

Canada Foundation for Innovation Workshop: Fair Market Value

Case Study #2

Professor Letitia Wright has applied for and been awarded a grant from the Canada Foundation for Innovation (CFI). One of the items on her CFI project is a Real Time Digital Simulator. Professor Wright has engaged Nathan King from Procurement Services to assist him with the procurement of this equipment.

Together, they have compiled a Request for Proposal (RFP) 20200202 for the Real Time Digital Simulator. They have posted it on MERX according to Procurement guidelines and have received 2 responses from RTDS Technologies and OPAL-RT Technologies. After a thorough analysis from the Evaluation Committee, comprised of Professor Wright, Angela Bassett, Danai Gurira and Nathan King, RTDS Technologies was awarded the contract for the Spinning Real Time Digital Simulator

As per CFI Policy, a Fair Market Value (FMV) Assessment must be completed to evaluate the reasonableness of the FMV of the Real Time Simulator from RTDS Technologies.

Professor Wright has come to you to assist her with compiling the Fair Market Value Assessment. She has provided to you with the following documentation:

1. Evaluation Matrix compiled by the Evaluation Committee (.xlsx file)
2. Response to RFP from RTDS Technologies (Pages 2-4 of this .pdf file)
3. Response to RFP from OPAL-RT Technologies (Pages 5-8 of this .pdf file)

Part A)

Using the CS2 FMV assessment template (.xlsx), please compile the FMV Assessment using information from the documentation provided to you by Professor Wright.

Part B)

Professor Wright noticed quite a bit of discrepancy between the RTDS Technologies and OPAL-RT Technologies responses to the RFP and worries that the FMV Assessment will not provide a strong enough argument for the FMV of the Real Time Digital Simulator.

What other information could Professor Wright request to strengthen the FMV Assessment?

Nathan King has provided a comparable quote from RTDS (pages 9-12 of this .pdf file) for a similar Real Time Digital Simulator sold to another institution. He has provided it to you. How would you use it to strengthen the FMV Assessment analysis?

RTDS TECHNOLOGIES

Schedule D Part 2

Financial Submission Requirements and Evaluation Criteria

FINANCIAL SUBMISSION REQUIREMENTS AND EVALUATION CRITERIA SCHEDULE D PART 2 TO THE RFP

A. FINANCIAL SUBMISSION – GENERAL

Proponents should provide their pricing response in the table below. For components already included, please indicate “incl.” in the Net Selling Price column.

The total cost below should include all costs associated with the Expansion Equipment, including delivery FOB (North American Shipping Terms) to the University, installation, testing, commissioning, set-up, the warranty and service coverage and all training requirements (including travel accommodation costs for trainers).

1. Fees – 20 Points

Qty	Model #	Components	List Price	Normal Discount	Educational Discount	CFI Discount	Net Selling Price
1	NovaCor	Real Time Simulator Expansion	312,750		62,550	2,670	247,530
1		Delivery	2,000			2,000	0
1		Installation & Testing/Commissioning/Training	17,650			17,650	0
1		Standard Warranty One (1) Year	5,850	5,850			0
1		Service Agreement per year (free for lifetime of simulator)	6,000		6,000		0
		TOTAL	344,250	5,850	68,550	22,320	247,530

All pricing is in Canadian Dollars (CAD).
No taxes are included
Price List can be found on the next page

In the event of mathematical errors in extension of prices or other ambiguities, unit prices shall govern over total bid prices, and words shall govern over numbers.

Delivery Lead Time: 4 weeks from contract signing

The University will not be reimbursing any expenses, including but not limited to:

- Administrative mark up
- Travel and Transportation
- Parking
- Accommodations & Meal

RTDS Simulator CAD Price List: NovaCor

Prices valid until March 31, 2021

Cubicles

➤ Mid-Size NovaCor Cubicle	\$ 13,000.00
➤ Flight Case (NovaCor Chassis)	\$ 650.00
➤ Portable I/O Cubicle	\$ 1,950.00
➤ Flight Case (Portable I/O Cubicle)	\$ 1,450.00

Processing Hardware

➤ NovaCor Chassis (includes 1 licensed core)	\$ 78,000.00
➤ Additional NovaCor Core License	\$ 45,500.00

