

Public Disclosure Authorized

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**LOAN NUMBER 7320-HR**

# **Loan Agreement**

**(Science and Technology Project)**

**between**

**REPUBLIC OF CROATIA**

**and**

**INTERNATIONAL BANK FOR RECONSTRUCTION  
AND DEVELOPMENT**

**Dated September 16, 2005**

Public Disclosure Authorized



**LOAN NUMBER 7320-HR**

**LOAN AGREEMENT**

AGREEMENT, dated September 16, 2005, between the REPUBLIC OF CROATIA (the Borrower) and the INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank).

WHEREAS (A) the Borrower, having satisfied itself as to the feasibility and priority of the project described in Schedule 2 to this Agreement (the Project), has requested the Bank to assist in the financing of the Project;

(B) Part A of the Project will be carried out by the Brodarski Institute (BI) and other selected RDIs, Part B of the Project – by BICRO, (BI and BICRO are collectively referred to as “Project Agencies”), with the Borrower’s assistance and, as part of such assistance, the Borrower will make part of the proceeds of the Loan available to each of the Project Agencies, as set forth in this Agreement;

WHEREAS the Bank has agreed, on the basis, inter alia, of the foregoing, to extend the Loan to the Borrower upon the terms and conditions set forth in this Agreement and in the respective Project Agreements with each of the Project Agencies of even date herewith between the Bank and each of the Project Agencies;

NOW THEREFORE the parties hereto hereby agree as follows:

**ARTICLE I**

**General Conditions; Definitions**

Section 1.01. The “General Conditions Applicable to Loan and Guarantee Agreements for Fixed- Spread Loans” of the Bank, dated September 1, 1999 (as amended through May 1, 2004) constitute an integral part of this Agreement.

Section 1.02. Unless the context otherwise requires, the several terms defined in the General Conditions and in the Preamble to this Agreement have the respective meanings therein set forth:

(a) “Brodarski Institute”, or “BI” means the limited liability company established and operating in the territory of the Borrower pursuant to its Articles of Association, approved by the Government Decision dated January 15, 1992 (court

registration No. Fi-22202/92, of February 25, 1992, MBS 08012 7309) or any legal successor thereto;

(b) “BI Project Agreement” means the agreement between the Bank and BI of even date herewith, as the same may be amended from time to time, and such term includes all agreements supplemental to the BI Project Agreement;

(c) “BI Staff Severance Plan” means a plan adopted by the BI describing the terms and conditions and criteria, agreed with the Bank, for termination of employment of the employees of the BI, including severance payments thereunder;

(d) “BICRO” means Business Innovation Center of Croatia established pursuant to Government’s Decision of October 30, 1997 (commercial court registration No. Tt-98/1091-2 of September 3, 1998, MBS 08021 4447), or any legal successor thereto;

(e) “BICRO Project Agreement” means the agreement between the Bank and BICRO of even date herewith, as the same may be amended from time to time, and such term includes all agreements supplemental to the BICRO Project Agreement;

(f) “Beneficiary” means an entity eligible, in accordance with the criteria set forth in the Operational Procedures, to receive Sub-financing under Part B and Part C.2 of the Project;

(g) “Financial Monitoring Report” or “FMR” means each report prepared in accordance with Section 4.02 of this Agreement;

(h) “MSES” means the Ministry of Science, Education and Sports of the Borrower, or any legal successor thereto;

(i) “Operational Procedures” means the procedures, agreed with the Bank and adopted by BICRO and MSES setting forth eligibility criteria and procedures for selection, appraisal and approval of Beneficiaries and Sub-projects to be financed under the Project, as well as the procedures for administration and monitoring of implementation of Sub-projects;

(j) “PIP” means Project Implementation Plan setting forth procedures and requirements for carrying out the Project, adopted by the Borrower and agreed with the Bank; as the same may be amended from time to time with the agreement of the Bank;

(k) "PMU" means the Project Management Unit established by the Borrower within MSES for purposes of Project management;

(l) "Procurement Plan" means the Borrower's procurement plan, dated May 3, 2005 covering the initial eighteen (18) month period (or longer) of Project implementation, as the same shall be updated from time to time in accordance with the provisions of Section 3.02 to this Agreement, to cover succeeding eighteen (18) month periods (or longer) of Project implementation;

