termination of Contract**

The contract may be terminated, in accordance with the conditions of the contract, both by the canal authority and the contractor. In the first case (termination by the canal authority), as provided for in Article 214 RCACP, the contract may be terminated – in part or in whole – on grounds attributable to the contractor or by unilateral decision on the part of the canal authority.

Clause 15 of Volume III (Conditions of Contract) establishes the circumstances under which the ACP may terminate the contract for causes attributable to the contractor. These grounds include: abandoning all or a substantial part of the works or the intention not to continue; failure without reasonable excuse to comply with conditions relating to commencement, delays and suspension of the works; the contractor being guilty of “any act of fraud, deliberate default or reckless misconduct or gross negligence”.

In any of these events, the ACP is required to give 14 days’ notice to the contractor to remedy the situation. Otherwise, the surety or its nominee will receive notification of the contractor’s failure to comply and will have 30 days to pay the performance bond or, failing that, to replace the contractor in all of its rights and obligations, on condition that the enterprise that takes over the contract – on account of and at the surety’s risk – has the technical and financial capacity and the approval of the ACP Contracting Officer. When this does not occur and the contract has been terminated, the ACP Contracting Officer may award a new contract based on the original proposals that met the requirements of the RFP, under the terms stipulated in Article 226A RCACP.

Notwithstanding the foregoing, the ACP also has the power to declare a unilateral termination of the contract at any time upon 28 days' notice to the contractor. According to the provisions of the RCACP (art. 217-220), in this case the canal authority shall compensate the contractor for completed work, preparatory work carried out on the uncompleted portion and a reasonable loss of profit (which may not exceed 5% of the total amount completed). The latter is not applicable if it is determined that the contractor would have incurred a loss had the contract been completed. In any case, the total amount payable to the contractor may not exceed the total contract value.
Although the RCACP does not specifically state anything in this regard, the contractor is also entitled to terminate the contract and receive compensation for damages in the event of any of the following causes attributable to the canal authority: a) failure to issue the payment certificate within 104 days; b) payment not made within a period of 90 days; c) failure by the canal authority to perform its obligations; d) failure to execute the contract agreement within the stipulated period; e) prolonged suspension of all works (more than 140 days); f) bankruptcy or insolvency of the canal authority. Prior to termination, the contractor may suspend or reduce the rate of work, having given 21 days’ notice to the canal authority representative (a time period which was duly observed by the GUPC representative).

Finally, the conditions also provide for the possibility of voluntarily terminating the contract when execution of the works is prevented for a continuous period of 120 days, or for multiple periods totalling more than 200 days, by force majeure, the parties having given prior notice. In all of these cases, once the corresponding notice of termination has been issued, the contractor shall assign to the canal authority or to a person nominated by the authority all rights, titles and benefits in relation to the works, documents and plant.

**Dispute Settlement Procedure**

In line with the provisions of the RCACP (art. 100-102), the contract conditions set out an ad hoc claims system, characterised primarily by the fact that it bypasses the national courts (in favour of international arbitration) and by its lax deadlines. The system entails, first, submitting an internal claim to the ACP; second, the claim must be submitted to the Dispute Adjudication Board (DAB), whose members are appointed by the parties; and finally, in case of disagreement, the claim is settled by an international court of arbitration (Clause 20 of Vol.III Conditions of Contract).

Consequently, if the contractor considers, in accordance with the provisions of the contract, that he is entitled to an extension of the contract (or of its milestone dates) and/or an additional payment, it must: first, give notice to the representative of the canal authority of the event or circumstance that has given rise to the claim; and then, submit to the representative a detailed claim indicating the extension of time or additional milestone being claimed. For its part, the ACP
has a period of 42 days to decide on the dispute (without any consequences being stipulated for failure to comply).

When the contractor does not agree with the decision of the ACP, it may write to the DAB, which shall give its decision within 84 days.\(^\text{18}\) If either party fails to agree with the decision of the Board (or the decision is not given within the prescribed period) it may issue a “notice of dissatisfaction” to the other party (within 28 days), for the purpose of reaching an amicable agreement. If no “notice of dissatisfaction” has been given by this deadline, the decision of the Board becomes final and binding upon both parties.

