

UNIVERSITÀ DI PAVIA Dipartimento di Ingegneria Industriale e dell'Informazione

II Direttore Prof. Riccardo Bellazzi

Titolo X Classe 4 Fascicolo n. 3861 Anno 2020 Allegato 1

OGGETTO DECRETO: Determina a contrarre tramite affidamento diretto extra Mepa (con preventivo già acquisito) – Acquisto di un servizio di realizzazione di circuiti integrati Optical RF front-end - The Governing Council of the University of Toronto

IL DIRETTORE DEL DIPARTIMENTO

- **PREMESSO** che il Dipartimento di Ingegneria Industriale e dell'Informazione ha necessità di procedere all'acquisto di un servizio di realizzazione di circuiti integrati Optical RF front-end, per le esigenze di svolgimento dell'attività di ricerca del Prof. Rinaldo Castello;
- **RICHIAMATO** l'art.32 (*Fasi delle procedure di affidamento*), comma 2, del D.Lgs. n.50/2016 e s.m.i. (*Codice dei contratti pubblici*) ai sensi del quale le stazioni appaltanti, in conformità ai propri ordinamenti, decretano o determinano a contrarre, individuando gli elementi essenziali del contratto e i criteri di selezione degli operatori economici e delle offerte;
- **VISTO** l'art.1, comma 449 della Legge n.296/2006 e s.m.i. ai sensi del quale le istituzioni universitarie sono tenute ad approvvigionarsi utilizzando le convenzioni quadro di Consip s.p.a.;
- ACCERTATA l'insussistenza di una convenzione Consip attiva per i servizi richiesti;
- VISTO l'art.1, comma 450 della Legge n.296/2006 e s.m.i. ai sensi del quale le Università per acquisti di beni e servizi di importo pari o superiore a € 5.000,00 e inferiori alla soglia di rilievo comunitario sono tenute a fare ricorso al Mercato Elettronico della Pubblica amministrazione;
- ACCERTATO che i servizi richiesti non sono presenti nel catalogo MEPA;
- ACQUISITO il preventivo dell'operatore The Governing Council of the University of Toronto, individuato dal Prof. Castello mediante indagine di mercato informale, che ha offerto per i servizi in oggetto l'importo di CAD\$ 16.800,00 (IVA esclusa) (*Allegato 1: Subcontract Agreement*)
- ACCERTATA la congruità del preventivo proposto con gli attuali costi di mercato e la compatibilità dell'importo con i vincoli imposti dalla vigente normativa per poter procedere ad affidamento diretto;
- **RICHIAMATO** l'art. 1, comma 1, lett. a) della Legge n. 120/2020 che consente di procedere per acquisti di beni e servizi di importo inferiore a € 75.000,00=. mediante affidamento diretto anche senza previa consultazione di due o più operatori economici;
- **RICHIAMATO** il Regolamento di Ateneo per l'Amministrazione, la Finanza e la contabilità, con particolare riguardo all'art. 37 (*Poteri di spesa*);
- ACQUISITO il CIG n. ZC72F49D46;

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http://iii.unipv.it/ E-mail segreteria.iii@unipv.it/ PEC amministrazione-centrale@certunipv.it/ C.F. 80007270186 P. IVA 00462870189



Il Direttore Prof. Riccardo Bellazzi

• ACCERTATA la sussistenza della copertura finanziaria;

DISPONE

- di autorizzare, ai sensi dell'art. 1, comma 1, lett. a) della Legge n. 120/2020, l'affidamento diretto all'operatore The Governing Council of the University of Toronto della fornitura di un servizio di realizzazione di circuiti integrati Optical RF front-end;
- di nominare la Dott.ssa Nicoletta Galli responsabile del procedimento, con il supporto del Prof. Castello, richiedente l'acquisto;
- di far gravare la relativa spesa quantificata complessivamente in CAD\$ 20.496,00 (già comprensivi di IVA) sul progetto "CASTHISI", del bilancio di previsione dell'Ateneo relativo all'esercizio finanziario 2020.

Pavia, data della sottoscrizione digitale

IL DIRET^{*}TORE Prof. Riccardo BELLAZZI (documento firmato digitalmente)

Università di Pavia - Dipartimento di Ingegneria Industriale e dell'Informazione

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Allegato 1

This **SUBCONTRACT AGREEMENT** (the **"Agreement"**) is made effective November 15, 2020 (the **"Effective Date"**).

