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**Abstract:**

The negotiation of components takes the ACCORD project from the stage where awards of components are determined, following peer review, to the delivery of components to Universities, setting in action the R&D activities of the ACCORD project.

In this report, we describe the calendar of this negotiation, the results, and we discuss the lessons learned in this experience.

**Keyword list:**

Photonic components, Optical components, negotiation of contracts and component fabrication.



## **Disclaimer**

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## Table of Contents

<b>DISCLAIMER</b> .....	<b>2</b>
<b>TABLE OF CONTENTS</b> .....	<b>3</b>
<b>1. EXECUTIVE SUMMARY</b> .....	<b>4</b>
<b>2. AGREEMENT FORMS FOR COMPANY AND FOR UNIVERSITY</b> .....	<b>5</b>
2.1 <i>WP-3 OBJECTIVES</i> .....	<i>5</i>
2.2 <i>PURCHASE OF THE COMPONENTS</i> .....	<i>5</i>
2.3 <i>DISPOSAL OF COMPONENTS:</i> .....	<i>5</i>
2.4 <i>AGREEMENTS BETWEEN ACCORD, THE COMPANY AND THE UNIVERSITY</i> .....	<i>6</i>
2.4.1 <i>Universities / end-users agree that:</i> .....	<i>6</i>
2.4.2 <i>Manufacturers understand that:</i> .....	<i>6</i>
2.4.3 <i>All parties agree:</i> .....	<i>7</i>
2.4.4 <i>Agreement forms</i> .....	<i>7</i>
2.5 <i>RECOMMENDATIONS FOR FURTHER IMPROVEMENTS TO FORMS</i> .....	<i>7</i>
<b>3. CALENDAR SCHEDULE DELAYS, WHAT HAS BEEN LEARNED</b> .....	<b>9</b>
3.1 <i>OVERALL CALENDAR</i> .....	<i>9</i>
3.2 <i>PROJECT BY PROJECT ANALYSIS AND CURRENT STATUS</i> .....	<i>12</i>
3.2.1 <i>Project 1: Photoporation using fiber tips</i> .....	<i>12</i>
3.2.2 <i>Project 2: Short pulse laser Eolite Corus 10G for micromachining of biodegradable implants and grooving of silicon wafer</i> .....	<i>13</i>
3.2.3 <i>Project 3: Adaptive Optics for Eye Physiology Studies</i> .....	<i>14</i>
3.2.4 <i>Project 4: Testing and system upgrading</i> .....	<i>15</i>
3.2.5 <i>Project 5: Characterisation of Semiconductor Optical Amplifiers and Electroabsorbers and their use in novel applications</i> .....	<i>16</i>
3.3 <i>MAJOR SCHEDULE DELAYS AND PROPOSED SOLUTIONS</i> .....	<i>17</i>
<b>4. PURCHASE AND DELIVERY OF COMPONENTS</b> .....	<b>18</b>
4.1 <i>INTRODUCTION</i> .....	<i>18</i>
4.2 <i>GENERAL PROCEDURES</i> .....	<i>18</i>
4.3 <i>NEGOTIATION PROCEDURES AND RESULTS</i> .....	<i>19</i>
4.3.1 <i>Project 1 Speciality Fiber Optical Tips</i> .....	<i>19</i>
4.3.2 <i>Project 2 Manufacturer: Eolite, France University: Tampere University of Technology, Finland</i> .....	<i>20</i>
4.3.3 <i>Project 3 Manufacturer: Visionica, Russia University: University of Latvia, Latvia</i> .....	<i>22</i>
4.3.4 <i>Project 4 Manufacturer: FiberLogix University: Universidad Politecnica de Madrid</i> .....	<i>23</i>
4.3.5 <i>Project 5 Manufacturer Centre for Integrated Photonics University: Universidad Politecnica de Valencia</i> .....	<i>24</i>
<b>5. CONCLUSIONS</b> .....	<b>25</b>
<b>ANNEX 1 SUMMARY OF OPERATING PROCEDURES</b> .....	<b>26</b>
<b>ANNEX 2 LOVALITE</b> .....	<b>27</b>
<b>ANNEX 3 EOLITE</b> .....	<b>29</b>
<b>ANNEX 4 VISIONICA</b> .....	<b>31</b>
<b>ANNEX 5 FIBRELOGIX</b> .....	<b>37</b>
<b>ANNEX 6 CENTRE FOR INTEGRATED PHOTONICS</b> .....	<b>39</b>



## 1. Executive Summary

In this deliverable WP-3 reports on the success of and the problems that are presented by this negotiation. In addition, the lessons learned will be incorporated in the proposal for a self-sustained components exchange program.

Following the award of components, the members of WP-3 began negotiations to specify the terms of the research under contract and the acquisition of components. Five awards were made, and all five projects have been negotiated successfully within the budget of the project. The negotiations were completed within 3 months, including the July-August vacation time. Delays on the university side are the rule, due in part to the more complicated university management hierarchy.

Component fabrication time averages to 2 months. If the first meeting of the project is taken as the start of the project, which in most of the cases is scheduled beginning 2008, there is an overall 7-month lag between the acceptance of the proposal and the beginning of the research project.

Specific suggestions are made here to firm up the language of the agreement forms. This should help to save additional time during the signature phase by reducing ambiguities in the contract language. At the same time, we suggest planning the calendar so that delays from the summer holiday absences do not affect this project.



## 2. Agreement forms for company and for university

### 2.1 *WP-3 Objectives*

WP3 Objectives in compiling Agreement forms for participating Companies and Universities were to:

- Determine an effective and auditable procedure for purchase of prototype photonic components that are used in such an initiative
- Create a simple and efficient agreement procedure that protects and enhances intellectual property of all the participants

In order to implement these objectives, WP-3 members developed an R&D agreement form based on the proposed guidelines in the Accord Technical Annex. The company supplying the components and the university doing the R&D were asked to sign this agreement. In addition, all partners were asked to certify jointly that they have reached an agreement on the treatment of intellectual property related to the R&D. However, ACCORD did not participate in this discussion. This is because the ACCORD Partners recognise that if IP issues are not defined before a project commences, to the satisfaction of all participating parties, they can cause unacceptable argument and ultimately even litigation.

ACCORD required both parties to sign a memorandum of understanding confirming the ground rules of the exchange. The ground rules that we proposed to use are summarized at the end of this section.

WP-3 finally informed WP-1, WP-2 and WP-4 when these negotiations had been completed, and the project was started or scheduled to start.

### 2.2 *Purchase of the components*

WP3 is responsible for the purchase of components. The project proposal was written with a budget for 10+ exchanges and a total components cost of €260.000. This budget might be subject to changes in view of re-allocation of resources during the course of the project. The ACCORD project is not aiming for a maximum number of exchanges in 2 years, but rather a significant number of exchanges that are representative of various photonics components and systems. The EPIC association, WP3 leader is the responsible partner. Nevertheless, each purchase order will be approved by the PC as well as EPIC.

### 2.3 *Disposal of components:*

At the close of the R&D project, an agreement will be sought per component regarding ownership of the component. It may be possible to re-use certain prototypes, for example, or to extend the period of the loan to permit continuation of a successful R&D collaboration.



## 2.4 *Agreements between ACCORD, the company and the university*

ACCORD partners decided that the success of the project would be ensured if both Company and University entered into contractual relationships. Hence the purchase of components was seen as an essential element of the project.

In a voluntary exchange between university and industry, it is sometimes the case that the university receives some components, but never gets around to measuring anything. Industry, on the other hand, sometimes provides non-functional or out-of-date components.

When ACCORD acquires a prototype component by purchase, it gains the benefit of assurance by industry of what component is being acquired, its functionality and nominal properties, and assurance that it represents a component in prototype production. When the university receives this component, it signs an agreement to perform the research in its proposition. The framework that ACCORD places around this exchange will do much to assure its success.

