



**IN THE MATTER OF:**

**A Complaint  
By ATS Scientific Inc.  
of 760 Pacific Road, Suite #21  
Oakville, Ontario**

**Board File No:  
G93PRF6623-021-0027**

**Complaint upheld**

**AND IN THE MATTER OF:**

**The Free Trade Agreement  
Implementation Act, Part II, Sec. 15  
S.C. 1988, Ch. 65.**

**January 26, 1994**

**DETERMINATION BY THE BOARD**

The Procurement Review Board (the Board) received a complaint on October 28, 1993 from ATS Scientific Inc. (ATS). The complaint concerns the procurement by the Department of Supply and Services (DSS) of one sequential inductively coupled plasma (ICP) emission spectrometer including installation and training for the Department of Energy, Mines and Resources (EMR), Devon Coal Research Centre, Devon, Alberta.

The complainant alleges that DSS improperly declared the contract awardee's offer responsive by wrongfully concluding that it met two of the mandatory requirements in the specifications.

The remedy requested by ATS is that the contract be terminated, that the bids be re-evaluated, or that new bids for the contract be sought. Also, the complainant asks for its reasonable complaint costs and its bid preparation costs.

On November 3, 1993, the administrative and regulatory requirements all having been satisfied, the Board accepted the complaint for investigation.

DSS filed a Governmental Institution Report (GIR) with the Board on November 22, 1993. A copy of the relevant portions of the GIR was sent to the complainant who, in turn, filed comments with the Board on November 25, 1993. The complainant's comments were forwarded to DSS.

On December 16, 1993, a copy of the Board's investigation staff's Preliminary Investigation Report was sent to DSS and the complainant for their comments. Both parties responded with written replies which were communicated to the parties by the Board. All of the above comments were added to the Preliminary Investigation Report and form part of the Investigation Report (Report) as submitted to the Board.

The Report of this investigation contains a number of appendices relative to material and documents deemed relevant by the Board's investigative staff. Specific reference is not made to these appendices in this determination, but they have been made available to the parties and, subject to the provisions of the *Access to Information Act*, are available to any other person.

Because the investigation produced sufficient information to enable the Board, in its opinion, to decide the issue raised in this complaint, it was determined that an oral hearing was not required nor was one requested by the parties. The Board, in reaching its conclusions, has considered the complaint, the GIR, the complainant's comments to the GIR, the Preliminary Investigation Report and the comments thereon, and has made its findings and determinations on the basis of the facts disclosed, the relevant portions of which are mentioned in this determination.

### **The Investigation**

The allegations of this complaint, were investigated by the Board's staff by means of interviews and the examination of documents.

The following people were interviewed in person and/or by telephone to confirm various statements made and/or contained in the documentation:

Mr. Don Green, Contracting Officer, DSS Edmonton, Alberta; Mr. Kevin Flint, Research Technologist, EMR, Devon, Alberta; Mr. Yves Dubeau, National Sales Manager and Guillaume Maupertuis, Service Engineer both of ATS, Oakville, Ontario; Mr. Michael Brazeau, General Manager, Thermo Instruments (Canada) Inc., Mississauga, Ontario; Mr. Ric Willing, Sales Specialist, Perkin-Elmer (Canada) Limited, Nepean Ontario; Mr. Gilles Poncet, Service Manager, Instrument S.A. Inc., Edison, New Jersey, and Mr. Mark Cullen, Marketing Representative, Varian Canada Inc., Mississauga, Ontario.

## **The Procurement**

On June 18, 1993, DSS Edmonton received a requisition from EMR, Western Research Centre. The requirement was described as follows:

*1. REQUEST FOR A SEQUENTIAL INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETER (specifications attached)*

DSS prepared a "Notice of Proposed Procurement" (NPP) which appeared in the Government Business Opportunities (GBO) of July 9, 1993. A second NPP appeared in the GBO of July 21, 1993, amending the item description.