(m) "Project Agencies" means collectively the BI and BICRO;

(n) "Project Agreements" means collectively the BI Project Agreement and BICRO Project Agreement;

(o) "RAZUM Program" means a program on innovative technologies established by the Borrower for supporting development of knowledge-based companies through commercialization of their research and development outputs;

(p) "RDIs" means Research and Development Institutes which may be selected from time to time, upon agreement between the Borrower and the Bank, for participation in Part A of the Project and are eligible for assistance under Part A of the Project, to be financed out of the proceeds of the Loan;

(q) "Severance Payments" means the payments to be made out of the Loan proceeds to the employees of BI and other RDIs, separated pursuant to the BI Staff Severance Plan and RDIs' Staff Severance Plans, respectively;

(r) "Special Account" means the account referred to in Section 2.02 (b) of this Agreement;

(s) "Subsidiary Finance Agreement" means the agreement to be entered into between the Borrower and each Project Agency pursuant to Section 3.01 (c) of this Agreement, as the same may be amended from time to time; and such term includes all schedules to the Subsidiary Finance Agreement and the term "Subsidiary Finance Agreements" means collectively the Subsidiary Finance Agreements between the Borrower and each of the Project Agencies;

(t) "Sub-Project Agreement" means an agreement to be entered into between BICRO and an eligible Beneficiary to implement a Sub-Project under Part B of the Project; and between MSES and an eligible Beneficiary to implement a Sub-project under Part C.2 of the Project;

(u) “Sub-financing” means any financing in the form of a loan, grant or equity investment made or proposed to be made by BICRO, or MSES to an eligible Beneficiary for a Sub-project, and to be financed out of the procedures of the Loan;

(v) “Sub-project” means a specific project eligible for financing out of the proceeds of the Loan in accordance with the criteria set forth in the Operational Procedures, to be carried out by a Beneficiary using a Sub-Financing under Part B and C.2 of the Project;

(w) “SPREAD” means Sponsored Research and Development Program referred to in Part B.5 of Schedule 2 to this Agreement; and

(x) “TCs” means Technology Centers referred to in Part B of the Project.

Section 1.03. Each reference in the General Conditions to the Project implementation entity shall be deemed as a reference to BICRO and BI.

## **ARTICLE II**

### **The Loan**

Section 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in the Loan Agreement, an amount equal to thirty-one million Euro (EUR 31,000,000), as such amount may be converted from time to time through a currency conversion in accordance with the provisions of Section 2.09 of this Agreement.

Section 2.02 (a). The amount of the Loan may be withdrawn from the Loan Account in accordance with the provisions of Schedule 1 to this Agreement for: (i) amounts paid (or if the Bank shall so agree, to be paid) by the Borrower on account of withdrawals to be made by BICRO or MSES under a Sub-Project Agreement to meet the reasonable cost of goods, services and equity investments required for the Sub-project in respect of which the withdrawal from the Loan Account is requested; (ii) for expenditures made (or if the Bank shall so agree to be made) in respect of the reasonable cost of goods, services, severance payments and operating costs required for the Project and to be financed out of the Loan; (iii) the front-end fee referred to in Section 2.04 of this Agreement; and (iv) any premium in respect of an Interest Rate Cup or Interest Rate Collar payable by the Borrower in accordance with Section 4.04 (c) of the General Conditions.

(b) The Borrower may, for the purposes of the Project open and maintain in Euro a special deposit account in a commercial bank on terms and conditions satisfactory to the Bank, including appropriate protection against set-off, seizure and attachment. Deposits into, and payments out of, the Special Account shall be made in accordance with the provisions of Schedule 6 to this Agreement.

Section 2.03. The Closing Date shall be November 30, 2009 or such later date as the Bank shall establish. The Bank shall promptly notify the Borrower of such later date.

Section 2.04. The Borrower shall pay to the Bank a front-end fee in an amount equal to one percent (1%) of the amount of the Loan, subject to any waiver of a portion of such fee as may be determined by the Bank from time to time. On or promptly after the Effective Date, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and pay to itself the amount of such fee.