ACCORD proposes that participating companies and universities to subscribe to some basic ground rules:

### 2.4.1 *Universities / end-users agree that:*

- all prototypes are at a pre-commercial stage and may not have been fully tested, optimised or characterised. As such, they may have flaws, limited functionality, or reduced lifetime.
- the manufacturer or provider of the prototype is not obliged to commercialise the prototype, and the prototype may not become commercially available in the future.
- the prototype may embody the provider's proprietary intellectual property. Recipient agrees not to reverse-engineer or to allow anyone else to reverse-engineer prototypes provided by ACCORD.
- they receive the prototype strictly for use by students and employees within the receiving university's organisation.
- recipients are expected to publish/present the results of their research in the open literature.
- recipients are requested however, not to identify the provider of the prototype by name or implication without the provider's prior written permission.
- the recipient shall acknowledge the IST contribution to the research with a written acknowledgement in each publication or presentation.

### 2.4.2 *Manufacturers understand that:*

- they will be reimbursed for the cost of prototypes acquired by ACCORD. Such costs do not include development or other research costs.
- all prototypes are at a pre-commercial stage and cannot be items that are or were routinely offered for sale.
- the prototypes have reached a level of maturity that makes them suitable for research purposes.
- there is no obligation to commercialise the prototype.



### **2.4.3 All parties agree:**

- to hold harmless the EU, and the ACCORD consortium for any events resulting from a collaborative agreement.
- to negotiate and sign a mutually acceptable intellectual property agreement prior to the beginning of the exchange.

### **2.4.4 Agreement forms**

The forms (see deliverable D3.1) were drawn up following these guidelines. They have formed the basis of negotiations between the successful participants in the first call for components and R&D proposals. In four cases the forms were accepted with only minor modification but in one case a lengthy negotiation took place with the University.

Initially the University legal department wished to limit the Universities legal exposure by passing to the ACCORD partners liability for any accident arising from the use of the supplied component. The ACCORD Partners could not agree to this as they were merely acting as match makers. Hence the first reaction to the University's suggested amendment to the agreement was rejected. The Academic proposer was encouraged to explain to the legal department the objectives of ACCORD and revisit the Agreement. This was done and an acceptable document was returned to the ACCORD Partners. However, the common agreement between ACCORD, University and Supplier was not retained and instead ACCORD has an agreement with Supplier and a modified Agreement with the University. The lesson learnt was that ACCORD should encourage the Academic proposers to speak to their legal department when submitting the proposal and not wait until they have succeeded in winning an award.

## **2.5 Recommendations for further Improvements to forms**

In addition to the proposals for the form contained in the Accord Technical annex the agreement contains an obligation that the University presents to at least one workshop arranged by Accord. This step is necessary in order for Accord to meet its public dissemination objectives. Obviously there is no obligation to reveal confidential or proprietary information which might be involved with pre-market components and new use of components.

Since placing the contracts and approaching the project partners for the first meeting at least one project has expressed surprise that there is to be monitoring. The Introduction to the ACCORD Agreement form refers to monitoring but it would be better to include a section in the body of the contract. This would include the project monitoring actions namely:

- Ask the university to present the aim of the project to the ACCORD supervisor and the component provider.
- Ask the university to present the infrastructures and people who will be involved in the project.
- Ask the Supplier what they would like out of the project. Although this may give rise to different expectations, ACCORD wishes to encourage continuing liaison between company and University which is more likely if both parties are happy with the ACCORD project.



- Ask the component supplier to present the performance of the component. As the component is pre-market, it may not be well documented; hence a presentation of the Supplier's expectation for the component could well shorten the time the University needs to gain familiarity with the component.
- Ask for a detailed planning of the project. This will be necessary for the deliverables D4.1n and also for the follow up of the project as it will be possible to compare it with the monthly progress reports.
- Advise the university that they must send a progress report to ACCORD every month (D4.2n). Let's say every 4 workweeks since the meeting day, which will eliminate the problem of Christmas and other special holidays.
- Advise the university that they must send a final report to ACCORD (D4.3). We might have a copy of the IPR that both parties have signed within WP3 activities in order to be sure that these reports won't produce any trouble..
- Advise the university that they will need to present the results in one of the scheduled workshops (D.4.4).



### **3. Calendar Schedule Delays, What Has Been Learned**

This section will detail the overall calendar of the purchasing procedure, provide a project by project breakdown of the major delays encountered, and finally propose procedures which should be put in place for future calls in order to minimise the time required to advance from project award notification to project initiation.

#### **3.1 Overall Calendar**

Table 3.1 shows the overall calendar for the 5 selected projects from the moment when the various forms were sent to the University or Society (Hold Harmless Agreement, Component Reception, Intellectual Property Agreement, System Certification, Price Certification) until the present. The calendar indicates all the major steps in the prototype purchasing procedure (see key) which have been completed for each project.



Table 3.1 – Calendar of Purchasing Procedure

DATE		25/06/07										23/11/07	
WEEK N°		26-27	28-29	30-31	32-33	34-35	36-37	38-39	40-41	42-43	44-45	46-47	
PROJECT & PARTNER	1	University of St Andrews	Forms Sent 05/07/07									Forms Signed 14/11/07	
		Lovalite	Forms Sent 05/07/07	Forms Signed 11/07/07					PO issued 23/09/07				
	2	Tampere University of Technology	Forms Sent 26/06/07					Forms Signed 10/09/07					
		Eolite	Forms Sent 26/06/07									PO issued 09/11/07	Forms Signed 19/11/07
	3	University of Latvia		Forms Sent 11/07/07									
		Visionica		Forms Sent 11/07/07					PO issued 07/09/07				
			Forms Signed 20/07/07										
			Forms Signed 13/07/07										



4	Universidad Politecnica de Madrid	Forms Sent 29/06/07	Forms Signed 15/07/07									
	FiberLogix	Forms Sent 29/06/07		Forms Signed 22/07/07			PO issued 05/09/07					
5	Universidad Politecnic de Valencia	Forms Sent 28/06/07					Forms Signed 07/09/07					Components Received 16/11/07
	CIP	Forms Sent 28/06/07					Forms Signed 07/09/07 PO issued 09/09/07					Project Started 19/11/07

KEY :

- Date at which forms were sent to University or Society (Hold Harmless Agreement, Component Reception, Intellectual Property Agreement, System Certification, Price Certification)
- Date at which the signed forms were returned to ACCORD
- Date at which a purchase order was issued by EPIC
- Date at which the components were received by the participating university
- Official start date of the project



## 3.2 *Project by Project analysis and current status*

The following section will give a summary of the timeline for each project, and the reasons for any delays which were encountered. Based on this analysis, a set of propositions have been formulated in order to anticipate and minimise the effects of the most frequently encountered causes of delay (section 3.3).

### 3.2.1 *Project 1: Photoporation using fiber tips*

#### 3.2.1.1 *Partners involved:*

University : St Andrew's

Components: Fibre Face Components

Manufacturer: Lovalite

#### 3.2.1.2 *Current Project Status:*

Awaiting confirmation of First Delivery of fiber face components

The contract forms were sent to the university and company on July 5th 2007. The completed forms were returned by the company on the 11th of July. The correctly signed forms were received from the University on the 14th of November – the delay involved here was simply due to administrative issues on the part of the University and the initial reception of forms which were not correctly signed. Pricing negotiations were initiated on 5th of July 2007 and completed on 14th of September 2007 (see section 4.3.1). A purchase order was issued by EPIC on the 23rd of September 2007. The major delay in this project concerned the pricing negotiation which was complicated by two main factors:

- Negotiations which took place over the summer vacation period
- Discussion between the University and the Company to identify the exact nature of the fibre tips to be delivered.

