

Red de Observacion del Nivel del Mar para America Central **(RONMAC)**

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RONMAC Procurement Synopsis

The RONMAC project is being executed by the OAS/USDE under a Memorandum of Understanding with the National Ocean Service/NOAA, the funding is provided by the U.S. AID. The “Executive Summary” of the task, as it relates to the performance of the basic task being performed for NOAA - USAID, is, that the OAS/USDE is to procure and install a monitoring and data dissemination system, in four countries in Central America. The ultimate goal is not only to deliver an operational monitoring network, but to create a sustainable network, operated by the existing institutions in Central America, however that is not discussed for the purpose of this procurement analysis. The network sites, quality and quantities of equipment, are ultimately determined by the NOS/NOAA.

There are several companies who produce monitoring equipment; Vitel, Sutron, Handar and Campbell. There are others, but they are specialized companies with limited function, which would not be qualified in a project with this level of sophistication. Of the four large companies named, all provide the US Government agencies with monitoring equipment for large complex networks. However, only two, Vitel and Sutron, have the capability of delivering a system that can not only monitor meteorological parameters under WMO Standards, but also process sea-level data under NOS/NOAA Standards. Because this capability to process both meteorological and sea-level data simultaneously in a single monitoring site, only Vitel and Sutron were considered.

Prior to soliciting cost estimates from either company, I made a site visit to each company and asked questions that would be relevant to the RONMAC procurement. After making the visit and discussing the technical merits of both companies with the NOS/NOAA technical staff, I prepared a request for cost proposal to each company (see attachment ‘A’). Both responded with proposals (see attachment ‘B’).

Because of the variability of the quantities being considered the quantities are not relevant. What is relevant is how many of the individual monitoring systems, plus the other necessary equipment to complete the network, can be procured within the budget amount. Because I was attempting to get comparisons of equal systems, I requested specific items from each company, rather than allow them to submit proposals on “their idea” of what we needed. I discussed “performance specifications” with the technical staff of NOS/NOAA and determined that a suitable performance specification was not available. I decided, with the advise of the technical staff of NOS/NOAA, not to attempt to write on for this procurement, but to request specific system components.

The first request that was prepared was to VITEL, Inc. of Chantilly, VA. This was an expansion of the system that OAS-USDE procured in 1997 for the CPACC project. The only additions were those technology improvements that had occurred since that 1997 procurement was completed. Most of the additions were in the communications, not the basic system. My second request was for the similar SUTRON, Inc of Sterling, VA. In terms of the quantities requested, all were the same except the quantities for the field monitoring systems. The NOS/NOAA had initially said that they wanted to deliver 18 field monitoring systems, however between my Vitel request preparation and my Sutron request preparation, NOS/NOAA indicated that the quantity could vary between 7 and 17. Because of this I requested a quantity of 7 field monitoring systems from Sutron. Vitel submitted a cost proposal very quickly for 17 systems, plus the other requested equipment. Prior to their submittal they called me for verification of several items, and at the same time they made suggestions for items that would provide a more complete system than what I had requested. I told them that they were free to make any suggestions for additional equipment, but that the ultimate equipment procured would depend on price and suitability. Sutron also called during their proposal preparation for clarification, however they made no additional suggestions regarding additional equipment, only additional services that they would like to provide to the RONMAC project. I told them to limit their proposal to equipment. Because I had requested a lower quantity of field monitoring systems from Sutron, I called Vitel and asked them if the quantity of field units were reduced, if they would alter their price per system. The said that the quantity did not matter. Sutron indicated that they could reduce their field unit prices based on quantity.

The following is a comparison of the two cost proposals based on equal quantities. This comparison is based on my interpretation of the two cost proposals.

<u>General Item Description</u>	<u>Qty</u>	<u>VITEL Cost</u>	<u>SUTRON Cost</u>
Field Monitoring System (complete)	7	\$ 204,064	\$ 222,536
Installation Kits	4	13,024	15,520
Calibration Equipment	1	8,499	10,647
Spare WL sensors	4	7,540	10,928
Radio Repeater systems	6	14,538	26,112
PC's	4	14,000	15,200
Satellite Receive system	1	41,150	88,604
Totals		\$ 302,815	\$ 391,759

If the quantities of the field monitoring units were increased to 17, and all other quantities remain the same the totals would be;

<u>Vitel</u>	<u>Sutron</u>
\$ 594,335	\$ 707,510

General Conclusions

It is my opinion that we should go with the Vitel offer, not just based on cost, but for many reasons. Vitel provided CPACC equipment in 1997. They delivered the equipment

on-time and provided good, reliable support after the sale was completed. They have worked with us in an ongoing basis, supporting training at their facility for our regional partners, at no cost. They have operated our data collection and dissemination system while we worked out regional institutional problems, at no cost. They have been flexible and responsive to our technical needs, providing demonstration equipment and new innovations in response to the needs that have arisen in the region. Yes, it was potentially to their benefit to do so, however the level of support and flexibility exceeded what other companies, that I have dealt with in this industry, would go to.