Auxiliary I/O Cards

➤ 12-Channel Analogue Output Card (GTAO)	\$ 7,100.00
➤ 12-Channel Analogue Input Card (GTAI)	\$ 7,100.00
➤ 64-Channel Digital Output Card (GTDO)	\$ 7,100.00
➤ 64-Channel Digital Input Card (GTDI)	\$ 7,100.00
➤ Time Synchronization Card (GTSYNC)	\$ 7,100.00

Additional Auxiliary Cards/Components

➤ Global Bus Hub (GBH) – 36 channels	\$ 13,000.00
➤ Inter-Rack Communication Switch – per 24 channels	\$ 20,400.00
➤ GTNETx2 Network Interface Card	\$ 17,650.00
➤ GTNET Chassis (houses up to 3 GTNET cards)	\$ 3,900.00
➤ Aurora License for NovaCor chassis	\$ 7,100.00
➤ High Voltage Interface Panel	\$ 5,300.00
➤ GTFPGA Unit	\$ 17,650.00

Software

➤ RSCAD/RTDS Graphical User Interface including Power/Control System Compilers/Libraries	\$ 123,650.00
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Warranty/Maintenance

➤ 1 year extended hardware warranty (per NovaCor chassis)	\$ 5,850.00
➤ 1 year extended software maintenance	\$ 6,000.00

NOTES:

- All quoted prices are FCA Winnipeg and in Canadian Dollars (CAD)
- A 20% discount will be applied to the hardware/software prices for Canadian Universities
- Universities receive extended software maintenance free of charge for the lifetime of their RTDS Simulator

OPAL RT

Schedule D Part 2

Financial Submission Requirements and Evaluation Criteria

**FINANCIAL SUBMISSION REQUIREMENTS AND EVALUATION CRITERIA
SCHEDULE D PART 2 TO THE RFP**

A. FINANCIAL SUBMISSION – GENERAL

Proponents should provide their pricing response in the table below. For components already included, please indicate “incl.” in the Net Selling Price column.

The total cost below should include all costs associated with the Expansion Equipment, including delivery FOB (North American Shipping Terms) to the University, installation, testing, commissioning, set-up, the warranty and service coverage and all training requirements (including travel accommodation costs for trainers).

1. Fees – 20 Points

Qty	Model #	Components	List Price	Normal Discount	Educational Discount	CFI Discount	Net Selling Price
1	OP5707	Real Time Simulator Expansion	175,414.28	0.00	39,639.91	58,050.00	77,724.37
1		Delivery					Incl.
0		Installation & Testing					
0		Commissioning					
0		Training					
1		Standard Warranty One (1) Year					Incl.
1		Service Agreement					Incl.
		TOTAL	175,414.28	0.00	39,639.91	58,050.00	77,724.37

In the event of mathematical errors in extension of prices or other ambiguities, unit prices shall govern over total bid prices, and words shall govern over numbers.

Delivery Lead Time _____ 3 weeks ARO _____

The University will not be reimbursing any expenses, including but not limited to:

- Administrative mark up
- Travel and Transportation
- Parking
- Accommodations & Meals

Canada Foundation for Innovation (CFI)

CFI is an independent corporation created by the Government of Canada to fund research infrastructure. The CFI's mandate is to strengthen the capacity of Canadian universities, colleges, research hospitals and non-profit research institutions to carry out world-class research and technology development that benefits Canadians. Further information about the CFI can be found at www.innovation.ca.

CFI requires all Suppliers to identify and document the standard market price for the equipment/service proposed and the University's one-time special pricing, the difference being an "in-kind" contribution. The standard market price should be the price normally provided to educational institutions. In addition, Suppliers must identify and document the standard market price of any equipment supplied at no charge. Suppliers are asked to provide these details in their Quote. It is not mandatory for Suppliers to provide an in-kind contribution. If the list price and the normal educational prices are the same, Suppliers should provide a statement in their Quote to explain the rationale behind their pricing strategy.

educational price and the in-kind contributions may be audited for reasonableness by the CFI.

To help ensure the accuracy of the pricing information, the following definitions are provided:

Normal Discount

A discount normally offered to the University, taking into consideration factors such as the University's current volume of transactions and location. A discount for early settlement or for settlement in cash is considered to be a normal discount.

Educational Discount

A discount offered to the University due to its educational status.

Normal Educational Price

The price that would normally have been charged to the University after normal and educational discounts, but prior to any discount offered as a contribution towards the CFI-funded purchase or project.