Section 2.05. The Borrower shall pay to the Bank a commitment charge on the principal amount of the Loan not withdrawn from time to time, at a rate equal to: (i) eighty-five one-hundredths of one percent (0.85%) from the date on which such charge commences to accrue in accordance with the provisions of Section 3.02 of the General Conditions to but not including the fourth anniversary of such date; and (ii) seventy-five (0.75%) thereafter.

Section 2.06. The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time, at a rate for each Interest Period equal to the Variable Rate; provided, that upon a Conversion of all or any portion of the principal amount of the Loan, the Borrower shall, during the Conversion Period, pay interest on such amount in accordance with the relevant provisions of Article IV of the General Conditions.

Section 2.07. Interest and commitment charges shall be payable semiannually in arrears on May 15 and November 15 in each year.

Section 2.08. The Borrower shall repay the principal amount of the Loan in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

Section 2.09. (a) The Borrower may at any time request any of the following Conversions of the terms of the Loan in order to facilitate prudent debt management:

- (i) a change of the Loan Currency of all or any portion of the principal amount of the Loan, withdrawn or unwithdrawn, to an Approved Currency;

- (ii) a change of the interest rate basis applicable to all or any portion of the principal amount of the Loan from a Variable Rate to a Fixed Rate, or vice versa; and
- (iii) the setting of limits on the Variable Rate applicable to all or any portion of the principal amount of the Loan withdrawn and outstanding by the establishment of an Interest Rate Cap or Interest Rate Collar on said Variable Rate.

(b) Any conversion requested pursuant to paragraph (a) of this Section that is accepted by the Bank shall be considered a “Conversion”, as defined in Section 2.01 (7) of the General Conditions, and shall be effected in accordance with the provisions of Article IV of the General Conditions and of the Conversion Guidelines.

(c) Promptly after the Execution Date for an Interest Rate Cap or Interest Rate Collar in respect of which the Borrower has requested that the premium be paid out of the proceeds of the Loan, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and pay to itself that amounts required to pay any premium payable in accordance with Section 4.04 (c) of the General Conditions up to the amount allocated from time to time for such purpose in the table in paragraph 1 of Schedule 1 to this Agreement.

### **ARTICLE III**

#### **Execution of the Project**

Section 3.01. (a) The Borrower declares its commitment to the objectives of the Project as set forth in Schedule 2 to this Agreement, and, to this end, without any limitation or restriction upon any of its other obligations under this Agreement, shall cause, through MSES, the Project Agencies to perform each in accordance with the provisions of their respective Project Agreements, all the obligations of the Project Agreements therein set forth, shall take and cause to be taken all action, including the provision of funds (which shall include counterpart funds), facilities, services and other resources, necessary or appropriate to enable the Project Agencies to perform such obligations, and shall not take or permit to be taken any action which would prevent or interfere with such performance, or which would limit in any respect organizational, managerial or financial autonomy of Project Agencies.

(b) Without limitation upon the provisions of paragraph (a) of this Section and except as the Borrower and the Bank shall otherwise agree, the Borrower shall, through MSES, carry out the Project and cause each Project Agency to carry out its



respective Part in accordance with the Implementation Program set forth in Schedule 5 to this Agreement, and PIP.

(c) The Borrower, through MSES, shall make part of the proceeds of the Loan available to the Project Agencies under separate Subsidiary Finance Agreements to be entered into between the Borrower and each of the Project Agencies, or eligible RDIs, under terms and conditions which shall have been approved by the Bank and which shall include, *inter alia*, the following conditions: (i) the loan proceeds shall be made available to BI and other RDIs' – 65% on a grant basis and 35% as a loan of the total allocation to BI or an eligible RDI, respectively; (ii) the loan proceeds shall be made available to BICRO -- 50% on a grant basis and 50% as a loan of the amount allocated for financing the activities under Parts B.2 and B.3 of the Project; and 100% on a grant basis of the amount allocated for financing activities under Parts B.1, B.4 and B.5 of the Project.

(d) The Borrower, shall exercise its rights under the Subsidiary Finance Agreements in such manner as to protect the interests of the Borrower and the Bank and to accomplish the purposes of the Loan, and, except as the Bank shall otherwise agree, the Borrower shall not assign, amend, abrogate or waive the Subsidiary Finance Agreements or any provision thereof.