#### 3.2.1.3 *Estimated Project start date (1<sup>st</sup> meeting with the project):*

First batch of components have been shipped

First meeting with the project is scheduled early 2008



### **3.2.2 Project 2: Short pulse laser Eolite Corus 10G for micromachining of biodegradable implants and grooving of silicon wafer**

#### *3.2.2.1 Partners involved:*

University : Tampere University of Technology

Components: IR to UV Industrial Laser

Manufacturer: Eolite

#### *3.2.2.2 Current Project Status:*

Awaiting delivery of prototype – project not yet started

The contract forms were sent to the university and company on June 26<sup>th</sup> 2007. The completed forms were returned by the company on the 19<sup>th</sup> of November and by the University on the 10<sup>th</sup> of September. The delay in the signing of the University forms was caused by reluctance on the part of the University legal department to sign the hold harmless agreement. The delay in the signing of the company forms was caused by administrative issues. Pricing negotiations were initiated on 26<sup>th</sup> of June 2007 and completed on 23<sup>rd</sup> of October 2007 (see section 4.3.2). A purchase order was issued by EPIC on the 9<sup>th</sup> of November 2007. The major delay in this project concerned the pricing negotiation which was complicated by two main factors:

- Negotiations which took place over the summer vacation period
- An initial quotation from the company (43000 €) which was very high with respect to the ACCORD budget for component purchase. The subsequent negotiations were relatively time consuming (see section 4.3.2)

#### *3.2.2.3 Estimated Project start date (1<sup>st</sup> meeting with the project):*

The lease agreement with EOLITE has been signed

The estimated delivery date for the prototype is the end of December

First meeting with the project is scheduled early 2008



### **3.2.3 Project 3: Adaptive Optics for Eye Physiology Studies**

#### *3.2.3.1 Partners involved:*

University : University of Latvia

Components: Wavefront Sensor

Manufacturer: Visionica

#### *3.2.3.2 Current Project Status:*

Awaiting delivery of prototype – project not yet started

The contract forms were sent to the university and company on July 11<sup>th</sup> 2007. The completed forms were returned by the company on the 13<sup>th</sup> of July and by the University on the 20<sup>th</sup> of July. The reactivity of both actors with respect to signing of the documents was exemplary. Pricing negotiations were initiated on 11<sup>th</sup> of July 2007 and completed on 7<sup>th</sup> of September 2007 (see section 4.3.3). A purchase order was issued by EPIC on the 24<sup>th</sup> of September 2007. There were no major complications in documentation signature or pricing negotiations for this project. A reasonably long delivery lead time (2 months) means that the prototype is due to be delivered at the end of November 2007.

#### *3.2.3.3 Estimated Project start date (1<sup>st</sup> meeting with the project):*

Shipping by Visionica is due the 15th of December

First meeting with the project is scheduled early 2008



### **3.2.4 Project 4: Testing and system upgrading**

#### *3.2.4.1 Partners involved:*

University : Universidad Politecnica de Madrid

Components: All-fibre stripper

Manufacturer: FiberLogix

#### *3.2.4.2 Current Project Status:*

Awaiting delivery of prototype – project not yet started

The contract forms were sent to the university and company on June 29<sup>th</sup> 2007. The completed forms were returned by the company on the 22<sup>nd</sup> of July and by the University on the 15<sup>th</sup> of July. Pricing negotiations were initiated on 29<sup>th</sup> of June 2007 and completed on 22<sup>nd</sup> of July 2007 (see section 4.3.4). A purchase order was issued by EPIC on the 5<sup>th</sup> of November 2007 – this delay was caused by non provision of an official pricing offer by Fiberlogix (necessary as a down payment was required). Delivery was estimated at one week from receipt of the purchase order, however there have been delays on the part of the company. The major delays with respect to this project were the following:

- Non provision of an official quotation by the manufacturer
- Non-respect of quoted delivery delay by the manufacturer

#### *3.2.4.3 Estimated Project start date (1<sup>st</sup> meeting with the project):*

Shipping from Fibrelogix was expected end of November but is one month overdue

First meeting with the project is scheduled early 2008



### **3.2.5 Project 5: Characterisation of Semiconductor Optical Amplifiers and Electroabsorbers and their use in novel applications**

#### *3.2.5.1 Partners involved:*

University : Universidad Politécnica de Valencia

Components: SOA / EA Modulators

Manufacturer: CIP

#### *3.2.5.2 Current Project Status:*

Prototypes delivered - project started on the 19th of November 2007

The contract forms were sent to the university and company on June 28th 2007. The completed forms were returned by both the company and the University on the 7th of September. Pricing negotiations were initiated on 26th of June 2007 and completed on 30th of August 2007 (see section 4.3.5). A purchase order was issued by EPIC on the 9th of September 2007. Components were delivered to the University on the 16th of November.

The only major cause of delay with respect to this project was the fact that contract negotiations took place during the summer vacation period.

#### *3.2.5.3 Estimated Project start date (1<sup>st</sup> meeting with the project):*

Components from CIP have been shipped

Components were received at Universidad Politécnica de Valencia

First meeting with the project is scheduled early 2008



### 3.3 *Major Schedule delays and proposed solutions*

**Problem:** Prototype negotiation coinciding with summer vacation period (all projects).

**Solution:** The calendar of the calls for proposals should be designed to avoid the signing of project agreements and pricing negotiations during the summer vacation period, as this often requires the simultaneous presence of several people at the University or Manufacturer. The timing of the second call for research proposals is such that this problem will be avoided.

**Problem:** Initial pricing quotations which are higher than initial estimates given by the company (project 2).

**Solution:** An accurate pricing estimate from the manufacturer should be required in the call for prototypes. If the given estimate is deemed too high for the project budget, the company should be informed that their component lies out with the scope of the ACCORD project and that in order to have details of their component published on the ACCORD website they will need to adhere to a pre-determined price ceiling. The difference in price between the company's estimate and the amount that the project can pay will either be by the provision of a component with less functionality or will be absorbed by the company, assuming that the research proposal is of enough interest to them. In the case where a project requires several small prototypes (consumable type items, e.g. project 1), the University should be clearly informed as to how many components can be funded by ACCORD.

**Problem:** Delays in the return of signed forms (projects 1, 2 and 5).

**Solution:** Companies and Universities should be informed of a reasonable but strict deadline with respect to the signature of the necessary contract forms. It should be made clear that failure to adhere to this deadline may result in the project being deactivated.

**Problem:** Legal questions and contestation of Project Agreement Forms (e.g. Project 2, Hold Harmless Agreement).

**Solution:** Universities and companies should be made aware at the time of the call for components and call for proposals that certain documents will be required to be signed in order for a project to be accepted. A model of these documents should be available on the ACCORD website and it should be clearly stated that the content of certain documents is non-negotiable and that it is the responsibility of each institution to verify that such documents are acceptable to their legal department.

**Problem:** Long component delivery lead time (projects 2, 3 and 4).

**Solution:** The call for components should include a requirement to state an explicit delivery lead time. It should be indicated that, given the limited time frame of the ACCORD project, failure to comply with a stated lead time may lead to cancellation of the project. An upper limit on acceptable delivery lead times should also probably be stated within the call for components.



## 4. Purchase and Delivery of Components

### 4.1 Introduction

The budget available for component purchase in Call 1 is 104.000 euros. Having selected 5 proposals, it is estimated that the average payment to a component supplier will be 20.000 euros. We anticipated that some systems or components being proposed would be more than this amount, and that some would be less. It is the responsibility of WP3 to match the resources available to the projects that have been approved.

### 4.2 General Procedures

As presented earlier in this document, both the University partner and the Component supplier received a set of forms (see deliverable 3.1, and a summary given in annex 1. that each party must sign in order for the project to move forward. The Component supplier must sign a form that the pricing of the prototype components represents the cost of fabrication of the prototype, and has no relationship in particular to the price that would be proposed for such a component as a commercial product.

Manufacturers were asked to submit an offer. The offer was studied by several team members, always including the project coordinator. The response to the manufacturer was

- Accept the offer
- Refuse the offer
- Suggest a reduction in the number of components in order to keep the budget in equilibrium.

In this first phase of the project, all three responses were necessary.

Following agreement on the price and the certification by the manufacturer that it was supplying a prototype, we could proceed to issuing a purchase order. In some cases an advance partial payment was sent following receipt of an invoice, and accompanied the purchase order. All purchase orders were signed by two people: Thomas Pearsall, the WP3 leader, and by Peter Van Daele, the project coordinator.

The payment for each component was completed on the delivery and acceptance of the components by the university, and the reception of an invoice from the supplier. As before, this payment order is signed by two people: Thomas Pearsall, the WP3 leader, and by Peter Van Daele, the project coordinator.



## 4.3 *Negotiation Procedures and Results*

### 4.3.1 *Project 1 Speciality Fiber Optical Tips*

Manufacturer: Lovalite, France

University: St. Andrews, Scotland

The manufacturer Lovalite was represented by Dr. Brahim DAHMANI, President. The University of St. Andrews was represented by Prof. Alistair MAIN, Director of Research and Enterprise Services of the University.