If it has not been possible to reach an amicable agreement (or in the event of failure to comply with the DAB’s decision), both parties may submit to an arbitration tribunal in Miami, composed of three licensed lawyers, who shall act in accordance with the rules of arbitration of the International Chamber of Commerce (ICC Dispute Board Rules).

Finally, it should be noted that the submission of a claim (including during arbitration) has no suspensive effect on the obligations of the contract: the contractor must continue with the execution of the scheduled works. This has led to GUPC representatives expressing their dissatisfaction with the lack of interest on the part of the ACP in restoring the economic balance of the contract and the excessive delay in the settlement of disputes, which has meant that the consortium has had to fund the new construction costs during this time.

**IUS VARIANDI AND RESTORING BALANCE IN THE CONTRACT**

**The Regulatory and Contractual Framework**

The conditions of the Panama Canal expansion contract differentiate between contract modification on grounds of public interest and adjustment of the conditions of the contract on grounds of extraordinary events or events that were unforeseeable at the time of tender. However, both cases share the obligation to restore the balance that existed in the contract at the time it was signed, through the reimbursement of additional costs and/or extension of the deadlines (acting as a counterweight to the principle of risk and cost).\(^\text{19}\) The interpretation of these clauses is the key to settling the dispute between the ACP and the Grupo Unido por el Canal...
consortium (GUPC), which led to the cessation of work on the third set of locks.

**Modification of the Contract or Ius Variandi: Grounds and Procedure**

According to the RCACP, contracts entered into by the canal authority may be modified unilaterally or bilaterally (requiring, in the latter case, the consent of the contractor and the ACP Contracting Officer). In the former, the contractor is required to comply with *unilateral modifications* that: a) are permitted under the contract; b) are made with the purpose of avoiding serious effects to the interests of the ACP. These modifications are limited only insofar as they do not circumvent the principle of competition, and may be decided on at any time prior to issuing the taking-over certificate (in the case of modification to the works) or after (if in relation to maintenance services).\(^2\) Once the modification has been approved, it will be carried out under the responsibility of the contractor, unless the contractor gives immediate notice that it will have an adverse impact on the execution of the contract. Once it has received this notice, the canal authority will cancel, vary or confirm the modification.

The **contractor** may also submit proposals for modifications related to *value engineering*, the purpose of which is to accelerate completion of the work, reduce the cost of the contract, improve efficiency or the added value of the works or, where applicable, to otherwise be of benefit to the canal authority, unless it reduces the level of quality required by the contract (Article 5A RCACP and subclause 13.2 of Vol. III Conditions of Contract). Any reduction in the contract price resulting from the approval of this initiative by the representative of the canal authority will be shared equally between the contractor and the canal authority.

As regards the applicable procedure, the contracting authority may issue an **instruction** with the requirements of the modification or first request that the contractor submit a **proposal**, to which it shall respond in writing. When it is not possible to reach an agreement as to the possible effects of the modification on the contract price and/or time of completion of the works, the representative of the canal authority will determine the **adjustment to the contract price**, which shall include **reasonable profit**.
Cases for Compensation for Works Delays or Cost Overruns

In a somewhat unsystematic fashion, the contract conditions also include the right of the contractor to the reimbursement of additional costs that might arise and/or an extension of time for completion of the works (or some of the milestones), when any of the following extraordinary circumstances occur, causing an imbalance of the equivalence of benefits established when the contract was signed:

1. Due to causes attributable to the ACP (related to the contract):
   a) Errors in the requirements laid down by the ACP, which could not have been detected by an experienced contractor exercising due care and “prudent industry practices” (subclause 1.2.4).
   b) The appearance of unforeseeable physical or topographical conditions not covered by the Geotechnical Interpretive Report or in the Topographical Data (subclause 4.12).
   c) A delay – attributable to the ACP – in conducting the tests specified in the contract or other additional tests that the contractor has been requested to carry out; or, if applicable, in the tests on completion of the works (subclauses 7.4 and 10.3).
   d) Total or partial suspension of work ordered by the ACP. After a period of 140 days, the contractor may request permission to proceed with the works; if there is no reply within 28 days of the request, and the suspension affects the whole of the works, it may give notice of termination of the contract (subclause 8.9).
   e) Suspension or reduction in the rate of work on the part of the contractor as a result of failure to meet payment certificate or payment deadlines (subclause 16.1).