Section 3.02. (a) Except as the Bank shall otherwise agree, procurement of the goods and consultants' services required for the Project and to be financed out of the proceeds of the Loan shall be governed by the provisions of Schedule 4 to this Agreement, as said provisions may be further elaborated in the Procurement Plan; and

(b) The Borrower shall, through MSES, update the Procurement Plan in accordance with guidelines acceptable to the Bank, and furnish such update to the Bank not later than twelve (12) months after the date of the preceding Procurement Plan, for the Bank's approval.

Section 3.03. For the purposes of Section 9.07 of the General Conditions and without limitation thereto, the Borrower shall:

(a) prepare, on the basis of guidelines acceptable to the Bank, and furnish to the Bank not later than two (2) months before the Closing Date or such later date as may be agreed for this purpose between the Borrower and the Bank, a plan for the future operation of the Project; and

(b) afford the Bank a reasonable opportunity to exchange views with the Borrower on said plan.

Section 3.04. The Bank and the Borrower hereby agree that the obligations set forth in Sections 9.04, 9.05, 9.06, 9.07, 9.08 and 9.09 of the General Conditions (relating to insurance, use of goods and services, plans and schedules, records and reports, maintenance and land acquisition, respectively) in respect of the Project shall be carried out by the Project Agencies pursuant to Section 2.03 of the Project Agreements.

## **ARTICLE IV**

### **Financial Covenants**

Section 4.01. (a) The Borrower shall maintain a financial management system, including records and accounts, and prepare financial statements in accordance with consistently applied accounting standards, acceptable to the Bank, adequate to reflect the operations, resources and expenditures related to the Project.

(b) The Borrower shall:

- (i) have the financial statements referred to in paragraph (a) of this Section for each fiscal year (or other period agreed by the Bank) audited, in accordance with consistently applied auditing standards acceptable to the Bank, consistently applied, by independent auditors acceptable to the Bank;
- (ii) furnish to the Bank as soon as available, but in any case not later than five (5) months after the end of each such year or such other period agreed to by the Bank, (A) certified copies of the financial statements referred to in paragraph (a) of this Section for such year or such other period agreed to by the Bank, as so audited, and (B) an opinion on such statements by said auditors, in scope and detail satisfactory to the Bank; and
- (iii) furnish to the Bank such other information concerning such records and accounts, and the audit of such financial statements, and concerning said auditors, as the Bank may from time to time reasonably request.

(c) For all expenditures with respect to which withdrawals from the Loan Account were made on the basis of statements of expenditure, the Borrower shall:

- (i) retain, until at least one year after the Bank has received the audit report for, or covering, the fiscal year in which the last

withdrawal from the Loan Account was made, all records (contracts, orders, invoices, bills, receipts and other documents) evidencing such expenditures;

- (ii) enable the Bank's representatives to examine such records; and
- (iii) ensure that such reports and statements of expenditures are included in the audit for each fiscal year or other period agreed to by the Bank, referred to in paragraph (b) of this Section.

Section 4.02. (a) Without limitation upon the Borrower's progress reporting obligations set out in Schedule 5 to this Agreement, the Borrower shall prepare and furnish to the Bank a Financial Monitoring Report, in form and substance agreed with the Bank, which:

- (i) sets forth sources and uses of funds for the Project, both cumulatively and for the period covered by said report, showing separately funds provided under the Loan and explains variances between the actual and planned uses of such funds;
- (ii) describes physical progress in Project implementation, both cumulatively and for the period covered by said report, and explains variances between the actual and planned Project implementation; and
- (iii) sets forth the status of procurement under the Project, as at the end of the period covered by said report.

(b) The first FMR shall be furnished to the Bank not later than thirty (30) days after the end of the first calendar quarter after the Effective Date, and shall cover the period from the incurrence of the first expenditure under the Project through the end of such first calendar quarter; thereafter, each FMR shall be furnished to the Bank not later than thirty (30) days after each subsequent calendar quarter, and shall cover such calendar quarter.

## **ARTICLE V**

### **Remedies of the Bank**

Section 5.01. Pursuant to Section 6.02 (p) of the General Conditions, the following additional events are specified namely, that:

(a) Any of the Project Agencies shall have failed to perform any of their obligations under their respective Project Agreement; and

(b) As a result of events, which have occurred after the date of the Loan Agreement, an extraordinary situation shall have arisen which, shall make it improbable that any of the Project Agencies will be able to perform their obligations under their respective Project Agreements.