The negotiations were opened on 5 July 2007 and completed on 14.09/2007. In this project the University was able to agree with Lovalite on an IP agreement by 30 July 2007. The University and Lovalite then entered into a discussion about the exact nature of the tips to be delivered. They agreed to two deliveries of components. The first batch of components is in preparation, while the structures in the second batch are still under discussion.

The first price proposal from Lovalite came in at over 26.000 euros. Since this delivery consists of multiple samples of the same component, we asked for a reduction in the number of components to be delivered, in order to bring the total cost closer to 20.000 euros. The total is 19.991,43 including VAT (required since the buyer and the seller are located inside the same European country.)

The purchase order was signed and issued on 23 September 2007.

The price proposal from Lovalite and the purchase order from ACCORD can be viewed in annex 2.



#### **4.3.2 Project 2 Manufacturer: Eolite, France University: Tampere University of Technology, Finland**

The Manufacturer Eolite was represented by François Salin and the University was represented by Prof. Paul Andersson, Director of the Institute of Production Engineering, and also by Prof. Reijo Tuokko, Professor in the Institute of Production Engineering.

The Negotiations were opened on 26 June 2007 and completed on 23 October 2007.

Following completion of forms and agreement on IP with the Technical University of Tampere, Eolite proposed the Laser system with a quotation for 43.000 euros which is detailed in exhibit 3. WP3 responded to this offer

- It is very high, perhaps too high, but perhaps acceptable
- WP3 will wait until it has received all other offers and we will see how much money is available to make a purchase

On 20 September, when all offers were in hand we informed Eolite that ACCORD could contribute up to 24000€ VAT included. In a discussion with Eolite, two options were discussed.

- Option 1 ACCORD contributes 24000 euros, and either Eolite or TUT contributes the rest.
- Option 2 Eolite proposes to sell a smaller system with fewer elements and a lower cost.

On 15 October, Eolite proposed a third option, which ACCORD has accepted allowing the project to go forward.

##### Option 3

- Eolite proposes a 1-year lease with an option to purchase.
- ACCORD will purchase this lease for 24.000 euros.
- At the end of year one, if all has passed according to plan with regard to TUT and its research plan, ACCORD will exercise the option to buy. The additional 18.000 needed to complete the purchase will be contributed by TUT to EPIC. EPIC will complete the purchase. The equipment will already be in place at TUT.

On the TUT side negotiations were conducted concerning the language of the Hold Harmless Agreement. In fact, TUT sought to hold ACCORD and its partners financially responsible for any damages caused by the laser products coming from Eolite. The results of this negotiation have been described in Section 1 of this report.

**Proposition commerciale n° FQ 070702****Date :** 23 juillet 2007**Number of pages including cover :** 2**To :** Thomas Pearsall**Contact :** Philippe Métivier**Organization :** European Photonics Industry Consortium  
17, rue Hamelin  
75016**Phone :** +33 556 46 45 53**Fax :** +33 556 46 24 35**email :** [pearsall@epic-assoc.com](mailto:pearsall@epic-assoc.com)**email :** [philippe.metivier@eolite.com](mailto:philippe.metivier@eolite.com)**Fax :** +331 4505 7263

Bonjour Thomas,

Voici comme convenu avec François Salin l'offre EOLITE pour un prototype de laser à fibre de type « Rod Type » Vert + UV.

Position	Produit	Quantité	Prix HT en euros	Prix TTC en euros
1	Proto EOLITE G 8W - UV 4W	1	36.000,00	43.056,00

**Conditions particulières :** Le prototype sera livré en version G (515nm) 10 à 12 semaines à réception de la commande. Le laser sera revalorisé en version UV (343nm) à partir de Décembre 2007 avec un préavis de 8 semaines. Les performances attendues du démonstrateur sont celles définies en annexe.**Délais :** Prototype EOLITE G 8 W - 10 à 12 semaines**Conditions de livraison :** Recette à EOLITE**Termes de paiement :** Paiement par virement à 30 jours date de facturation du BOREAS G 8W**Validité de l'offre :** 3 mois**Conditions générales :** Selon document EOLITE general terms G70701Je me tiens à votre disposition pour toute information complémentaire,  
Amicalement,Philippe Métivier  
Président and CEO**Eolite Systems****Address**  
6 allée Doyen Brus  
33 500 PESSAC  
FRANCE**Contact**  
Tel : +33 56 46 45 00  
Fax : +33 56 46 24 35  
[sales@eolite.com](mailto:sales@eolite.com)**Legal**  
RCS : 477 788 418 Bordeaux  
TVA : FR49477788418**Bank**  
Banque Populaire PESSAC  
IBAN : FR76 1090 7000 0182  
0210 7104 438  
BIC : CCBPFRPPBDX**Exhibit 4.1: Initial pricing proposal for laser system prototype offered by Eolite**



#### **4.3.3 Project 3 Manufacturer: Visionica, Russia University: University of Latvia, Latvia**

The manufacturer was represented by Ilia P. Nikolaev, CEO of Visionica. The University was represented by Marcis Auzins Rector of the University of Latvia. Negotiations started on 11 July 2007. The forms were signed on 20 July 2007, and the negotiations were completed on 7 September 2007.

In these negotiations, ACCORD agreed to pay  $\frac{1}{2}$  the value of the wavefront monitor with the purchase order and the other half on satisfactory delivery. A purchase order for 26.800 euros was issued on 24 September accompanied by a bank transfer of 13.400 euros.

There were no complications concerning either the Manufacturer or the University in these discussions.

The pricing proposal and purchase order may be consulted in annex 4



#### **4.3.4 Project 4 Manufacturer: FiberLogix University: Universidad Politecnica de Madrid**

The manufacturer was represented by Saeed Rehman, CEO of FiberLogix, Ltd. The University was represented by Prof. Gonzalo Leon, Vice Rector for Research of the Universidad Politecnica de Madrid. The negotiations were started on 29 June 2007, and the negotiations were completed on 22 July 2007.

In these negotiations, ACCORD agreed to pay  $\frac{1}{2}$  the value of the fiber stripper with the purchase order and the other half on satisfactory delivery. Although we agreed on price and conditions, it took some time for FibreLogix to issue a pricing offer. Because they asked for a down payment, ACCORD required an invoice for this payment, and it took some time to get an invoice for the proper amount. A purchase order for 16.500 euros was issued on 5 November accompanied by a bank transfer of 8.250 euros. FiberLogix claimed that their prototype would be delivered within one week. However there are delays on their side.



**4.3.5 Project 5 Manufacturer Centre for Integrated Photonics University:  
Universidad Politecnica de Valencia**

The manufacturer was represented by Davis Smith, CTO, and Ray Taylor, VP of Sales at CIP, Ltd. The University was represented by Prof. Salvador Sales, responsible for research and Prof. David Argilés for the Center for Technology Transfer. The negotiations were started on 26 June 2007, and the negotiations were completed on 30 August 2007. There were no particular issues raised during the discussions.

In these negotiations, ACCORD agreed to pay on delivery for the semiconductor amplifier and modulator components. A purchase order for 19.263.99 euros was issued on 9 September 2007. Components were manufactured and delivered on 16 November 2007 to Prof. Sales at the University.



## 5. Conclusions

This deliverable D3.2 gives an overview of negotiation and purchasing process. The first five pairings of components and universities has been completed. All projects have been brought successfully to the start of the R&D phase. The time required for the negotiation plus preparation of prototypes is at least 5 months. The intervening summer holidays added an additional month to the schedule.

It is our experience that companies respond more quickly than universities. Companies also appear to be more flexible than universities when it comes to having our agreement forms signed. There are several levels of university bureaucracy involved, while in a company lines for decision-making are clearer.

Company participants also showed flexibility in meeting the budget limitations of the project. In several cases, this resulted in reducing the number of components to be supplied. In other cases, innovation and financial participation of the university helped close the gap between prototype cost and resources available from ACCORD.



## **Annex 1 Summary of Operating Procedures**

### **Purchase of Components and Systems**

The purchase of components and systems is a four-step process:

- A university proposal is selected following proposal review.
- The corresponding manufacturer is contacted and a negotiation begins to determine the price to be paid.
- The intellectual property certification is signed by both parties
- A purchase order is signed by two members of the ACCORD project and sent to the supplier.

