Expansion Program Components

- **Post-Panamax Locks**
  Construction of new Post-Panamax locks at the Pacific and Atlantic sides. The new locks complexes will have three chambers each with water-saving basins, a lateral filling and emptying system, and rolling gates.

- **Pacific Access Channel**
  Excavation of the new Pacific Post-Panamax locks north access channel. The project requires the dry excavation of approximately 49 million cubic meters of material along 6.1 km. It is being executed in four different phases (PACs 1 – 4).

- **Improvements to Existing Navigational Channels**
  This project involves dredging existing navigational channels to enable the safe navigation of Post-Panamax vessels through the expanded Canal.

- **Improvements to Water Supply**
  Requires elevating Gatun Lake's maximum operating level by 45 centimeters to improve Canal water supply and draft dependability.

**Excavation of the Pacific Access Channel Phase 1**
The contract was awarded to Panama-based Constructora Urbana, S.A. (CUSA) on July 17, 2007, for a total of $40.4 million.

Activities include the leveling of Paraiso Hill, from its original 136 meters to 46 meters high. To accomplish this, CUSA must remove a total of 7.3 million cubic meters of material. This contract also includes cleaning a total 146 hectares of UXO areas and the relocation of 3.4 km. of the Borinquen Road.

**Excavation of the Pacific Access Channel Phase 2**
Cilsa Panama – Minera Maria is responsible for the execution of the second dry excavation contract spanning 2.4 km.

This contract was awarded on November 27, 2007, for a total $25.5 million. It involves the removal of 7.5 million cubic meters of material. Activities under this contract include the 3.5 km. diversion of the Cocoli River and the relocation of 1.5 km. of the Borinquen Road, which has been under construction since May 2008.

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>Submitted Base Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constructora Urbana S.A.</td>
<td>$41,094,000.00</td>
</tr>
<tr>
<td>Corporación M&amp;S Internacional - MECO Santa Fe</td>
<td>$43,516,288.78</td>
</tr>
<tr>
<td>Consorcio Cilsa Panama-Minera Maria</td>
<td>$44,459,877.73</td>
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<td>International Underground Corp.</td>
<td>$47,029,956.40</td>
</tr>
<tr>
<td>Consorcio CORESA</td>
<td>$48,204,942.14</td>
</tr>
<tr>
<td>Consorcio EPBA Masing Curoa</td>
<td>$55,224,233.40</td>
</tr>
<tr>
<td>Astali-Ghella SpA</td>
<td>$61,930,269.41</td>
</tr>
<tr>
<td>Consorcio GRIPICA</td>
<td>$73,132,858.67</td>
</tr>
<tr>
<td>Consorcio Condor Promipetrol Panama</td>
<td>$79,960,263.11</td>
</tr>
<tr>
<td>Jay Cashman, Inc.</td>
<td>$89,988,160.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COMPANY</th>
<th>Submitted Base Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consorcio Cilsa Minera Maria</td>
<td>$25,489,200.30</td>
</tr>
<tr>
<td>Consorcio Masseng Cresnas</td>
<td>$30,564,475.00</td>
</tr>
<tr>
<td>Constructora Urbana S.A.</td>
<td>$30,913,000.00</td>
</tr>
<tr>
<td>Consorcio Conalvias Retraneg</td>
<td>$37,492,853.18</td>
</tr>
<tr>
<td>Consorcio M&amp;S MECO Santa Fe</td>
<td>$40,986,400.04</td>
</tr>
<tr>
<td>Consorcio Condor Promipetrol</td>
<td>$42,455,577.54</td>
</tr>
<tr>
<td>Consorcio ICA Panama - ICA CV</td>
<td>$45,822,242.77</td>
</tr>
<tr>
<td>International Underground Corp.</td>
<td>$61,745,339.00</td>
</tr>
</tbody>
</table>
Excavation of the Pacific Access Channel Phase 3
The ACP awarded this contract on December 16, 2008, to Constructora Meco, S.A., for a total of $36.6 million. This contract, scheduled for completion by 2011, includes the excavation, removal, and disposal of 8 million cubic meters of material, leveling of Paraiso Hill from 46 to 27.5 meters above sea level and cleaning of 190 hectares of UXO areas.