2. Through no fault of the ACP (or causes external to the contract):
   a) The discovery of remains of geological or archaeological interest, which must be made known and placed under the care of the ACP (subclause 4.24).
   b) The creation of additional cost resulting from a change in the laws of the country or the official interpretation of the laws by the government, unless it could have been reasonably
foreseen if prudent industry practices had been exercised (subclause 13.7).

c) The occurrence of any of the “employer’s risks” listed in the conditions, including war, terrorism, riots, pressure waves caused by aircraft, the occupation by the ACP of any part of the permanent works not specified in the contract and, in general, “any operation of the forces of nature which is unforeseeable or against which an experienced contractor could not reasonably have been expected to have taken adequate preventive precautions” (subclauses 17.4 and 19.4).

When the occurrence of any of these circumstances places a greater burden on the contractor, the principle of public contract immutability (as a result of pacta sunt servanda) gives way to the obligation to restore contractual balance, which translates to the right to equivalent material benefits, in order to guarantee legal certainty for the contractor and to safeguard its economic interests. In any case, the ACP always reserves the right to express its agreement with the contractor’s claim and determine the scope thereof.

The foregoing shall not prejudice contract price adjustments (upwards or downwards): a) when there is an increase or decrease in the prices for specified materials (steel, fuel and cement) in line with the indices established in the conditions (for which purpose the ACP should create a “price adjustment timetable”); or b) when there is an increase in local labour rates before the 1,694th day after the date of commencement of work (subclauses 13.8 and 13.9).

Pursuant to these provisions, and prior to the dispute that led to the cessation of work, the ACP had already authorised payment of two additional costs to the contractor: one for the amount of 156 million dollars for the variation in fuel and steel prices; another for 20 million dollars for personnel needs. However, as has been explained, the claims that led to the cessation of work are different. In general terms, they are related to the failure to fulfil the obligation to restore the contractual balance as a result of cost overruns and delays caused either by the lack of information provided by the canal authority, or – principally – by the modifications imposed unilaterally by the canal authority.
Claims Filed by the Consortium and the Contents of the Memorandum of Understanding of 13 March 2014

From the beginning of the work until its cessation (in February 2014), there were a high number of claims pending resolution by the ACP. Altogether they add up to a total amount of 1.625 billion dollars and an extension of the completion date of 485 days; the most significant of these are the following:

- *Claim No. 8*, which has its origin in the additional works undertaken in the construction of the Pacific Cofferdam, due to the inaccuracy of the geological and geotechnical information from the ACP, which caused a cost overrun of 120 million dollars and a delay of 120 days in the critical path of the construction program.

- *Claim No. 43*, amounting to 470 million dollars, filed in response to the additional costs associated with the process of procuring aggregates for the preparation of concrete due to the poor quality of basalt from the excavations on the Pacific side, a factor not provided for in the tender documents.

- And *Claim No. 78*, which is the largest amount claimed and is justified by the substantial changes in the conditions of the contract that were imposed unilaterally by the canal authority and that forced the consortium to study alternative designs and technical solutions. In this claim (submitted in December 2013 and which incorporates other previous claims), GUPC is seeking compensation of 880 million dollars and an extension of the contract of 150 days.

The rejection of these claims, in some cases, and the lack of response, in others, are the cause of the suspension of work by the contractor. However, on 13 March 2014 a “Memorandum of Understanding” was signed between the parties concerned (ACP, GUPC and Zurich), which resulted in Resolution No. ACP-JD-RM 14-672; this enabled resumption of the works. In summary form, this MOU contains the following provisions:

- Modification of the contract to inject a sum of 200 million dollars into the project, provided in equal measure by the contractor and the ACP, intended exclusively to pay subcontractors, labour costs and project-related costs.
- The contractor agrees to complete the works in December 2015; the 12 gates from Italy will be transported in staggered shipments, to be completed at the latest in February 2015.

- The performance bond, which amounts to 400 million dollars, may be released so that the contractor may obtain new funding to complete the works (this also entails changing the type of guarantee granted to Sacyr by the public entity CESCE).