DSS also prepared an Invitation to Tender (ITT), dated July 9, 1993, with a public bid opening date of 1400 MDST August 19, 1993 (later amended to October 12, 1993). The requirement was described as follows:

*FOR THE SUPPLY INSTALLATION AND TRAINING OF ONE (1) ONLY SEQUENTIAL INDUCTIVELY COUPLED PLASMA EMISSION SPECTROMETER IN ACCORDANCE WITH THE SPECIFICATION ATTACHED.*

The specification describes the equipment, in part, as follows:

*1. Inductively Coupled Plasma Spectrometer:*

*A. Hardware:*

*Mandatory:*

- sequential spectrometer with latest updates. (93 model)*
- vacuum spectrometer with purged entrance slits*
- \* - 165 to 850 nm wavelength range with 0.009 nm resolution (all wavelengths in this range). For example: analysis of S @ 180.731, Cl @ 837.597, and Al @ 167.08 [emphasis added]*
- fully automated system which includes: 1) torch ignition and shut down*
- 2) wavelength selection 3) RF power system 4) sample delivery system*
- 5) all gas and cooling flow rates 6) height and optimization of torch 7) peak optimization [sic]*
- 40 MHz RF power supply capable of 1.7 kilowatts or more*
- ability to handle organic, inorganic and high salt/solids with changes to torch, spray chamber, nebulizer only. These do not need to be provided at this time.*
- cooling recirculation bath required*

- *thermally stabilized optics* [emphasis added]
- *time to scan from Al @ 167 to Cl @ 837 and back to starting point*
- *1ppm evaluation at Al @ 167 with all system parameters given*

*Preferred:*

- *bench top model*
- *upgradable to simultaneous/sequential (combination of both)*
- *3 channel peristaltic pump*

The ITT contained a "*STORES CERTIFICATION*" clause which reads:

*B4001T 01/06/91*

*Stores Certification*

*The item offered conforms strictly in accordance with the specification.*

*YES \_\_\_\_ NO \_\_\_\_ . The deviations are as follows: \_\_\_\_\_*

Seven suppliers submitted 12 proposals. A tabulation of prices, dated October 13, 1993 and prepared by DSS, lists 12 offers and shows Varian as the second lowest bidder and ATS as the fourth and sixth lowest bidder. The tabulation and all the bid sets, were delivered to EMR by the Contracting Officer on October 13, 1993. According to DSS, EMR was given verbal instructions that the bids were to be evaluated in accordance with the specification provided. According to the Contracting Officer, he also indicated that Varian was the lowest bidder, subject to technical review.

Three of the bidders (the complainant, the contract awardee and one other), certified that "*the item offered conforms strictly in accordance with the specification.*" Two bidders indicated that they did not meet the specification and two others did not complete the certification clause.

Varian returned the completed DSS solicitation document by facsimile on August 19, 1993, and included a quotation dated September 15, 1993 and specifications on their own stationery. In addition to completing the "*STORES CERTIFICATION*" with a "YES", Varian added "*MEETS ALL MANDATORY SPECS SEE ATTACHED RESPONSE TO SPECIFICATIONS.*" The specification for the system offered reads, in part:

**1. ICP HARDWARE**

- *Varian Liberty 220 Sequential ICP Spectrometer with Vacuum*

*Monochromator.*

*- benchtop unit*

*- wavelength range 160 to 900*

*- resolution .006 in fourth order and .009 between 160 and 470nm*

*...*

*- Measurement at Peak using refractor plate **eliminating** requirement for thermal stabilization. [emphasis added]*

According to the Contracting Officer, on October 12, 1993, prior to bid closing, DSS Edmonton received documentation from Varian. The documentation comprises a letter dated October 12, 1993, substituting a new product at a lower price for line item 100 [Liberty 200 vacuum...] in their original quotation, and a copy of their original offer. The above letter reads, in part:

*Due to the ammended [sic] close date on this tender Varian Canada has released a new product in our ICP Product Line.*

*Our new Vacuum System Liberty 220ICP has replaced the originally quoted Liberty200 product...*

*Our new submission for line # 1 should read:*

*...Liberty 220ICP substituted at a discounted value of **[amount deleted]**.*

The Varian offer, thus amended, would rank as the lowest priced bid.