Dredging of the Pacific Entrance Navigational Channel
This project consists in widening the Panama Canal Pacific access navigational channel to a minimum 225 meters and deepening to 15.5 meters below mean low water level. In addition, the project includes the partial construction of the Pacific Post-Panamax locks south access.

A total of 9.1 million cubic meters of material will be removed under this project. The ACP awarded this contract to the Belgian company Dredging International for a total of $177.5 million.

### Company / Consortium | Submitted Base Price
---|---
Dredging International | $177,500,676.78
Boskalis International BV | $258,851,577.20
Jan De Nul N.V/Van Oord Dredging and Marine Contractors BV | $485,453,336.00

Dredging for the Deepening and Widening of Gatun Lake and Deepening of Gaillard Cut
ACP personnel is responsible for all dredging work to be conducted for the deepening and widening of Gatun Lake, as well as the deepening of Gaillard Cut. A total of 27 million cubic meters of material will be removed under this project.

The ACP is using the drill boat Baru and dredges Mindi, Rialto M. Christensen, and Il Principe, the latter under a lease with the Jan de Nul company, to complete this project.

Dredging work began on October 6, 2008, with leased dredge Il Principe after several months’ preparation with ACP’s drill boat Thor.
The works include deepening the approach channel to 15.5 below mean low water level, which will require dredging some 14.8 million cubic meters of material and excavating an additional 800,000 cubic meters of material.

An area of approximately 13.8 km. will be dredged to widen the Atlantic access channel from its 198 meters to a minimum 225 meters and the north access channel to the new locks on the Atlantic side to a minimum 218 meters.

Design and Construction of the Third Set of Locks
Following compliance with the bidding process, the ACP awarded the contract for the design and construction of the Third Set of Locks to consortium Grupo Unidos por el Canal on July 15, 2009.

The consortium obtained the highest combined score for technical and price proposal as revealed during a public ceremony held on July 8, 2009.

Dredging of the Atlantic Entrance Navigational Channel
On September 28, 2009, the ACP awarded the contract for the dredging of the Canal’s Atlantic entrance to Belgian company Jan de Nul n.v. At a total $89.6 million, the contract was awarded following the lowest-price negotiated bidding process.

Following are the companies or consortia and their corresponding price proposals submitted on September 9:

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<thead>
<tr>
<th>Company</th>
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<td>Joint Venture Boskalis Dredging Intern.</td>
<td>$177,611,840.00</td>
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<tr>
<td>Van Oord Dredging</td>
<td>$162,182,828.00</td>
</tr>
<tr>
<td>China Harbour Engineering Co. Pilotec, S.A.</td>
<td>$116,732,224.00</td>
</tr>
<tr>
<td>Great Lakes Dredging and Dock Co.</td>
<td>$195,943,179.00</td>
</tr>
<tr>
<td>Jan de Nul N.V.</td>
<td>$ 89,617,317.00</td>
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New post panamax locks design

<table>
<thead>
<tr>
<th>Consortium</th>
<th>Technical score (maximum 5,500)</th>
<th>Base Price proposal (in US dollars)</th>
<th>Base Price proposal score (maximum 4,000)</th>
<th>Provisional sum price proposal</th>
<th>Funds score (Max. 500)</th>
<th>Total price proposal</th>
<th>Total score – price proposal (Max. 4,500)</th>
<th>Total combined score (Maximum 10,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rechel Taiye; Mitsubishi Corporation</td>
<td>3,789.5</td>
<td>$4,185,983,000.00</td>
<td>2,980.3</td>
<td>$93,836,670.00</td>
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<td>$4,279,819,670.00</td>
<td>2,980.3</td>
<td>6,769.8</td>
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<tr>
<td>CANAL</td>
<td>3,973.5</td>
<td>$5,981,023,333.00</td>
<td>2,585.9</td>
<td>$0.00</td>
<td>500</td>
<td>$5,981,023,333.00</td>
<td>2,585.9</td>
<td>6,559.4</td>
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<tr>
<td>Grupo unidos por el Canal</td>
<td>4,088.5</td>
<td>$3,118,880,001.00</td>
<td>4,000.0</td>
<td>$102,751,383.00</td>
<td></td>
<td>$3,221,631,384.00</td>
<td>4,000.0</td>
<td>8,088.5</td>
</tr>
</tbody>
</table>