- The moratorium on the advance payments (amounting to 784 million dollars) may be extended until 31 December 2018, subject to reaching certain milestones in the progress of the works and delivery conditions for the gates.

- Claims proceedings for additional costs will continue in the arbitration bodies provided for in the contract.

In reality, the agreement is a headlong rush, since it neither changes the contract price nor admits any payment for additional costs. It aims to facilitate the funding necessary to ensure completion of the works; but it leaves the underlying problem unresolved, namely the claims submitted by the contractor related to maintaining contractual equilibrium, which ultimately depends on the decision of the International Arbitration Tribunal.28 In this regard, the commitment of the ACP is only limited to implementing more flexible procedures for the settlement of those claims that do not exceed 50 million dollars.

**CONCLUDING REMARKS**

The Panama Canal expansion crisis allows us to revisit a classic problem in public procurement – the modification of contracts – for which there does not seem to be a satisfactory solution. Furthermore, this is a permanent problem today, one which has been highlighted by various institutions as one of the main causes of fraud and corruption in public procurement (European Commission, 2014; and OECD, 2006): abuse of this aspect may not only obstruct the principles of openness and fair competition, but also have grave repercussions for public accounts because of the increased burden derived from the fulfilment of contracts.

This situation calls for a proper application of the regulations. But, first and foremost, it is also essential to implement other types of
measures to prevent opposing interests – public and private – from being unfairly prejudiced. Such measures include: establishing clear and unambiguous rules, which would both limit the margin of discretion of the contracting entities and preclude recklessly low bidding; monitoring tenderers’ modifications; and establishing a dispute settlement system which guarantees independence and efficiency, both in time and money. Taking these into consideration, this article draws some basic lessons from the case under study that can be extrapolated to any public procurement system.29

The Inevitability of Contract Modifications: Rrigidity versus Flexibility.

This dispute confirms that, in long-term or highly complex contracts, contract modification is inevitable and maintaining the balance of benefits is essential. When the contract is executed over a long period of time, decisions are often made by the contracting authority and extraordinary and unforeseeable events occur, which could not have been foreseen at the time of the tender, causing a breakdown in the contract finances. In these cases, the principles of pacta sunt servanda and execution of contract at the risk and cost of the contractor must give way in favour of maintaining the balance of benefits. It has always been thus, and must remain so, for the sake of legal certainty.

For this reason, apart from the inclusion of contract review clauses (for price updates, adaptation to new technologies, etc.), legislations must allow for a certain degree of flexibility, in order to adapt the contract to unforeseeable circumstances without having to turn to a new contractor. In short, it is about finding a fair balance between the fight against fraud and corruption, on the one hand, and the need to maintain the financial balance of the contract, on the other, so as not to bankrupt the contractor on the account of risks that could not have been foreseen at the time of tender and which therefore have to be marked down as a necessary cost of executing the contract.

According to these criteria, the contract for the design and construction of the third set of locks includes the obligation (and the guarantee) to restore the contractual equilibrium that may have been disrupted both by modifications unilaterally imposed by the canal authority and by events unforeseeable at the time of tender (which may arise either from decisions made by the canal authority or for
reasons beyond its control). The problem is not, then, in the categorisation of these circumstances, but the practical application on the part of the ACP and the internal dispute settlement body, which have rejected most of the claims submitted by the contractor.

**Prohibition of Modifications Intending to Distort Competition: Due Diligence and Distortion of the Contract**

In order to avoid fraudulent claims that are designed to cover up excessively low bids, it is necessary to ensure that unexpected and unforeseeable circumstances have truly taken place. To that end, the maintenance of contractual balance should be tied up with with the criterion of *due diligence*, by which the degree of prudence and foresight expected from a contractor is evaluated along with the required technical and professional experience. In other words, it must not have been possible to foresee the circumstances at the time of the initial awarding of the contract, taking into account the available means, the nature and characteristics of the specific project, best practices in the field in question and the need to guarantee an appropriate relationship between the resources committed to preparing the tender and the expected return.

At the same time, maintaining the balance of benefits should not go as far as altering the nature of the contract (for example, replacement of the works, supplies or services by others) or substantially modifying the essential conditions, which could lead to a hypothetical influence on the outcome of the tendering procedure. In both cases, the contract should be terminated and awarded to a new contractor.