### **The Supply Agreement**

The supply agreement consists of:

- Hold harmless
- Certification of non-commercial availability
- Certification that the device is operational
- Certification of cost price
- Certification of IPR agreement

ACCORD will negotiate a purchase agreement with the supplier. For payment of an agreed price, the supplier will transfer ownerships of the components or system to the European Photonics Industry Consortium (EPIC), with the understanding that the components or system be used exclusively in the ACCORD programme at the site of the University performing the R&D project.

As part of the agreement, the supplier will certify that the components or systems are operational and that they are not available commercially at the time of transfer. The supplier will also certify that the transfer price represents the cost of constructing the prototype.

The price should reflect the marginal cost of producing a few additional prototypes. The price should not be the market value of a comparable component that has been fully tested, qualified and marketed. It is believed by ACCORD that the marginal production cost of prototype components may be a competitive secret. Therefore we ask only each supplying company to sign a statement certifying that the acquisition price represents the marginal cost of production.

The supplier will additionally certify that a satisfactory IPR agreement has been concluded with the University selected for the project.

Finally the supplier will also sign a hold harmless agreement, releasing the ACCORD project and the European Commission from financial responsibility involving the use or misuse of the components or systems.

### **Purchase and Payment**

The purchase order will be signed by two members of the ACCORD project. The EPIC organisation will then send the purchase order to the supplier and pay for the product under the conditions negotiated with the supplier. Copies of all transaction documents will be filed with the project coordinator.



## Annex 2 Lovalite

### A2.1 Negotiated Price Proposal

**LovaLite**®  
The Next Generation Micro Optical Components



Delivery Address: **Prof. Kishan Dholakia**  
School of Physics and Astronomy  
University of St Andrews  
North Haugh, St ANDREWS  
Fife, KY16 9SS, **Scotland**

Tel: +44 1334 463184/3165

Invoicing Address: **EPIC** European Photonics Industry Consortium  
17, rue Hamelin  
75016 Paris – France  
Etablissement non soumis à la TVA

Besançon, 14 Septembre, 2007

Quotation N° 140907

Description	Code	Qty	Unit. Pr. (€)	Total Price(€)
<b>Test A</b>				
Low power tips with geometry according to St Andrews request	Proto1	15	240,00	3600,00
provided on visible SMF Fiber shipping handling to be delivered 10/2006		1	25,00	25,00
<b>Test B</b>				
Tips on low dispersion Fibre Low dispersion Fibre shipping handling to be delivered 11/2006	Proto2	15	400,00	6000,00
		1	25,00	25,00
<b>Test C</b>				
Sol Gel Tips (for power handling) Provided on visible SMF Fiber shipping handling to be delivered 12/2006	Proto3	16	440,00	7040,00
		1	25,00	25,00
			<b>TOTAL H.T.</b>	<b>16715,00</b>
			<b>TVA 19,6%</b>	<b>3276,14</b>
			<b>TOTAL T.T.C.</b>	<b>19991,14</b>

LOVALITE WITHIN APPROVED ACCORD PROGRAM

Your Purchase N° .....

**Payment 50% on A delivery, 50% on delivery C by bank transfer :**

Banque SNVB/Agence Troyes

Code BIC : CMCIFRPP

Compte : 00065437001

IBAN : FR76 3008 7335 3000 0654 3700 156

SIRET: 478 992 647 00014 – Code APE: 334B – Numéro d'identification à la TVA:  
FR68478992647

LovaLite SAS au capital de 150 000€

**LovaLite**

18 Rue Alain Savary,  
25000 Besançon, France  
SIRET 478 992 647 00014 APE334A

Tel : +33 (0)3 81 53 26 25

Fax : +33 (0)3 81 25 53 51

[sales@lovalite.com](mailto:sales@lovalite.com)



## A 2.2 Purchase Order



## PURCHASE ORDER

PURCHASE ORDER #2007\_004

From : EPIC European Photonic Industry Consortium  
17 rue Hamelin  
75016 Paris - France

Date :	23/09/2007
Authorized by :	Thomas Pearsall EPIC Peter Van Daele IMEC
Order Contact Person:	
Addressee :	Dr. Brahim Dahmani
Delivery time :	October 07 to December 07

To : LovaLite  
Dr. Brahim Dahmani  
25 rue Alain Savary  
25000 Besançon  
France

Quotation N° 140907

DESCRIPTION	Code	Price in Euro	Quantity	Cost in Euro
<b>Test A</b>				
Low Power tips with geometry according to St Andrews request provided on visible SMF Fiber	Proto1	240,00	15	3 600,00
Shipping handling		25,00	1	25,00
<i>To be delivered 10/2007</i>				
<b>Test B</b>				
Tips on low dispersion Fiber	Proto2	400,00	15	6 000,00
Low dispersion Fiber		25,00	1	25,00
Shipping handling				
<i>To be delivered 11/2007</i>				
<b>Test C</b>				
Sol Gel Tips (for power handling) provided on visible SMF Fiber	Proto3	440,00	16	7 040,00
Shipping handling		25,00	1	25,00
<i>To be delivered 12/2007</i>				
Total HT				16 715,00
TVA 19,6 %				3 276,14
Total TTC				19 991,14

T.P. Pearsall / EPIC

Peter Van Daele / IMEC

Date: 23/09/2007



## Annex 3 Eolite

### A 3.1 Price Proposal



#### Quotation n° FQ07 - 1001

**Date :** October, 18th 2007  
**To :** Thomas Pearsall  
**Company :** EPIC (European Photonics Industry Consortium)  
 17, rue Hamelin  
 75016 Paris  
 FRANCE

**Number of pages including cover :** 5  
**Contact :** David Horain  
**Phone :** +331 4505 7263  
**Phone :** +33 556 46 45 58  
**Fax :** +331 4505 7263  
**Fax :** +33 556 46 24 35  
**email :** [pearsall@epic-assoc.com](mailto:pearsall@epic-assoc.com)  
**email :** [david.horain@eolite.com](mailto:david.horain@eolite.com)

Dear M. Pearsall,

We are pleased to send you a firm proposal for a BOREAS 515 nm 15W rod type fiber laser.  
This offer consists in a rental with option to buy.

Rental offer:

Position	Product	Reference	Quantity	
1	1 Year Rental Equipment BOREAS G 15 W – 515 nm fiber Laser - includes: - Laser Head - Electro Optical Supply - Remote Control Unit - A 3 meters interface cables carrying the optical pump power, electrical RF power and control signals ( longer cabling on option) Includes 1 year warranty	RENT01	1	24 000 Euros

Option to buy offer:

Position	Product	Reference	Quantity	Unit Price VAT
1	Option to buy after 1 year rental: BOREAS G 15 W – 515 nm Fiber laser as specified in the included specs - includes: - Laser Head - Electro Optical Supply - Remote Control Unit - A 3 meters interface cables carrying the optical pump power, electrical RF power and control signals ( longer cabling on option)	OptionToBuy BO G15	1	18 000 Euros

Sales conditions in page#2

#### EOLITE Systems

**Address**  
 Parc Unitec  
 5 allée Doyen Brus  
 33600 PESSAC - FRANCE

**Contact**  
 Tel : +33 5 56 46 45 50  
 Fax : +33 5 56 46 24 35  
[sales@eolite.com](mailto:sales@eolite.com)

**Legal**  
 RCS : 477 788 418 Bordeaux  
 VAT : FR49477788418

**Bank**  
 Banque Populaire PESSAC  
 IBAN : FR76 1090 7000 0182  
 0210 7104 438  
 BIC : CCBPFRPPBDX

**A 3.2 Purchase order****PURCHASE ORDER**

PURCHASE ORDER #2007\_005

From : EPIC European Photonic Industry Consortium  
17 rue Hamelin  
75016 Paris - France

<b>Date :</b> 22/11/2007
<b>Authorized by:</b> Thomas Pearsall EPIC Peter Van Daele IMEC
<b>Order Contact Person:</b>
<b>Addressee:</b> Mr. David Horain
<b>Delivery time:</b> 10 to 12 weeks

To : EOLITE Systems  
Mr. David Horain  
Sales Manager  
Parc Unitec - 5 Allée Doyen Brus  
33600 Pessac - France

Quotation n° FQ07 - 101

**Rental Offer:**

DESCRIPTION	Reference	Quantity	Unit Price incl. VAT in euros
1 Year Rental Equipment BOREAS G 15 W - 515 nm fiber Laser includes: - Laser Head - Electro Optical Supply - Remote Control Unit - A 3 meters interface cable carrying the optical pump power, electrical RF power and control signals (longer cabling on option) Includes 1 year warranty	RENT01	1	24,000
Total Net			24,000

**Option to buy offer:**

DESCRIPTION	Reference	Quantity	Unit Price incl. VAT in euros
1 Option to buy after 1 year rental: BOREAS G 15 W - 515 nm fiber Laser as specified in the included specs - includes: - Laser Head - Electro Optical Supply - Remote Control Unit - A 3 meters interface cable carrying the optical pump power, electrical RF power and control signals (longer cabling on option)	OptionToBuy BO G15	1	18,000
Total Net			18,000

T.P. Pearsall / EPIC

Peter Van Daele / IMEC

Date: 08/11/2007



## Annex 4 Visionica

### A 4.1 Price Proposal

Соглашение о покупке №07/0917-I

Москва, Россия

17 сентября 2007 г.