The complainant, for its part, in addition to completing the DSS solicitation document, quoted two systems, JY-24 and JY-38 PLUS, which they detailed on ATS stationery. Also submitted with its bid package, are the manufacturer's brochures and "General Specifications" detailing the systems offered. On page 2 of this specification are outlined the following characteristics:

***JY-24 - Grating Quoted:***

*2400 grs/mm 1st and 2nd order*

*160-310 nm .008*

*310-800 nm .016*

***JY-38 - Grating Quoted***

*Back to Back Grating*

*4320 grs/mm and 2400 grs/mm*

*Resolution:*

*160-430 nm 0.006nm*

*430-850 nm 0.009 nm*

The manufacturer's brochures included in their bid describe, in part, the two models as follows:

**JY 24 - 2400 grooves/mm**

*Wavelength range* 160-780 nm

*Practical resolution* 17 pm [.017nm]

**JY 38 S - 4320 grooves/mm**

**2400 grooves/mm**

*Wavelength range* 160-430 nm 160-780 nm

*Practical resolution* 6 pm [.006nm] 11 pm [.011nm]

According to the complainant, Models JY-38 PLUS and JY-38S are the same system, and the brochures supplied with the bid set are outdated. The up-to-date version detailed in the "General Specifications" was the one quoted.

Three of the bidders (not ATS) as well as the Service Manager of Instruments S.A. Inc., the American Subsidiary of Jobin Yvon Emission (the American distributor of the product offered by ATS), were contacted by the Board's investigative staff to obtain information regarding the feasibility of achieving a resolution of 0.009 nm through the entire wavelength range. It was their opinion that such resolution could only be obtained in the lower end of the wavelength range.

According to the government, the need for "*thermally stabilized optics*" can be achieved through several methods, short of controlling the room temperature:

- 1 - by using zero expanding material in the optics, as proposed by one supplier;
- 2 - by compensating using a refractor plate, as proposed by Varian; and
- 3 - with a cooling and/or heating unit to try to keep a constant temperature.

The following table, prepared by the Board's investigation staff, sets out the information provided in each bid with respect to the wavelength range and resolution, as well as the method of thermal stabilization of optics proposed.

Bid	Wavelength Range	Resolution	Optics
No. 1a)	160-800	.008 160-310 .016 310-800	The optical system is thermally stabilized
b)	160-850	.006 160-430 .009 430-850	
No. 2	165-800	.011 1st order	Thermally stabilized at 32°C
No. 3	160-900	.009 160-470	Measurement at peak using refractor plate
No. 4	160-800	.009 1st & 2nd orders	Thermostated
No. 5a)	160-770	.012 160-770	Thermostated in monochromator
b)	167-782	.007 in UV region	Thermostated
c)	160-770	.012 160-770 .009 160-440	Thermostated
No. 6a)	160-850	.008 160-335 .018 335-670 .04 > 670	Thermally stabilized optics
b)	160-850	.008 160-335 .018 335-670 .04 > 670	Thermally stabilized optics
No. 7a)	165-800		Geometric construction and materials used
b)	160-480 230-850		Geometric construction and materials used

On October 14, 1993, EMR sent the following letter to DSS:

*We have reviewed all the tenders submitted and have agreed with your recommendation of awarding the bid to Varian Canada for their Liberty 220 Vacuum Path Inductively Coupled Plasma [emission spectrometer].*

*The attached tables show a comparison of all systems available. Two companies did not bid and are thus eliminated. The Varian instrument meets all our requirements and was also the lowest price. The other bidders have been eliminated either due to unsatisfactory specifications or higher cost than the Varian model.*

According to EMR, the tables referred to above were created prior to the requisition being raised, to assess what type of equipment was on the market. Several suppliers were contacted to provide information and brochures on sequential ICPs. As the information was received by EMR, the tables were updated to record each suppliers data against the list of EMR's needs. Based on the information provided and after talking with people from the industry, EMR concluded that they had a good idea of what was available on the market. The specification was then written up.

On October 18, 1993, a verbal contract was awarded to Varian.

In a letter dated October 18, 1993, ATS was advised that *"a contract will not be placed with you in this particular instance as a more favourable offer has been accepted."*

On October 25, 1993, ATS sent a facsimile to DSS, which was redirected to EMR for a reply. The facsimile reads, in part:

*...I would like to bring to your attention that the Varian Liberty 200 does not meet three (3) of the Mandatory Hardware Specifications as follows:*

- (1) - *165 to 850nm wavelength range with 0.009nm resolution (all wavelengths in this range)...*

*The resolution (as per attached Varian's specification sheet, from Varian's brochure), from 160-900nm is 0.018!*

- (2) - *Thermally stabilized optics*

*The Varian ICP has no thermal system to regulate the optics.*

- (3) - *Sample Prep Station  
Mandatory.  
- computer controller autosampler that holds 120 samples and  
10 standards.*