In this regard, it should be noted that neither the RCACP nor the ACP contract set any quantitative limits to price increases resulting from modifications, which, if exceeded, would require a new tender (any percentage may thus be arbitrary and inadequate). Once an extraordinary and unforeseeable circumstance has been proven, the issue is whether it is possible to replace the contractor and if so, whether such a replacement will be more costly – as was the case in the contract analysed in this article – than awarding the corresponding compensation for delays and/or additional costs incurred.
**Better Regulation: Greater Transparency and Monitoring.**

As a measure to combat possible fraudulent practices aimed at restricting competition, it would be advisable for the modifications to be not only correctly justified and recorded, but also officially published, stating, inter alia, the circumstances behind them, the price increase caused by them (if any) and their effect on the date of completion. All of the above, with the corollary recognition that those bidders who participated in the tender may legitimately appeal against the agreed modification. In this way, monitoring of contract modifications is strengthened, as it is removed from the relational sphere of the contractor, who is naturally interested only in receiving compensation it considers appropriate.

In this regard, the regulatory framework of the ACP contracts can be improved both from a systematic point of view (it seems reasonable to try to reduce the number of referrals to other clauses, which on occasion become confusing) and from the point of view of content, in order to reinforce the principles of transparency and equal treatment of tenderers (and by extension, safeguards against fraud and corruption).

**Satisfactory Claims Mechanisms: International Arbitration as an Alternative.**

It seems reasonable that contracts of this nature be exempted from the jurisdiction of national courts, to be submitted to international arbitration (contractors see it as a guarantee of independence and objectivity). In this regard, the question that may be asked is whether it would be appropriate to establish a permanent international public procurement tribunal, composed of specialists who perform their duties independently and under conditions of stability (i.e., they are not assigned to each case by the parties to the conflict), and whose decisions are officially published, in order to set down a consolidated doctrine that establishes precedent for any future claims.

It is also necessary to create mechanisms to simplify and speed up the dispute settlement procedures, in order to prevent the contractor having to finance the additional cost of the modifications during the time it takes the arbitration tribunal to reach a decision (which sometimes takes over a year), which entails serious risk to the financial sustainability of the company and the project itself. This
becomes even more imperative when, faced with the contractor’s failure to comply, the ACP has the authority to demand from the surety that the works be completed by another company that has sufficient technical and financial capacity (which will replace the contractor in all its rights and obligations) or, where appropriate, to award a new contract to the tenderer that submitted the second best proposal.

Without any doubt, introducing these measures will not put an end to (the seemingly inevitable) modifications in public procurement contracts, but it could help to improve transparency, preventing suspected fraud, and to increase legal certainty among contracting parties.

NOTES

1. The list of the ten largest transport infrastructure projects in the world is as follows: China’s National Trunk Highway System (186 billion euros), the California High-Speed Rail (54 billion euros), London’s Crossrail (17.8 billion euros), New York’s Second Avenue Subway (13 billion euros), the first line of the Klang Valley Mass Rapid Transit Project in Malaysia (9 billion euros), the Dubai World Central International Airport (7.7 billion euros), the Thameslink Programme in the UK (7.4 billion euros), the Gotthard railway tunnel (7.1 billion euros), line 9 of the Barcelona Metro (6.927 billion euros) and the Panama Canal Expansion (4.26 billion euros). Multidisciplinary analyses of the problems encountered in the planning, decision-making and execution of these megaprojects may be found in Flyvbjerg, 2005; Priemus, Flyvbjerg & Van Wee, 2008; Flyvbjerg & Molloy, 2011; Flyvbjerg, Bruzelius & Rothengatter, 2013.

2. The acronym for Twenty-foot Equivalent Unit, which is the unit of cargo capacity most commonly used for shipping containers; it measures the flow of container traffic based on the capacity of a standard 20-foot container (equivalent to 1 TEU). A study of the economic and infrastructure impacts was commissioned by the U.S. Department of Transportation and Maritime Administration (2013).

3. The term Panamax is used to designate the largest type of vessel that can navigate the canal; its size is determined by the
dimensions of the canal’s lock chambers. Post-Panamax vessels are too large to pass through the existing locks.