ООО «Визионика», Москва, Россия, именуемое в дальнейшем "ПРОДАВЕЦ", с одной стороны, и "Европейский промышленный консорциум по фотонике", именуемый в дальнейшем "ПОКУПАТЕЛЬ", с другой стороны, согласовали следующее:

#### 1. Предмет Контракта.

1.1. ПРОДАВЕЦ продал, а ПОКУПАТЕЛЬ купил товары на условиях и в соответствии с спецификацией, которая приложена к настоящему Контракту (Приложение №1) и является неотъемлемой его частью.

#### 2. Цена и общая сумма Контракта.

2.1. Цена установлена в ЕВРО.

2.2. Общая сумма настоящего Контракта составляет 26,800 ЕВРО за товары, перечисленные в Приложении №1; эта цена включает себестоимость товаров, накладные расходы, расходы на услуги банка, любые российские налоги, все расходы, связанные с получением разрешения таможи РФ на вывоз товара и всей связанной документации.

2.3. Цена товаров заявлена в Приложении №1 настоящего Контракта.

#### 3. Сроки и условия поставки.

3.1. Все товары должны быть поставлены в течение 3-х месяцев с момента подписания Контракта, как указано в Приложении № 1.

3.2. Пункт доставки: Латвия, г. Рига, Латвийский университет, Проф. Марису Озолиньшу.

3.3. Условия поставки: СРТ Рига

#### 4. Приемка товаров.

4.1. Условия приемки:

Purchase Agreement Number: 07/0917-I

Moscow, Russia

September 17, 2007

"Visionica Ltd.", Moscow, Russia, hereinafter referred to as the "SELLER" on the one side and "The European Photonics Industry Consortium" after referred to as the "BUYER" on the other side agreed upon the following:

#### 1. Subject of the Contract.

1.1. The SELLER has sold and the BUYER has bought the goods on the terms and in accordance with the specification which is enclosed with the Contract (Appendix No.1) and is an integral part of it.

#### 2. Price and total amount of the Contract.

2.1. The price is fixed in EURO.

2.2. The total amount of the present Contract will be 26,800 EURO for the goods specified in Appendix No.1; the price includes production costs, overhead costs, expenses on bank service, any Russian taxes, all charges related to obtaining Russian customs clearance and all associated documentation.

2.3. The price of the goods is stated in Appendix No.1 of the Contract.

#### 3. Terms of delivery.

3.1. All goods must be delivered in 3 months from the date of contract signing as in time given in Appendix No.1.

3.2. Delivery is to Prof. Maris Ozolinsh at University of Latvia, Riga, Latvia.

3.3. The delivery terms are CPT Riga.

#### 4. Acceptance of the goods.

4.1. Conditions of acceptance

4.1.1. The statement of acceptance will



4.1.1. Протокол приемки будет подписан представителями ПРОДАВЦА и ПОКУПАТЕЛЯ после тестирования товаров. Период тестирования не может превысить 30 дней с момента поставки товаров.

4.2. В случае несоответствия количества товаров количеству, заявленному в накладной, ПОКУПАТЕЛЬ должен сообщить об этом ПРОДАВЦУ в письменной форме в течение 30 дней

## 5. Оплата.

5.1. ПОКУПАТЕЛЬ соглашается заплатить ПРОДАВЦУ за товары, перечисленные в Приложении №1. ПОКУПАТЕЛЬ не несет никакой ответственности за расходы ПРОДАВЦА, не предусмотренные в Приложении №1.

Оплата будет произведена следующим образом: половина суммы Контракта (13,400 ЕВРО) оплачивается после подписания Контракта обеими сторонами. После поставки и приемки Товаров ПРОДАВЕЦ выставит ПОКУПАТЕЛЮ счет на остаток стоимости. Все счета должны ссылаться на этот Контракт и содержать инструкции по переводу денег. Оплата должна быть сделана телеграфным переводом между банками, указанными в Параграфе 12 настоящего Контракта.

Права собственности на товары, определенные в Предмете контракта (Параграф 1) будут переданы в момент полной оплаты Контракта.

## 6. Гарантия качества.

6.1. Гарантия ПРОДАВЦА имеет силу в течение 12-ти месяцев от даты приемки товаров.

6.2. Если в пределах гарантийного срока товар оказывается дефектным или несоответствующим условиям Контракта, ПРОДАВЕЦ должен устранить вскрытые дефекты в течение 60 дней со дня сообщения о них от ПОКУПАТЕЛЯ.

6.3. Гарантия ПРОДАВЦА не распространяется на повреждения, являющиеся результатом неподходящего или небрежного обслуживания или использования в ненадлежащих целях.

## 7. Рекламации.

be signed by representatives of the SELLER and the BUYER after the test of the goods. The testing period can not exceed 30 days after delivery of the goods.

4.2. In the case of non-conformity of the goods quantity with that stated in the waybill, the BUYER should inform the SELLER about it in written form within 30 days.

## 5. Payment.

5.1. BUYER agrees to pay SELLER for the goods specified in Appendix No.1. BUYER shall not have any liability for expenses or costs incurred by SELLER except for those expressly provided for in Appendix No.1.

Payment will be as follows: one half (13,400 EURO) upon signing the contract by both parties. SELLER will invoice BUYER for the balance of the firm fixed price upon delivery and acceptance of all the goods. All invoices must reference this Contract and contain wire transfer instructions. The payment is to be made by wire transfer between the banks noted in Paragraph 12 of the Contract.

Property rights to the goods specified in the Subject of the Contract (Paragraph 1) will be transferred at the moment of balance payment completion.

## 6. Quality guarantee.

6.1. The SELLER's guarantee is valid for 12 months from the date of acceptance of the goods.

6.2. If within the period of guarantee the manufactured article proves to be defective or non-conformable to the Contract terms, the SELLER should remove the revealed defects within 60 days from the day of receiving them from the BUYER.

6.3. The SELLER's guarantee doesn't concern to the damage arisen from an improper or careless service or use of the article for wrong purposes.

## 7. Claims.



7.1. Рекламации могут быть сделаны относительно количества товаров в случае их несоответствия к грузовым документам.

7.2. ПОКУПАТЕЛЬ имеет право предъявить претензии по комплектности ПРОДАВЦУ в течение 30 дней с момента поставки товаров. В претензии необходимо заявить количество и название соответствующих компонентов и обоснования претензии.

7.3. ПОКУПАТЕЛЬ может предъявить претензии по качеству товаров в пределах гарантийного срока, отсчитываемого от даты приемки товаров.

7.4. Претензии должны содержать серийный номер изделия, описание выявленных дефектов, технические параметры, которым изделие не соответствует, другие данные, подтверждающие неудовлетворительное качество поставленных товаров.

7.5. ПРОДАВЦ имеет право проверить обоснованность претензий на месте через своего представителя.

7.6. Претензии могут быть сообщены ПРОДАВЦУ любыми допустимыми средствами.

7.7. Все претензии должны быть предъявлены в течение 12 месяцев с момента приемки товаров.