BETWEEN:

UNIVERSITY OF PAVIA

Department of Electrical, Computer and Biomedical Engineering, Fiscal Code 80007270186, VAT number 1T00462870189, located in Pavia, Via Ferrata n. 5, represented by the Director, Prof. Riccardo Bellazzi authorized to sign the present document

(the "Pavia")

- and -

THE GOVERNING COUNCIL OF THE TORONTO OF TORONTO

a corporation vested with the government, management and control of the University of Toronto by the *University of Toronto Act, 1971* and having offices at Banting Institute, 100 College Street, Suite 413, Toronto, Ontario M5G 1L5, Canada

(the "Toronto")

(Individually a "Party" and collectively the "Parties")

WHEREAS Pavia has received an unrestricted Huawei research grant;

AND WHEREAS Pavia agrees to transfer funding to Toronto to undertake research activities as described in the attached <u>Appendix "A"</u> for the research project entitled "Optical RF interface" (the **"Project"**);

NOW THEREFORE the Parties hereby agree as follows:

1.0 THE PROJECT

1.1 Project. Toronto will perform the Project as described in the attached <u>Appendix "A"</u> in accordance with Toronto policies and procedures. The manner of performance of the Project shall be determined solely by the Toronto Investigator, after consultation with Pavia and subject to substantial compliance in all respects with <u>Appendix "A"</u> and all other provisions of this Agreement, as may be amended from time to time. Neither Party makes any warranties or

representations regarding its ability to achieve, nor shall it be bound to accomplish, any particular research objective or results.

- 1.2 **Investigators.** The researcher responsible for the conduct of the Project at Toronto and the overall co-ordination of the Project is Professor Antonio Liscidini of the Department of Electrical and Computer Engineering (the **"Toronto Investigator"**). The researcher responsible for the conduct of the Project by Pavia is Professor Rinaldo Castello (the **"Pavia Investigator"**).
- 1.3 **Budget.** In consideration of Toronto carrying out the Project, Pavia will contribute to Toronto the sum of CAD \$16,800 in compensation for the direct and indirect costs of the work, all generally in accordance with the budget contained in the attached <u>Appendix "B"</u>.
- 1.4 Payment. To initiate payment, Toronto shall issue invoice and Pavia shall pay the sum set out in <u>Article 1.3</u> to Toronto in accordance with the payment schedule in the attached <u>Appendix</u> <u>"B"</u>.
- 1.5 **Equipment.** Toronto will own any equipment or material purchased by Toronto under the Project.

2.0 INTELLECTUAL PROPERTY

- 2.1 **Definitions.** In this Agreement,
 - a. "Background Intellectual Property" means Intellectual Property of a Party that is:
 - i. proprietary to that Party and was conceived, created, or developed prior to, or independent of, any research performed pursuant to or related to this Agreement or a Project hereunder; and
 - ii. necessary for the performance of a Project and is listed in the attached <u>Appendix</u> <u>"C".</u>
 - b. **"Foreground Intellectual Property"** means Intellectual Property that is discovered, created or reduced to practice in the performance of a Project.
 - c. **"Intellectual Property"** (or "**IP**") means all intellectual property, including technical information, know-how, models, drawings, specifications, prototypes, inventions and software.

2.2 Ownership

- a. Background Intellectual Property of a Party shall remain the exclusive property of such Party.
- b. Pavia shall own all Foreground Intellectual Property created solely by Pavia's personnel.
- c. Toronto shall own all Foreground Intellectual Property created solely by Toronto's personnel.

d. The Parties shall jointly own all Foreground Intellectual Property created jointly by the Parties' personnel. Creative contribution shall be determined according to the rules of inventorship under patent law, whether IP is patentable or not.

3.0 CONFIDENTIAL INFORMATION

- 3.1 **Confidential Information.** The Parties may disclose confidential information one to another to facilitate performance of this Agreement. Such information will be identified as "confidential" in writing at the time of its transmittal, or so reduced to writing within ten (10) days thereafter ("Confidential Information"), and will be safeguarded and not disclosed to third parties by the receiving Party. Confidential Information will not include information that:
 - a. is already known to the Party to which it is disclosed;
 - b. is or becomes part of the public domain without breach of this Agreement;
 - c. is obtained from third parties which have no obligations to keep confidential to the Parties to this Agreement;
 - d. was independently developed by the receiving Party without the use of any of the Confidential Information of the disclosing Party.
- 3.2 Notwithstanding anything contained herein, each Party may disclose Confidential Information to its officers, employees, consultants, agents, and students on a need-to-know basis to facilitate performance of the Project, provided that such persons agree to be bound by terms at least as restrictive as those contained herein.
- 3.3 All obligations of confidence and non-use created under this Agreement shall terminate five (5) years from the completion or termination of this Agreement. Upon written request of the disclosing party, the receiving party agrees to return all copies of Confidential Information to the disclosing party; provided, however, that the receiving party shall be entitled to retain one (1) archival copy of all Confidential Information solely to ensure compliance with their rights and obligations hereunder.