In-kind Contribution

A non-monetary resource that an external partner offers as a contribution towards a CFI-funded project. It may include the value, in whole or in part, of eligible capital items (i.e. equipment, accessories/options and software), or non-capital items (i.e. extended warranties, delivery, installation costs and training) that are needed to bring the infrastructure into service. The in-kind contribution is equal to the best normal educational prices, less the net selling price (if any).

Net Selling Price

The cash consideration payable by the University.

B. FINANCIAL SUBMISSION REQUIREMENTS AND EVALUATION CRITERIA

Submission Requirements	Maximum Pages	Evaluation Criteria	Maximum Points
<p>The Proponent shall submit the following:</p> <p>(a) Financial Submission</p> <p>1. Fees</p>	N/A	<p>Each Proponent will receive a percentage of the total possible points allocated to price it has bid by dividing that Proponent's price into the lowest bid price in that category.</p> <p>For example, if a Proponent bids \$120.00 and that is the lowest bid price, that Proponent receives 100% of the possible points ($120/120 = 100\%$). A Proponent who bids \$150.00 receives 80% of the possible points ($120/150 = 80\%$), and a Proponent who bids \$240.00 receives 50% of the possible points ($120/240 = 50\%$).</p>	10 Points



RTDS[®] SIMULATOR PROPOSAL

Prepared for:

Date: June 6, 2019

Our Reference: P3261.5



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1 INTRODUCTION

RTDS Technologies is pleased to provide the following proposal for an RTDS® Simulator installation at .

RTDS Technologies has based the proposal on information provided by . If it is decided that the simulation requirements should be changed, RTDS Technologies will be pleased to adjust the proposal accordingly.

The RTDS Simulator proposal consists of one (1) NovaCor chassis with 2 licensed cores, as well as input and output (I/O) devices for connection of the simulator to external equipment. Additional core licenses (up to a maximum of 10 cores per chassis), chassis, and I/O cards can be added to the simulator at any time.

2 PRICE

HARDWARE

Item 1 : One (1) NovaCor chassis, including:

- 2 cores licensed per chassis
- 1 GTFPI card per cubicle
- 1 Low Voltage Digital Input/Output Interface Panel per cubicle
- 1 mid-size NovaCor cubicle

\$ 136,500.00

Item 2 : One (1) High Precision GTAO analogue output (total of 12 ch., optically isolated 16-bit d/a converters) rail-mounted units

\$ 7,100.00

Item 3 : One (1) High Precision GTAI analogue input (total of 12 ch., optically isolated 16-bit a/d converters) rail-mounted units

\$ 7,100.00

Item 4 : One (1) GTDI High Speed Digital Input (total of 64 optically isolated digital input channels) rail-mounted units

\$ 7,100.00

Item 5 : One (1) GTDO High Speed Digital Output (total of 64 optically isolated digital output channels) rail-mounted units

\$ 7,100.00

SOFTWARE

Item 6 : RTDS Simulator Software, including

- RSCAD™ Graphical User Interface Software
- RTDS Compiler
- Standard Power and Control System Component Libraries

\$ 123,650.00

Comparable Quote

TESTING AND INSTALLATION

Item 7 : Final Factory Testing (in Winnipeg)

Included in overall package

Item 8 : On-site Installation, Commissioning and Training, including:
Work to be conducted by RTDS Technologies qualified personnel over a five day period.

\$ 17,650.00

MISCELLANEOUS ITEMS

Item 9 : Additional charge for delivery DAP (Delivered At Place according to Incoterms 2010)

\$ 2,000.00

TOTAL

\$ 308,200.00

**IN-KIND CONTRIBUTION FOR
RTDS SIMULATOR HARDWARE**

\$ - 32,980.00

**IN-KIND CONTRIBUTION FOR
RTDS SIMULATOR SOFTWARE**

\$ - 123,650.00

**IN-KIND CONTRIBUTION FOR
COMMISSIONING AND TRAINING**

\$ - 17,650.00

**IN-KIND CONTRIBUTION FOR
SHIPPING**

\$ - 2,000.00

DISCOUNTED TOTAL

\$ 131,920.00

TOTAL INCLUDING GST

\$ 138,516.00

NOTES:

- All quoted prices are in Canadian Dollars (CAD)