Because we had recent experience with Vitel, I felt that I knew what to expect from them. Sutron, on the other hand is a company that I have dealt with since the mid-1980's, but very little in the last four years. To reacquaint myself with them I asked that I be included in a demonstration being given at the Sutron facility in Virginia for the National Ocean Service/NOAA in April. During the demonstration I made several observations that are relevant to this procurement;

1. Although the demonstration was predicated on showing NOS/NOAA their new 8210 DCP they did not have the latest field version available, only a preproduction one was demonstrated. They said that they had delivered all of the recently produced 8210 DCP's to the Navy Stennis Space Center in Mississippi.
2. They stated that their current DCP development efforts were focused on becoming a provider of internet focused devices, rather than satellite based. A large part of the demonstration was devoted to their internet based research efforts.
3. When asked about issues that were relevant to the delivery of the 8210 DCP for satellite communications, such as our need in the Caribbean and Central America, they were somewhat negative. One Sutron sales engineer commented to me that the Caribbean was "a very small market".
 - The president of the company, when asked about including automatic time correction to the 8210 DCP with GPS for satellite telemetry, he stated that they had no plans to do so, because they felt that there was no reason. Both myself and NOS engineers pointed out the need for this and he again stated that Sutron had no plans to incorporate this feature. This is a feature that is incorporated in the Vitel VX1100 DCP, and under development by other DCP manufacturers.
 - When asked about the ability to continuously store data on an external, removable device (PCMCIA card), Sutron said that while their 8210 DCP would deliver data to a PCMCIA card it required an operator to visit the DCP and download the data, it would not store the data continuously. Without this feature, of automatically storing data to the removable PCMCIA card, if the DCP crashes and loses its internal data or its download function, the data is lost. Vitel's VX1100 stores data automatically to a removable PCMCIA card. The PCMCIA card has its own internal power, if the entire DCP is damaged or loses function, the data on the PCMCIA card remains intact.
 - When I asked about a recent delivery of 8210's to a customer that I could ask as a reference, I was told that Sutron had delivered 8210 with

telemetry to the US Navy Oceanographic facility at Stennis Space Center in Bay St. Louis, Mississippi.

4. I went to visit the Stennis Space Center in MS to meet with the US Navy evaluation engineer and procurement officer on the Sutron procurement. When I asked them if they were satisfied with the performance of the Sutron 8210 that had been procured, they said that they had just received them and that they had not finished evaluating them. They said, in general terms, that the Sutron 8210's that had been delivered, appeared to be satisfactory. These 8210's were much more basic than the ones would have to be for the RONMAC project. When I asked them if they were satisfied with the delivery of the Sutron 8210's they said that there had been problems. Sutron had been one year late delivering the DCP's. They said that in their initial evaluation that they had ranked Sutron as a third choice, behind Vitel, but that Sutron's price was so low that they had been forced to go with them. The delay was the result of a very minor communication change requested by the Navy. The procurement officer said that even though Sutron had initially indicated that the 8210 would comply with the Navy specification, it would need modification to meet the final needs stated by the Navy. Sutron used this as the justification for the late delivery according to the Navy procurement officer.
5. In the request that I sent to Sutron I addressed the issues of on-time delivery, continuous data storage and automatic GPS time correction. The cost proposal that was delivered, included a delivery date that says "on or about October". The PCMCIA card module is included, but with no provision for automatic continuous storage. There is a GPS module included but it says "GPS data" and does not address time correction. GPS data collection and data storage is a very simple basic sensor function, available from many manufacturers, but the automatic time correction feature is a much more complex feature. Sutrons proposal made no reference to GPS time correction, so I have to assume that they will not offer that feature, just as Sutrons president had clearly stated when I visited the Sutron facility with the NOS in April.

It is my opinion based on past experience and the obvious price difference that the RONMAC procurement should be awarded to Vitel. The final configuration of the equipment will remain essentially the same as in Vitels cost proposal, but the quantities may be varied to meet the specific needs of the project.

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