4. On 17 December 2010, a Spanish newspaper published an article entitled “US tried to prevent Sacyr winning Panama Canal contract”, which stated that, according to data revealed by Wikileaks, US diplomats considered that Sacyr had bid such a low price thanks to the support of the Spanish government. The article also contained a statement by a Bechtel representative, stating that “...the winning bid...was not enough to buy the cement...and that Sacyr would try to renegotiate the contract once work had begun.” [Online]. Available at http://internacional.elpais.com/internacional/2010/12/17/actualidad/1292540416_850215.htm.

5. Until the notice of intent to suspend work was filed, the contract had been carried out to the satisfaction of the ACP, as reflected in its quarterly reports (these reports are analysed by an ad hoc committee comprising seven members, the composition and functioning of which are regulated by Decree No. 33, 26 February 2007). In March 2013 an independent audit concluded that the works cost overruns claimed by the consortium were realistic, reasonable and consistent with the market (see GUPC, 2014). At 31 December 2015, the cost overrun claimed by GUPC amounted to 2.698 billion dollars.


7. The evaluation of proposals was conducted under special security conditions. To guarantee the integrity of the information, a specific computer network was set up, isolated both from the outside and from other internal ACP networks (USB ports were disabled on all the computers) and a document monitoring protocol was set up.

8. Prior to the opening of the envelopes containing the price proposals, Deloitte presented the results of the audit of the technical documents evaluation process in the presence of all parties.
9. FIDIC contracts are the standard construction contract model most widely used internationally. The current edition dates from 1999, when a new generation of contracts tailored to the demands of an increasingly international engineering and construction sector was developed. For a general overview of the issues related to international contracts, see Audit, & Schill (2014).

10. In compliance with Articles 109 and 110 RCACP, the contractor submitted a performance bond of 400 million dollars (period of cover may be extended up to three years after completion of the works) and a payment bond of 50 million dollars, which guarantees payment to third parties for the provision of labour and supplies used in the execution of the contract (which remains valid up to 180 days after the date of publication in the national press of the notice of completion of the works and its taking-over by the canal authority).

11. The instructions authorised the tenderers to visit the laboratories where the physical model tests of the models for the lock filling and emptying systems (Lyon) and the navigation tank model (Antwerp) were being carried out; and to undertake tests, borings, and any other type of inspection necessary in the preparation of the technical proposal, on the site (Vol. I, Clauses A.8 and C.9.c.).

12. These obligations are not considered fulfilled until the ACP has issued the corresponding certificate of compliance. In the event that the contractor does not remedy the defect or fault within the stipulated period, the ACP may take one of the following steps: carry out the work at the expense of the contractor, apply a reasonable reduction in the contract price, or terminate the right of the contractor to complete the contract or part thereof that cannot be used, recovering, as the case may be, the amount paid for that work, plus financing costs. In any case, this contractual liability does not relieve, reduce or alter the liability for defects in the works as set out in Article 1343 of the Panamanian Civil Code.

13. The contractor shall recover the amounts deducted if it achieves any subsequent milestone or achieves the milestone within 56 days after the applicable milestone date.
14. If the contractor objects to the payment of damages for delay or if the delay in completion of the works is a result of fraud, deliberate default, reckless misconduct or gross negligence of the contractor, the liability of the latter will be determined by general damages (and not days of default) without being limited to the maximum amount stated in the Appendix.

15. Article 175 RCACP states that when contractors are in arrears or are debtors of the ACP, the ACP may suspend payments due to the contractors. Through a written determination, the Contracting Officer may offset amounts owed to contractors against sums due to the Authority.

16. Article 221 RCACP concerning the termination of the contract due to noncompliance by the contractor (as referred to in Clause 15.2 of the Conditions of Contract) states that “failure to comply with contractual obligations” and “any clear and convincing evidence that a default will arise due to non-compliance with the contract terms” are applicable causes even if they are not included in the contract.

17. For the former it has a maximum of 28 days (failure to do so discharges the ACP from all liability in connection with the claim) and, for the latter, 42 days. These periods begin, in both cases, from the moment the contractor becomes aware or “should have become aware” of the event or circumstance giving rise to the claim.

18. The DAB is composed of three people. Two are nominated by each of the parties, the third – the Chairman of the Board – by mutual agreement between the contracting authority and the contractor.