*As per spec. sheet from Varian, their autosampler capacity is 100 sample capacity maximum.*

*I am officially objecting to the issuance of a contract to Varian for the above reasons.*

On October 27, 1993, DSS responded to ATS with a letter which reads, in part:



*...I have forwarded your letter to the Scientific Authorities at Energy, Mines and Resources...and they have now responded as follows:*

*Item #1: The resolution that manufacturers quote is the low wavelength range where resolution is the best. The number [name deleted] has quoted from the Varian specification sheet is the average from the low to high wavelength and thus much higher than .009 nm. The mandatory specification was for an ICP covering 165 to 850 nm with all wavelengths accessible in this range. The "all wavelengths" does not refer to the resolution but to the range of wavelengths. The resolution of .009 nm over a range of 165 to 850 nm is impossible. The resolution specified was the one achievable at the low wavelength range. Thus Varian does meet this specification with a range of 160 to 900 nm and a resolution of .006 nm in the low wavelength range.*

*Item #2: The concern here is that changes in room temperature affect the instrument response. So there must be a mechanism in the instrument to standardize the response even under fluctuations of room temperature. This can be accomplished in several ways. The most impractical is to control the room temperature very accurately. Another way in which this is controlled by some manufacturers, is by using zero expanding material in the optics, thus temperature changes have no effect. The way that Varian meets this expanding and contracting problem as stated in their tender and specification brochure is by a method called "Measurement at Peak" using a refractor plate. This compensates for any shifting by measuring at the theoretical peak position [sic] and scanning .2 nm either side to find the true peak location, thus Varian does meet the mandatory specification.*

*Item #3: Varian meets and exceeds the mandatory specification capacity of the autosampler of 120 samples and 10 standards. The specifications of the SPS-5 state that it can hold 5 racks. One rack type that Varian offers can hold 100 samples, so it can hold 500 samples which is 370 samples more than specified.*

*As explained not only does Varian meet the specification but has offered the lowest responsive bid...*

The complainant accepted the above response with reference to the autosampler (Item #3) and no longer disputes this point.

In a letter dated October 28, 1993, ATS filed the subject complaint.

### **Discussion**

The essence of the ATS complaint is that DSS acted improperly in awarding the contract to Varian as it failed to evaluate the bids in accordance with the requirements stated in the ITT.

Section 17 of the *Free Trade Agreement Implementation Act* (the Act) provides that, in considering a complaint, the Board shall be guided by and determine whether Article 1305 of the Free Trade Agreement (FTA) and such other "*procedural requirements as are prescribed have been complied with in respect of the procurement that is the subject-matter of the complaint.*"

In the Board's opinion, in considering ATS's complaint, there are two procedural requirements that must be addressed in deciding this complaint.

Chapter 13 of the FTA, referred to in subsection 21(1) of the Act, incorporates the *GATT Agreement on Government Procurement* (the Code). Paragraph 15(j) of Article V of the Code reads:

*The submission, receipt and opening of tenders and awarding of contracts shall be consistent with the following:*

*(j) awards shall be made in accordance with the **criteria** and **essential requirements specified** in the tender documentation.* [emphasis added]

As well, paragraph 4 of Article 1305 of the FTA reads, in part:

*...each Party shall ensure that complete documentation and records, including a written record of all communications substantially affecting each procurement are maintained...*

It is thus left to the Board to determine whether or not DSS complied with these procedural requirements in evaluating the contract awardee's tender in respect of the issues raised in the complaint and in awarding the contract.

The first of the two mandatory specifications addressed by the complainant reads:

- \* - *165 to 850 nm wavelength range with 0.009 nm resolution (all wavelengths in this range). For example: analysis of S @ 180.731, Cl @ 837.597, and Al @ 167.08*

In response to this mandatory specification, only one bidder, ATS, offered a resolution not greater than 0.009 nm for the wavelength range of 165-850 nm.

The government, in the GIR, contends that what was requested in the specification was the "*BEST resolution performance within all wavelength ranges*" and that it is not possible to have a resolution of 0.009 nm over a wavelength range of 165-850 nm. It is also noteworthy that, although the complainant indicated that the instrument it offered could meet this specification with a resolution of 0.009 nm throughout the wavelength range (165-850 nm), the technical literature it provided, as part of its tender, is at variance with this statement. Three of the bidders consulted during the investigation on this point, including the American distributor of the product offered by ATS, indicated that a 0.009 nm resolution is possible in the lower end of the wavelength range only.