4.0 DISCLOSURE OF RESEARCH RESULTS

4.1 **Disclosure of Research Results.** Pavia acknowledges and agrees that under Toronto policy, Toronto reserves on behalf of itself, the Toronto Investigator and all other Project participants the right to disseminate information or otherwise publish the research results arising in performance of the Project. Pavia's support of the Project will be acknowledged in all such publications, and with attribution of authorship and/or contribution of Pavia in accordance with accepted academic publishing standards.

5.0 TERM AND TERMINATION

- 5.1 **Term.** This Agreement will enter into force as of the Effective Date and will terminate on November 15, 2021, unless sooner terminated in accordance with Article 5.2 below, or upon the written agreement of the Parties.
- 5.2 **Termination.** Either Party may terminate this Agreement upon thirty (30) days written notice to the other Party. In the event of termination, Toronto will be entitled to credit for work performed hereunder before termination including Toronto's termination and severance costs and Pavia will be entitled to a return of the balance of any advance payment.
- 5.3 **Effect of Termination.** The provisions of <u>Articles 1.4, 1.5, 2.0, 3.0, 4.0, 5.0, 6.0 and 7.0</u> will survive termination or expiration of this Agreement in accordance with their terms.

6.0 LIABILITY AND INDEMNITY

- 6.1 **Limitation of Liability.** Neither Party will be liable for any delays in the performance of its obligations under this Agreement resulting from circumstances or causes beyond its reasonable control, and in no case will the Parties be liable for loss of business or profit or other indirect or consequential damages.
- 6.2 Indemnity. Toronto will indemnify and save harmless Pavia against all costs, suits or claims on account of injuries (including death) to persons participating in the Project or to damage to Toronto property caused by the wilful or negligent act or omission of personnel of Toronto during the performance of this Agreement. Pavia will indemnify and save harmless Toronto and its employees, students and agents against all costs, suits or claims on account of injuries (including death) to persons participating in the Project or to damage to property caused by agents or personnel of Pavia during the performance of this Agreement.

7.0 MISCELLANEOUS

- 7.1 **Use of Names.** Neither Party will use the name of the other Party, or of any member of the other Party's personnel, in any advertising or publicity without the prior written approval of the other Party's authorized representative. However, both Parties may make the following information a matter of public record: name of Toronto Investigator; Toronto Investigator's department; Toronto's name; Pavia's name; Project title; Project duration; and, contract value.
- 7.2 **Notices.** Notices under this Agreement will be sent to the Parties as follows or to such other person as a Party may designate in writing:

For Technical and Scientific Matters:

	To Toronto:	To Pavia:
Name:	Antonio Liscidini	Rinaldo Castello
Department:	ECE	IIE Department
Address:	10 King's College Road	Via Ferrata 5
City, Province/State:	Toronto	Pavia (IT)
Postal/Zip Code,	M4Y0B8	27100
Country:		
Tel:	+14169786454	+39 3356863783
Email:	antonio.liscidini@utoronto.ca	rinaldo.castello@unipv.it

For Legal and Administrative Matters:

	To Toronto:	To Pavia:
Name:	Director, Partnerships	Director
Department:	Innovations & Partnerships Office (IPO), Toronto of Toronto	IIE Department
Address:	Banting Institute 100 College Street, Suite 413	Via Ferrata 5
City, Province/State:	Toronto, ON	Pavia (IT)
Postal/Zip Code, Country:	M5G 1L5 Canada	27100
Tel:	416 978-5557	
Email:	Innovations.partnerships@utoronto.ca	riccardo.bellazzi@unipv.it

For Financial Matters:

	To Toronto:	To Pavia:
Name:	Tomas Rivas	Nicoletta Galli
Department:	Research Oversight & Compliance Office (ROCO), Toronto of Toronto	IIE Department
Address:	McMurrich Building, F2 12 Queen's Park Crescent W.	Via Ferrata 5
City, Province/State:	Toronto, ON	Pavia (IT)
Postal/Zip Code, Country:	M5S 1S8 Canada	27100
Tel:	+1416-978-4800	+390382985898
Email:	Tomas.rivas@utoronto.ca	nicoletta.galli@unipv.it

- 7.3 **No Assignment.** Neither Party may sell, assign, encumber, licence or otherwise transfer any of its rights, duties or obligations under this Agreement without the prior written consent of the other Party, which consent may not be unreasonably withheld.
- 7.4 **Independent Parties.** The Parties are independent parties and nothing in this Agreement will constitute either Party as the employer, principal or partner of or joint venturer with the other Party. Neither Party has any authority to assume or create any obligation or liability, either express or implied, on behalf of the other Party.
- 7.5 **Successors.** This Agreement binds and ensures to the benefit of the Parties hereto and their respective heirs, successors and permitted assigns.
- 7.6 **Interpretation.** This Agreement will be governed by and construed in accordance with the laws of the Province of Ontario in Canada. In the event that a court of competent jurisdiction holds any provision of this Agreement to be invalid, such holding will have no effect on the remaining provisions of this Agreement, which will continue in full force and effect. Headings are used for convenience only and will not be used to interpret the provisions of this Agreement.
- 7.7 **Entire Agreement.** This Agreement is the entire agreement of the parties with respect to its subject matter and no change or modification will be valid unless it is in writing and signed by both parties.
- 7.8 **Counterparts.** This Agreement may be executed by signatures delivered by facsimile transmission or delivered electronically in optically scanned form; and/or it may be simultaneously executed by the parties in multiple counterparts, each of which will be considered to be an original instrument, and all of which taken together, where each Party has executed at least one counterpart, will constitute one and the same instrument.

(SIGNATURE PAGE FOLLOWS)

IN WITNESS WHEREOF by signature of their respective authorized officers, the Parties agree to be bound by the terms of this Agreement.

THE GOVERNING COUNCIL OF THE TORONTO OF TORONTO		UNIVERSITY OF PAVIA Department of Industrial and Information Engineering
NAME:	Tina Coccia	NAME: Riccardo Bellazzi
TITLE:	Director, Partnerships	TITLE: IIE Department Chair
DATE:		Date:

Acknowledgement by Toronto Investigator and Pavia Investigator:

Having read this Agreement, I hereby agree to act in accordance with all the terms and conditions herein, and further agree to ensure that all participants involved in this Agreement are informed of their obligations under such terms and conditions.

NAME: Antonio Liscidini TITLE: Professor DATE:

NAME: *Rinaldo Castello* TITLE: *Professor* DATE:

APPENDIX "A"

Description of the Project

The project is focused on the design of integrated circuits for Optical RF front-end. Two integrated RF front-end will be designed: a receiver and a transmitter. The work will be based on the quantized analog signal processing developed at the University of Toronto. Two Ph.D. students of the University of Pavia will be involved in the project. The students will be co-supervised by Prof. Rinaldo Castello and Prof. Antonio Liscidini. The latter will provide a initially remote supervision until the tape-out of the two integrated circuits. Cost of the prototyping will be covered by Prof. Antonio Liscidini. The goal is to perform the testing phase at the University of Toronto.

The project will follow the milestones reported in table I.

Month*	Milestone
0	Beginning of the project
2	Schematics ready for the layout
4	Layout ready for the Tape Out
5	Tape-Out
7	Fabrication and validation of the testing
	board
8	Start of the testing phase
10	Termination of the testing phase
11	Dissemination of the results

Table I Milestones

*from the beginning of the project

APPENDIX "B"

Budget [and Payment Schedule]

Budget:

Project Budget:

Item		Budget (CAD) TOTAL
a.	Open	12,000
b.	Subtotal - Direct Costs	12,000
C.	Indirect Costs (40% of F)	4,800
d.	TOTAL CASH (B + C)	16,800
e.	In-kind Contribution (if applicable)	N/A

Payment schedule:

Payment Due Date	Payment Amount
Effective Date	CAD\$ 16,800

Payment method:

Bank Transfer

Payment Terms:

Net thirty (30) days

<u>CIG</u>: ZC72F49D46

APPENDIX "C"

Description of the Background Intellectual Property

Toronto Background IP:

Invention Disclosure # 10003643 "Quantized Analog Signal Processing"

Pavia Background IP: None