Section 5.02. Pursuant to Section 7.01 (k) of the General Conditions, the following additional events are specified, namely that events specified in paragraphs (a) of Section 5.01 of this Agreement shall occur and shall continue for a period of sixty (60) days after notice thereof shall have been given by the Bank to the Borrower.

## **ARTICLE VI**

### **Effective Date; Termination**

Section 6.01. The following event is specified as an additional condition to the effectiveness of the Loan Agreement within the meaning of Section 12.01 (c) of the General Conditions, namely that all Subsidiary Finance Agreements have been executed on behalf of the Borrower and each of the Project Agencies.

Section 6.02. The following are specified as additional matters within the meaning of Section 12.02 (c) of the General Conditions, to be included in the opinion or opinions to be furnished to the Bank:

(a) that each Project Agreement has been duly authorized and entered into by each of the Project Agencies, and is legally binding the respective Project Agency in accordance with its terms; and

(b) that the Subsidiary Finance Agreements have been duly authorized and entered into by the Borrower and each of the Project Agencies and are legally binding upon the Borrower and the respective Project Agencies in accordance with their terms.

Section 6.03. The date one hundred-twenty (120) days after the date of this Agreement is hereby specified for the purposes of Section 12.04 of the General Conditions.

## ARTICLE VII

### Representative of the Borrower; Addresses

Section 7.01. The Minister of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 11.03 of the General Conditions.

Section 7.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:

For the Borrower:

Minister of Finance  
Ministry of Finance  
Katančičeva 5  
Republic of Croatia

Telex:

Facsimile:

862-21215

862-21833

(385-1) 4922-598

For the Bank:

International Bank for  
Reconstruction and Development  
1818 H Street, N.W.  
Washington, D.C. 20433  
United States of America

Cable address:

Telex:

Facsimile:

INTBAFRAD  
Washington, D.C.

248423 (MCI) or  
64145 (MCI)

(202) 477-6391

IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Agreement to be signed in their respective names in Zagreb, Republic of Croatia as of the day and year first above written.

REPUBLIC OF CROATIA

By: /s/ Ivan Suker

Authorized Representative

INTERNATIONAL BANK FOR  
RECONSTRUCTION AND DEVELOPMENT

By: /s/ Anand K. Seth

Authorized Representative

## SCHEDULE 1

### Withdrawal of the Proceeds of the Loan

The table below sets forth the Categories of items to be financed out of the proceeds of the Loan, the allocation of the amounts of the Loan to each Category and the percentage of expenditures for items so to be financed in each Category:

<u>Category</u>	<u>Amount of the Loan Allocated Expressed in Euro</u>	<u>% of Expenditures to be financed</u>
(1) Goods	6,900,000	100% of foreign expenditures, 100% of local expenditures (ex factory) and 80% of local costs for other items procured locally
(2) Consultants' services	3,900,000	100% of foreign expenditures, and 75% of local expenditures
(3) Training	1,145,000	100%
(4) Sub-financing (a) under Part B.3 of the Project;	4,500,000	100% of Sub-project amount
(b) under Part B.5 of the Project;	1,500,000	100% of Sub-project amount
(c) under Parts B.2, B.4 and C.2 of the Project	10,700,000	80% of Sub-project amount
(5) Severance payments	700,000	100%

<u>Category</u>	<u>Amount of the Loan Allocated Expressed in Euro</u>	<u>% of Expenditures to be Financed</u>
(6) Operating costs of BICRO, RDIs and PMU	500,000	75%
(7) Fee	155,000	Amount due under Section 2.04 of this Agreement
(8) Premia for Interest Rate Caps and Interest Rate Collars		Amount due under Section 2.09 (c) of this Agreement
(9) Unallocated	<u>1,000,000</u>	
TOTAL	<u>31,000,000</u>	

2. For the purposes of this Schedule:

(a) the term “foreign expenditures” means expenditures in the currency of any country other than that of the Borrower for goods or services supplied from the territory of any country other than that of the Borrower.