Allocated funds - ACP $3,481,000,000.00
After the July 8 public ceremony, the Price Verification Committee — comprised by ACP employees who were not part of the Technical Evaluation Board — confirmed that the consortium’s price proposal met Canal requirements.

The Contracting Officer also confirmed that the contractor complied with Canal Acquisition Regulations regarding its capacity to execute the contract.

Grupo Unidos por el Canal obtained the highest technical proposal score and submitted the lowest base price for a total of $3,118,880,001.00. The total amount of the awarded contract is $3,221,631,384.00, which includes the provisional sums.

The amount submitted by the consortium did not exceed the ACP’s amount of allotted funds — or the official price — which was established at $3,481,000,000.00.

All participating consortia were notified of the award and were given five working days to review the winning proposal and an additional three days to file any protests to the ACP. The term expired on July 27 with no protests filed.

On August 11, consortium Grupo Unidos por el Canal submitted its performance and payment bonds, and on August 18 the ACP issued the order to proceed. From that date on, the contractor will have 1,883 days to complete the works.

This consortium is formed by the following companies:

- Sacyr Vallehermoso S.A. - Leader (Spain)
- Impregilo S.p.A. – (Italy)
- Jan de Nul n.v. – (Belgium)
- Constructora Urbana, S.A. – (Panama)

**Designers**
- Montgomery Watson Harza (MWH) — Leader (United States)
- IV-Groep (Holland)
- Tetra Tech (United States)

**Gate Manufacturer**
- Heerema Fabrication Group (Holland)

**Future Activities**

By the end of 2009, the ACP expects to have 97% of the Expansion Program works, services, payroll, and other related aspects awarded and already under way.

This percentage includes the contract for the fourth and final dry-excavation contract for the Pacific Access Channel (PAC-4).

PAC-4 tender documents, which require the excavation of 26 million cubic meters of material, were published on July 30, 2009, and receipt of proposals is expected on December 3, 2009.

PAC-4 also involves the excavation for the new access channel up to 9.14 meters PLD and the construction of the 2.3 km Borinquen Dam, which will separate Miraflores Lake from the new access channel.

**Sealed bid proposals opening ceremony for the locks design-build contract**
Reforestation and Wildlife Rescue

In compliance with its commitment to protect and preserve the environment, the ACP, along with the contractors for each component of the program and in coordination with Panama’s National Environmental Authority (ANAM), in conducting wildlife rescue and relocation operations as it progresses in the various projects being executed under the Expansion Program.

These activities develop from the early stages of work planning following a Rescue and Relocation Plan for each specific area before conducting any area clearing activities. To date, mammals, amphibians, and reptiles that include crocodiles, turtles, and sloths, among others, have been rescued and relocated as part of this effort.

As part of the ecological compensation for the areas affected by the first three dry-excavation contracts and the dredging of Gatun Lake, the ACP, jointly with ANAM, is developing reforestation projects in 415 hectares of land distributed among five national parks.

The ACP has also paid ANAM $1.3 million as economical compensation for the execution of the Expansion Program.

Accountability

In abidance of Law 28 of July 17 of 2006 and in order to comply with its accountability responsibility regarding the Expansion Program, the ACP publishes quarterly progress reports of the project for the overseer entities: Executive Branch, National Assembly, Controller General’s Office, Ad-hoc Commission (integrated by representatives of civil society), as well as Multilateral Lending Agencies.