## 8. Форс-мажор.

8.1. При условии, что одна из сторон неспособна выполнять свои обязательства по настоящему Контракту полностью или частично, по причинам: пожар, стихийные бедствия, война, военные действия любого вида, блокада, эмбарго экспорта или импорта, другие обстоятельства, независимые от Сторон, выполнение контрактных обязательств продлевается на время действия этих обстоятельств.

8.2. Если эти обстоятельства, длятся больше чем 6 месяцев каждая Сторона имеет право отказаться выполнить обязательства настоящего контракта.

8.3. Сторона, для которой работа обязательств Контракта стала невозможной, должна немедленно уведомить другую Сторону относительно начала и прекращения обстоятельств, препятствующих выполнению

7.1. Claims may be made for the goods quantity in case of their non-conformity to the shipping documents.

7.2. The BUYER has the right to claim on the SELLER for quantity within 30 days from the date of the goods delivery. In the claim, it's necessary to state the quantity and name of claimed article, claiming substantiation.

7.3. The BUYER can make claims for goods quality within the guarantee period from the date of acceptance of the goods.

7.4. The claims must contain the serial number, defects revealed, technical parameters, which the product does not correspond to, other data confirming unsatisfactory quality of the delivered goods.

7.5. The SELLER is given the right to check the claims validity in place through his representative.

7.6. Claims can be communicated to the SELLER by any reasonable means.

7.7. All claims must be made within 12 months from acceptance of the goods.

## 8. Force-Majeure.

8.1. Under conditions of one of the Parties inability to fulfil their obligations of the present Contract fully or partially, i.e.: fire, natural calamities, war, military operations of any kind, blockade, export or import embargo, other circumstances independent from the Parties the fulfilment of the Contract obligations extends for the period of these circumstances being in force.

8.2. If these circumstances last more than 6 months each Party has right to refuse to fulfil the obligations of the present Contract.

8.3. The Party for which the performance of the obligations of the Contract became impossible is to notify the other Party of the beginning and the cessation of the circumstances preventing the fulfilment of the obligations immediately.

8.4. Certificates given by the SELLER'S or the BUYER'S Chamber of Commerce



обязательств.

8.4. Свидетельства, выданные Торговыми палатами ПРОДАВЦА или ПОКУПАТЕЛЯ, служат достаточным доказательством присутствия вышеупомянутых обстоятельств и их продолжительности

### 9. Арбитраж.

9.1. Все споры, которые могут проистекать из настоящего Контракта или в связи с ним и не разрешенные с общего согласия, должны быть улажены без права обратного требования в Арбитражном суде Торгово-промышленной палате Российской Федерации (Москва), в соответствии с Правилами и порядками оформления и рассмотрения заявлений вышеупомянутого суда, решения которого окончательны и обязательны для обеих Сторон.

### 10. Другие условия.

10.1. ПОКУПАТЕЛЬ должен получить импортную лицензию, в случае необходимости.

10.2. Ни одна из Сторон не имеет право передать третьему лицу их права и обязанности по настоящему Контракту без письменного согласия другой Стороны.

10.3. Любые поправки и приложения к настоящему Контракту имеют силу, только если они сделаны в письменной форме и должным образом подписаны обеими Сторонами.

10.4. Конечный пункт назначения товаров - представитель ПОКУПАТЕЛЯ в Латвии. Товары должны быть доставлены ПРОДАВЦОМ Проф. Марису Озолиньшу, Латвия, г.Рига, Латвийский университет,

10.5. Грузополучатель товаров - ПОКУПАТЕЛЬ.

10.6. Настоящий контракт выполнен в 2 экземплярах на русском и английском языках: 1 - для ПОКУПАТЕЛЯ, 1 - для ПРОДАВЦА, каждый из них подлиннен.

10.7. Контракт вступает в силу с момента его подписания и действует до 31 декабря 2008 г. Срок действия контракта может быть продлен путем взаимного соглашением обеих Сторон.

correspondingly will serve an appropriate proof of the presence of above-mentioned circumstances and their duration.

### 9. Arbitration.

9.1. All disputes which may arise out of the present Contract or in connection with it and not solved by common consent are to be settled without recourse by Arbitration Court at the Chamber of Commerce and Industry of Russian Federation, Moscow, in accordance with the Rules of pleading procedure cases of above-mentioned court, the awards of which are final and binding upon both Parties.

### 10. Other terms.

10.1. The BUYER is bound to obtain an import licence, if necessary.

10.2. None of the Parties has the right to transfer to the third person their rights and obligations under the present Contract without a written consent of the other Party.

10.3. Any amendments and supplements to the present Contract are valid only if they are made in written form and duly signed by both Parties.

10.4. Place of the destination of the goods is the BUYER'S legal agent. The goods are to be delivered by the SELLER to Prof. Maris Ozolinsh at University of Latvia, Riga, Latvia.

10.5. The Consignee of the goods is the BUYER.

10.6. The present Contract is made in 2 copies in Russian and English: 1 - for the BUYER, 1 - for the SELLER, each of them is authentic.

10.7. The contract comes into force from the date of its signing and acts till December 31, 2008. The time of action of the contract may be prolonged by mutual agreement of both parties.

10.8. Fax or other copying, electronic signatures and stamps may be used during making and effecting the Contract.



10.8. Факсимильные или другие копии, электронные подписи и печати могут использоваться в период заключения и осуществления Контракта.

The goods to be delivered in accordance with the contract and the costs of these are listed in the following table.


No.	Component Description	Price, EURO	Q-ty	Cost, EURO
1	Wavefront Sensor ShaH-0620 (aperture diameter 6 mm; acquisition & processing frequency 20 Hz; spatial resolution 0.15 mm)	5,500	1	5,500
2	10x Telescope for Wavefront Sensor	800	1	800
3	Unimorph Deformable Mirror (active aperture diameter 34 mm; 24 electrodes with MDL arrangement)	5,000	1	5,000
4	Unimorph Deformable Mirror (active aperture diameter 34 mm; 24 electrodes with HEX arrangement)	5,000	1	5,000
5	Mirror Control Unit, 24 channels	4,500	2	9,000
6	Customs Clearance, Insurance, and Shipment	1,500	1	1,500
<b>TOTAL</b>				<b>26,800</b>

### Delivery

The delivery time of the above mentioned goods is 3 months from the date of contract signing. Transportation of the goods to Riga, Latvia will be provided by SELLER, which is also responsible for obtaining export documents.

### Cost

The total cost of the goods to deliver is fixed at 26,800 EURO.

From VISIONICA LTD.  Ilia Nikolaev, CEO 	From The European Photonics Industry Consortium  Tom Pearsall, General Secretary
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**A 4.2 Purchase Order****PURCHASE ORDER**

PURCHASE ORDER #2007\_002

From : EPIC European Photonic Industry Consortium  
17 rue Hamelin  
75016 Paris - France

Date :	07/09/2007
Authorized by :	Thomas Pearsall EPIC Peter Van Daele IMEC
Order Contact Person:	
Addressee :	Dr. Iliia Nikolaev
Delivery time :	max. 3 months

To : Visionica Ltd.  
Dr. Iliia NIKOLAEV  
Chief Executive Officer  
Yuzhnobutovskaya str., 101  
117042 Moscow  
Russia

Purchase Agreement Number: 07/0720-I  
Appendix 1

DESCRIPTION	Price in Euro	Quantity	Cost in Euro
Wavefront Sensor ShaH-0620 (aperture diameter 6 mm; acquisition & processing frequency 20 Hz; spatial resolution 0.15 mm)	5,500	1	5,500
10x Telescope for Wavefront Sensor	800	1	800
Unimorph Deformable Mirror (active aperture diameter 34 mm; 24 electrodes with MDL arrangement)	5,000	1	5,000
Unimorph Deformable Mirror (active aperture diameter 34 mm; 24 electrondes with HEX arrangement)	5,000	1	5,000
Mirror Control Unit, 24 channels	4,500	2	9,000
Customs Clearance, Insurance and Shipment	1,500	1	1,500
	Total Net		26,800
	TVA		0
	Total		26,800