19. In keeping with the French school of thought, which contemplates administrative contracts characterised by a common law “exorbitant regime” (also an attribute of Spanish law), the 2006 Panamanian public procurement law regulates both ius variandi (art. 77) and the guarantee of “contractual balance” (art. 21). There is an extensive bibliography relating to this issue, including the seminal work of Ariño Ortiz (1968).

20. In general, the cost of these modifications is limited to 15% of the contract price; in the case of works contracts, the increase may be higher if previously approved by the Board of the ACP (art.
155-162 RCACP). Modifications to this contract are set out in Clause 13 of Volume III.

21. The contractor shall not be entitled to an extension of time due to or in payment of the cost incurred in correcting the results of design error on its part, the quality of workmanship or materials, or failure to protect, store or secure the works, plant, materials and equipment for the duration of the suspension.

22. In cases a), c) and e) the contractor is entitled to receive payment of "cost plus reasonable profit", defined as the cost plus a sum of 5% of this as profit.

23. In this case, the contractor may not make claims other than those listed in the price adjustment timetable or for other than actual dates of purchase, use or delivery of the specified materials.

24. Similarly, an extension of the period for completion of the works may be agreed if the delay occurs because of any of the following causes: a) contract modification in accordance with the established procedure; b) exceptionally adverse climatic conditions; c) unforeseeable shortages of personnel or goods caused by an epidemic or government actions; d) any other delay attributable to the canal authority or the national authorities (subclauses 8.4 and 8.5).

25. By 31 December 2015, 160 contract modifications had been recorded, although many have no impact on the cost or duration of the contract. Others, however, have given rise to different claims, based on higher wage costs (Claim No. 6), unforeseen work (Claim No. 7), adverse weather conditions (Claim No. 9), the cost of setting up independent laboratories (Claim No. 10), a fire control system (Claim No. 72), interruption of works (Claim No. 78), etc.

26. In his letter of 10 January 2014, addressed to the Spanish National Securities Market Commission, the representative of Sacyr denounced the continuous interference of the ACP in the design process and the lack of respect for the framework and the restrictions of the contract. He also considered that the ACP was not able to provide adequate, complete and reliable data on the terrain, or key data concerning the "lump sum" approach and the design and planning of the works. He even stated that it was
unable to provide adequate landfill to allow GUPC to proceed with
the work in a timely manner.

27. In order to formalise this agreement, contract variations No. 90
and No. 108 were signed bilaterally.

28. Since the 2014 MOU, several GUPC claims have been partially
recognised by the DAB: Claim No. 43 on the quality of the basalt;
No. 52 on the imposition of additional requirements for testing
the concrete being used; Nos. 45, 71 and 76 on public holidays
recognised by the Government of Panama; and No. 96 on a
workers’ strike. Despite appearances (because of media
exposure), GUPC’s claims are not the only ones to have been
brought against the canal authority. The consortium that is
carrying out the works on the Pacific Access Channel was 20
months behind schedule with a 50% cost overrun. And the French
construction company Vinci Construction Grands Projets,
responsible for building the first bridge in the Atlantic sector, had
to redo the technical project, as it considered the project
tendered by the ACP to be “unworkable”, with consequent delay
and added cost.

29. This is the case, for example, of the European Union, whose new
procurement directives, adopted in February 2014, deal for the
first time with the rules concerning contract modification,
differentiating between modifications provided for in the initial
contract documents and modifications not expressly referred to
(ex lege); the latter are limited to specific cases (unforeseen
circumstances or the incorporation of additional works or services
that have become necessary) and 50% of the contract value (art.
43 of Directive 2014/23/EU on the award of concession
contracts; art. 72 of Directive 2014/24/EU on public
procurement; and art. 89 of Directive 2014/25/EU on
procurement by entities operating in the water, energy, transport
and postal services sectors.

30. In general, the European Directives set this limit at 50% of the
contract value or initial framework agreement (art. 43.1 c)
However, there is an exception in the case of excluded sectors
contracts (water, energy, transport and postal services): these
cases only require that the modification does not alter the overall
nature of the contract (art. 89.1 c) Directive 2014/25/EU).
REFERENCES