(b) the term “local expenditures” means expenditures in the currency of the Borrower or for goods or services supplied from the territory of the Borrower; and

(c) the term “operating costs” means: (i) incremental operating costs incurred by the PMU on account of Project implementation, including, *inter alia*, salaries of administrative staff (except for Government employees), office equipment, maintenance and supplies, and travel expenses; (ii) incremental operating costs incurred by BICRO and a respective eligible RDI; and a list of eligible operating expenditures shall be set forth in a plan for each respective RDI, PMU or BICRO, and agreed upon with the Bank.

3. Notwithstanding the provisions of paragraph 1 above, no withdrawals shall be made in respect of:

(a) payments made for expenditures prior to the date of this Agreement, except that withdrawals, in an aggregate amount not exceeding the equivalent of



EUR 1,000,000, may be made on account of payments made for expenditures under Categories (1) through (5) before that date but after January 1, 2005; and

(b) payments made for expenditures in respect of Category (3)(a) set forth in the table in paragraph 1 of this Schedule until: (i) legislative enactments, agreed with the Bank, have been passed for regulating venture capital investments; and (ii) the Operational Procedures have been modified, as agreed with the Bank, to govern the implementation of Part B.3. of the Project.

4. The Bank may require withdrawals from the Loan Account to be made on the basis of statements of expenditure for expenditures for: (a) goods under contracts not exceeding EUR 200,000 equivalent; (b) services provided by consulting firms under contracts not exceeding EUR 100,000 equivalent; (c) services provided by individual consultants under contracts not exceeding EUR 50,000 equivalent; (d) Sub-financing contracts; (e) operating costs; (f) training; and (g) severance payments, all under such terms and conditions as the Bank shall specify by notice to the Borrower.

## SCHEDULE 2

### Description of the Project

The objectives of the Project are: (a) to strengthen and restructure research and development institutions and promote commercialization of the research outputs; and (b) to upgrade technological capabilities of enterprises.

The Project consists of the following parts, subject to such modifications thereof as the Borrower and the Bank may agree upon from time to time to achieve such objectives:

#### Part A: Restructuring of Research and Development Institutions (RDIs)

1. Provision of equipment, consulting services, training to BI and selected RDIs for: (a) strengthening RDIs' governance structure and capacity in strategic planning and change management; (b) development and introduction of modern budgetary, accounting, MIS and audit systems; (c) strengthening marketing, contract and intellectual property management introducing transparent criteria for selecting research programs and individual projects, establishing science parks and profit centers; (d) human resources development through adopting proper transparent human resources policies and staff training; (e) upgrading physical infrastructure; and (f) establishing virtual Science Parks.
2. Financing of incremental operating costs of BI and selected RDIs, incurred in connection with organizational restructuring of these entities.
3. Implementation of staff retrenchment program, including provision of Severance Payments to BI's staff and selected RDIs' staff separated in accordance with the provisions of their respective Staff Severance Plans.

#### Part B: Upgrading of Technology Development Financing Programs

1. *Institutional Building of BICRO*. Strengthening institutional capacity of BICRO, including managerial and technical skills of its staff, human resources management, marketing, MIS, financial management and planning, and monitoring and evaluation functions.
2. *RAZUM Program*. Provision of Sub-financing, through BICRO, to private firms and researchers selected in accordance with the criteria set forth in the Operational Procedures, for implementation of RAZUM Program.

3. Venture Capital. Provision of Sub-financing and technical assistance to venture capital funds, selected in accordance with the criteria set forth in the Operational Procedures, for investing in technology financing and knowledge based companies managed on a commercial basis.
4. Upgrading Technology Centers, Incubators and Research and Development Centers. Provision of Sub-financing to selected Technology Centers, Incubators and Research and Development Centers for Sub-projects selected in accordance with the criteria set forth in the Operational Procedures.
5. SPREAD. Provision of Sub-financing to eligible enterprises for implementation of the Sponsored Research and Development Program (SPREAD) in accordance with the criteria set forth in the Operational Procedures.

Part C: Unity Through Knowledge Fund

1. Establishment of the Unity Through Knowledge Fund (UKF) for promotion of professional exchanges and contacts and joint projects between Croatian scientists and researchers working abroad with their Croatian colleagues.
2. Provision of Sub-financing to eligible Beneficiaries through the Unity Through Knowledge Fund administered by MSES in accordance with the criteria set forth in the Operational Procedures.