Nevertheless, the Board must base its decision on the specification in the ITT. It questions why the government, after indicating the wavelength range and the required resolution adds, in parenthesis immediately after 0.009 nm resolution, "*all wavelengths in this range*". Is this wording superfluous? Could this mean that a responsive bidder would have to offer a spectrometer with the capacity to provide a 0.009 nm resolution throughout the 165-850 nm wavelength range?

In this regard, the Board concludes that, on the basis of the specification as stated in the ITT and the bidders' responses, it is reasonable to believe that the government wanted the resolution referred to in the specification to at least cover the low end of the wavelength range. The Board further concludes that the interpretation given to this feature by the complainant is also reasonable. The Board, therefore, finds that this mandatory requirement is subject to more than one reasonable interpretation and that, in these circumstances, the evaluation methodology applied and the rationale produced by the government at the time it made these decisions are critical in arriving at a conclusion on this point. This is addressed later.

The second issue raised by the complainant relates to another mandatory requirement, "*thermally stabilized optics*". The complainant argues that the government sought a spectrometer with this specific feature. The government responded by saying, "*The concern...is that changes in room temperature affect the instrument response [and therefore] there must be a mechanism in the*

*instrument to standardize the response even under fluctuations of room temperature."* The government then added that this could be accomplished in several ways, including, in the manner proposed by the contract awardee.

On this issue, the Board reviewed the tenders submitted to gain an appreciation of perhaps how the trade interpreted this requirement and noted that, in response to the "*thermally stabilized optics*" requirement, most bidders offered a thermal feature. The contract awardee did not. In fact, and of particular importance, its bid states, in part: "*Measurement at Peak using refractor plate **eliminating** requirement for thermal stabilization*" [emphasis added].

Taking into consideration the general responses from the trade (although that, by itself, would not be conclusive), Varian's response to this feature, and the wording of this requirement (even when giving it a liberal interpretation), the Board is of the view that the government did not properly evaluate the contract awardee's bid regarding this essential requirement as specified in the tender documentation. It may very well have been the government's intention to accept an alternative method to standardize the instrument response but, if it did, it should have provided for this in the specification.

On the question of the evaluation methodology referred to earlier, the Board finds that, in evaluating the mandatory requirements, the government did not apply a systematic method nor did it offer acceptable rationale for its decisions. When requested to provide a record of the evaluation, the Board was given a document which, on its face is incomplete and ambiguous, at times containing entries that are in conflict with each other. The investigation also revealed that a price tabulation of the offers was made by the government, although it was not in the procurement file when the Board received it from the government.

The Board finds, from the evidence provided to it by the government, that there is insufficient transparency in the way that the government carried out the technical evaluation. Decisions were made based on an assessment methodology and rationale that were not documented in the procurement file. The government has an obligation to maintain complete documentation and records, including all communications substantially affecting each procurement, so that verification can be made as to whether or not the procurement process under review was conducted pursuant to procedural requirements.

In conclusion, the Board determines that the government did not make the award in accordance with at least one of the two essential requirements specified in the tender documentation that are in dispute here. The Board further determines that the government did not maintain complete documentation and records substantially affecting this procurement.

Therefore, the Board recommends that, given the spectrometer has not been delivered, the government terminate the contract and, if the requirement still exists, a new solicitation for the contract be issued.

The complainant is awarded its reasonable costs for filing and pursuing the complaint.

## **DETERMINATION**

The Board has determined that this procurement by the Department of Supply and Services does not comply with all of the requirements referred to in Section 17 of the *Canada-United States Free Trade Agreement Implementation Act* in that the department failed to conduct the evaluation as provided for in the ITT and it failed to maintain complete documentation and records substantially affecting this procurement.

Taking the afore-mentioned into consideration, the Board finds for the complainant and awards it its reasonable costs in filing and proceeding with the complaint. Furthermore, the Board, noting that the spectrometer has yet to be delivered, recommends that this contract be terminated and, should the requirement still exist, that a new solicitation for the contract be issued.

**J. Craig Oliver**

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**Chairman**

**Procurement Review Board of Canada**