The contents of those reports are available for consultation by the population at the ACP’s web page at www.pancanal.com. So far, 11 quarterly reports have been published.

In addition, the ACP welcomes frequently officials of the State and other entities to witness the progress of the works. These works have also awakened the interest of the different sectors of civil society; college and university students, professionals of various fields of expertise, international visitors, workers, business people, and dignitaries.

On the other hand, the Expansion Program has a telephone line, 800-0714, and an e-mail address ampliaci@pancanal.com to offer general information about the project.

The ACP has established a strict environmental surveillance and auditing program based on a five-level structure to guarantee compliance with the project’s environmental commitments.

This structure is formed by the contractors’ environmental personnel, ACP’s environmental surveillance staff, and the independent consultant, who is responsible for issuing evaluations and compliance reports, as well as auditors from the international financial institutions to which the ACP shall report regarding every aspect of local and international environmental requirements. ANAM acts as State auditor.

The environmental surveillance and auditing process is conducted in strict coordination with ANAM, which receives semiannual reports on projects’ environmental performance and conducts joint inspections at the sites. To date, two thorough environmental compliance reports have been submitted to ANAM on the Expansion Program and more than 12 joint inspections have been conducted.
**Paleontological and Archaeological Studies**

In January 2009, the ACP renewed its contract with the Smithsonian Tropical Research Institute (STRI) to locate and analyze paleontological findings on the sites of the Third Set of Locks project.

As a result of this agreement, the paleontological potential map for the Panama Canal Area was developed. Based on this map, a series of paleontological rescue activities have been conducted at the site of the future Gatun Locks on the Atlantic side and in the area of Cartagena Hill on the Pacific side.

The ACP has continued to conduct the technical evaluation of archaeological findings in the expansion areas. To date, the inventory of findings includes arrows dating from the pre-Columbian era and bottles from the early part of the 20th century, which allow documenting the pre-Columbian and historical reality of this side of the country.

Archaeological findings are assessed and registered supported by bibliographic searches, photographed and analyzed for their importance and historical relevance.

All the information is gathered in a results analysis report that is submitted as official correspondence to the National Cultural Institute’s (INAC) Historical Patrimony Bureau for the corresponding registration and archive and for use as reference material.

**Labor Aspects**

When Panamanians decided to cast their vote on October 22, 2006, to support the ACP’s plan to develop the colossal Canal Expansion Program, a commitment to training was immediately signed.

The Government took advantage of this opportunity to launch a program to train the workforce that would be required for the Program through the National Institute for Professional Education and Human Resources Development (INADEH, for its Spanish acronym). The objective of this training is to satisfy the labor demand for the expansion project, which, only for the construction of the third set of locks, will require about 7,000 qualified workers.

By half-way through 2009, the Expansion Program has generated approximately 2,300 jobs both in contracts that have been already completed and those currently under way. This figure also includes the new labor opportunities that have arisen internally at the ACP.

The Canal entity, in conjunction with INADEH, has undertaken the training of this labor force that will be required in the next years, especially in specialized trades such as blasters and heavy equipment operators.

**Financing**

On October 14, 2008, then Panama President Martin Torrijos Espino announced the Cabinet Council’s authorization for the Panama Canal Authority (ACP) to negotiate the required $2,300 million financial support for the expansion of the waterway with a group of multilateral and bilateral credit organizations.

Throughout more than a year, the ACP administration conducted negotiations always keeping its Board of Directors informed and in close coordination with a liaison group headed by the former first Vice President of the Republic of Panama.

After being authorized by the Cabinet Council, the ACP Board of Directors proceeded to approve the signing of financial support contracts with the following institutions:

- **European Investment Bank (EIB)**: $500 million
- **Japan Bank for International Cooperation (JBIC)**: $800 million
- **Inter-American Development Bank (IDB)**: $400 million
- **International Financial Corporation (IFC)**: $300 million
- **Andean Development Corporation (CAF)**: $300 million

**Total:** $2,300 million
For more information
e-mail: ampliacion@pancanal.com
Tel. (507) 800-0714