T.P. Pearsall / EPIC

Peter Van Daele / IMEC

Date: 07/09/2007



# Annex 5 FibreLogix

## A 5.1 Price Proposal

<p>FiberLogix Limited          Ashley House, Vale Industrial Park          Tolpits Lane          Watford          Hertfordshire. WD18 9QP          England          VAT Reg No: 795955258</p>	<p style="text-align: right;">Quotation <span style="float: right;">Page 1</span></p>																																				
<p>EPIC          17 rue hamelin          7016 Paris</p> <p>VAT Reg No:</p> <p>Exchange Rate: 1.500000</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;"><b>Invoice No.</b></td> <td>554</td> </tr> <tr> <td><b>Invoice/Tax Date</b></td> <td>24/07/2007</td> </tr> <tr> <td><b>Cust. Order No.</b></td> <td></td> </tr> <tr> <td><b>Account No.</b></td> <td>EPIC</td> </tr> </table>	<b>Invoice No.</b>	554	<b>Invoice/Tax Date</b>	24/07/2007	<b>Cust. Order No.</b>		<b>Account No.</b>	EPIC																												
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<p><b>Note: THIS IS NOT A V.A.T. INVOICE</b></p>																																					
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;">Quantity</th> <th style="width: 40%;">Details</th> <th style="width: 10%;">Unit Price</th> <th style="width: 10%;">€</th> <th style="width: 10%;">Net</th> <th style="width: 10%;">€</th> <th style="width: 10%;">VAT Rate</th> <th style="width: 10%;">VAT</th> <th style="width: 10%;">€</th> </tr> </thead> <tbody> <tr> <td>1.00</td> <td>Fiber Stripper prototype for upgrading</td> <td>12,000.00</td> <td></td> <td>12,000.00</td> <td></td> <td>T0</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>1.00</td> <td>AllStripp Electrodes, other mics accessories,</td> <td>3,500.00</td> <td></td> <td>3,500.00</td> <td></td> <td>T0</td> <td>0.00</td> <td>0.00</td> </tr> <tr> <td>1.00</td> <td>range of large core OPTICAL FIBER mics accessories: power supply, computer control fiber rail, machine outer box, range of teleocm and non teleocm fiber</td> <td>1,000.00</td> <td></td> <td>1,000.00</td> <td></td> <td>T0</td> <td>0.00</td> <td>0.00</td> </tr> </tbody> </table>		Quantity	Details	Unit Price	€	Net	€	VAT Rate	VAT	€	1.00	Fiber Stripper prototype for upgrading	12,000.00		12,000.00		T0	0.00	0.00	1.00	AllStripp Electrodes, other mics accessories,	3,500.00		3,500.00		T0	0.00	0.00	1.00	range of large core OPTICAL FIBER mics accessories: power supply, computer control fiber rail, machine outer box, range of teleocm and non teleocm fiber	1,000.00		1,000.00		T0	0.00	0.00
Quantity	Details	Unit Price	€	Net	€	VAT Rate	VAT	€																													
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<b>Invoice Tax Breakdown:</b>	<b>Tax Rate</b>	<b>Total Net</b>	<b>Total Tax</b>																																		
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<p>Direct transfers may be made to:          Barclays Bank          32 Clarendon Road, Watford, WD1 1LD, UK          GBP Acct no: 80016381. IBAN:GB36BARC20917980016381          USD Acct no: 78311166. IBAN:GB82BARC20917978311166          Sort Code: 20-91-79</p>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 60%;"><b>Total Net Amount</b></td> <td style="width: 10%; text-align: center;">€</td> <td style="width: 30%; text-align: right;">16,500.00</td> </tr> <tr> <td><b>Carriage Net</b></td> <td style="text-align: center;">€</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td><b>Total VAT Amount</b></td> <td style="text-align: center;">€</td> <td style="text-align: right;">0.00</td> </tr> <tr> <td><b>Invoice Total</b></td> <td style="text-align: center;">€</td> <td style="text-align: right;">16,500.00</td> </tr> </table>	<b>Total Net Amount</b>	€	16,500.00	<b>Carriage Net</b>	€	0.00	<b>Total VAT Amount</b>	€	0.00	<b>Invoice Total</b>	€	16,500.00																								
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<b>Invoice Total</b>	€	16,500.00																																			

**A 5.2 Purchase Order****PURCHASE ORDER**

PURCHASE ORDER #2007\_001

From : EPIC European Photonic Industry Consortium  
17 rue Hamelin  
75016 Paris - France

Date :	05/09/2007
Authorized by :	Thomas Pearsall EPIC Peter Van Daele IMEC
Order Contact Person:	
Addressee :	
Delivery time :	

To : FiberLogix Limited  
Ashley House, Vales Industrial Park  
Tolpits Lane  
Watford  
Herts, WD18 9QP  
UK

VAT Reg. Nr. 795955258  
Invoice # 554

DESCRIPTION	Quantity	PRICE
Fiber Stripper prototype for upgrading	1	12,000.00
AllStripp Electrodes, other misc. Accessories	1	3,500.00
Range of large core OPTICAL FIBER misc. Accessories: power supply, computer control fiber rail, machine outer box, range of telecom and non telecom fiber	1	1,000.00
Total Net		16,500.00 €
Carriage Net		0.00 €
TVA		0.00 €
Total		16,500.00 €

T.P. Pearsall / EPIC

P. Van Daele / IMEC

Date:

European Photonics Industry Consortium (EPIC)

17 rue Hamelin 75016 PARIS France

Association de loi de 1901 créée le 10 décembre 2003 - Publiée au Journal Officiel le 10 janvier 2004

N° Siret : 480 890 741 00011 - Code NAF : 913E



## Annex 6 Centre for Integrated Photonics

### A 6.1 Price Proposal



### QUOTATION

CIP Ltd

B55 Adastral Park - Martlesham Heath - Ipswich IP5 3RE  
Phone: +44 (0)1473 663210 - Fax: +44 (0)1473 663295 -  
Email: sales@ciphotonics.com

**To:** Salvador Sales  
Universidad Politécnica de Valencia  
Dpto. Comunicaciones. ETSIT  
Camino de Vera s/n.  
46022 Valencia  
Spain

**Phone:** +34 96 387 97 35

**Fax:** + 34 96 387 73 09

This quotation is given on the basis that no contract will come into existence until the CIP Ltd dispatches an acknowledgement of order to Universidad Politécnica de Valencia. Any quotation is valid for a period of 30 days only from its date, provided that CIP has not previously withdrawn it.

Date	CIP Quote #
30/08/07	CIPQ1864

CIP Contact	P.O. Number	Ship Via
Ray Taylor		Customer Choice

Ln #	Qty	Part #	Description	Lead Time (Weeks)	Unit Price	Ext. Price
1	1		Provide two off packaged research quality prototype EAM's of new design for radio on fibre type applications. Target Specification attached + Provide two off packaged research quality prototype SOA in butterfly package. SOA chip will be selected for high saturation output power. Target Specification attached. -Total Cost	13	£12,842.66	£12,842.66
<b>Total</b>						<b>£12,842.66</b>

CIP Notes -  
Price is not broken down between the two line items

Timescale subject to detailed discussion on specifications (attached)  
All prices are quoted in £ excluding Duty, VAT and Carriage (if applicable), and bank charges (if paying by electronic transfer). Lead time is from acceptance of Order.

Conditions of Quotation:-  
See attached Terms & Conditions

**A 6.2 Purchase Order****PURCHASE ORDER**

PURCHASE ORDER #2007\_003

From : EPIC European Photonic Industry Consortium  
17 rue Hamelin  
75016 Paris - France

Date :	09/09/2007
Authorized by :	Thomas Pearsall EPIC Peter Van Daele IMEC
Order Contact Person:	
Addressee :	Mr. Ray Taylor, CIP
Delivery time :	

To : Centre for Integrated Photonics  
Mr. Ray Taylor  
B55 Adastral Park  
Martlesham Heath  
Ipswich IP5 3RE  
UK

Quotation # CIPQ1864  
CIP order # CIPQ1384

DESCRIPTION	Quantity	PRICE in Euro
Provide two off packaged research quality prototype EAM's of new design for radio on fibre type applications. <i>Target Specification attached</i>	1	19,263.99
Provide two off packaged research quality prototype SOA in butterfly package. SOA chip will be selected for high saturation output power. <i>Target Specification attached.</i>		
Total Net		19,263.99
TVA		N.A.
Total		19,263.99

T.P. Pearsall / EPIC

Peter Van Daele / IMEC

Date: 09/09/07