Part D: Project Implementation and Croatian Innovation System Group

1. Strengthening the capacity of the PMU to manage the Project, including provision of equipment, technical assistance, studies and financial support for carrying out procurement, disbursement, financial management, monitoring and evaluation, and conducting of a public outreach campaign on Project activities; and provision of financial services to cover Project auditing services.
2. Provision of technical assistance and training for setting up and operations of a Croatian Innovation System Group under MSES and Croatian Accreditation Agency.

\* \* \*

The Project is expected to be completed by June 30, 2009.

### SCHEDULE 3

#### Amortization Schedule

1. The following table sets forth the Principal Payment Dates of the Loan and the percentage of the total principal amount of the Loan payable on each Principal Payment Date (Installment Share). If the proceeds of the Loan shall have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined by the Bank by multiplying: (a) the total principal amount of the Loan withdrawn and outstanding as of the first Principal Payment Date; by (b) the Installment Share for each Principal Payment Date, such repayment amount to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

<u>Payment Date</u>	<u>Installment Share (Expressed as a %)</u>
On each May 15, and November 15 beginning November 15, 2010 through May 15, 2020	5%

2. If the proceeds of the Loan shall not have been fully withdrawn as of the first Principal Payment Date, the principal amount of the Loan repayable by the Borrower on each Principal Payment Date shall be determined as follows:

(a) To the extent that any proceeds of the Loan shall have been withdrawn as of the first Principal Payment Date, the Borrower shall repay the amount withdrawn and outstanding as of such date in accordance with paragraph 1 of this Schedule.

(b) Any withdrawal made after the first Principal Payment Date shall be repaid on each Principal Payment Date falling after the date of such withdrawal in amounts determined by the Bank by multiplying the amount of each such withdrawal by a fraction, the numerator of which shall be the original Installment Share specified in the table in paragraph 1 of this Schedule for said Principal Payment Date (the Original Installment Share) and the denominator of which shall be the sum of all remaining Original Installment Shares for Principal Payment Dates falling on or after such date, such repayment amounts to be adjusted, as necessary, to deduct any amounts referred to in paragraph 4 of this Schedule, to which a Currency Conversion applies.

3. (a) Withdrawals made within two calendar months prior to any Principal Payment Date shall, for the purposes solely of calculating the principal amounts payable on any Principal Payment Date, be treated as withdrawn and outstanding on the second Principal Payment Date following the date of withdrawal and shall be repayable on each

Principal Payment Date commencing with the second Principal Payment Date following the date of withdrawal.

(b) Notwithstanding the provisions of sub-paragraph (a) of this paragraph 3, if at any time the Bank shall adopt a due date billing system under which invoices are issued on or after the respective Principal Payment Date, the provisions of such sub-paragraph shall no longer apply to any withdrawals made after the adoption of such billing system.

4. Notwithstanding the provisions of paragraphs 1 and 2 of this Schedule, upon a Currency Conversion of all or any portion of the withdrawn principal amount of the Loan to an Approved Currency, the amount so converted in said Approved Currency that shall be repayable on any Principal Payment Date occurring during the Conversion Period, shall be determined by the Bank by multiplying such amount in its currency of denomination immediately prior to said Conversion by either: (i) the exchange rate that reflects the amounts of principal in said Approved Currency payable by the Bank under the Currency Hedge Transaction relating to said Conversion; or (ii) if the Bank so determines in accordance with the Conversion Guidelines, the exchange rate component of the Screen Rate.

5. If the principal amount of the Loan withdrawn and outstanding from time to time shall be denominated in more than one Loan Currency, the provisions of this Schedule shall apply separately to the amount denominated in each Loan Currency, so as to produce a separate amortization schedule for each such amount.

## **SCHEDULE 4**

### **Procurement**

#### Section I. General

A. All goods shall be procured in accordance with the provisions of Section I of the “Guidelines for Procurement under IBRD Loans and IDA Credits” dated May 2004 (the Procurement Guidelines), and with the provisions of this Schedule.

B. All consultants’ services shall be procured in accordance with Sections I and IV of the “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” dated May 2004 (the Consultant Guidelines), and with the provisions of this Schedule.

C. The capitalized terms used below in this Schedule to describe particular procurement methods or methods of review by the Bank of particular contracts, have the meanings ascribed to them in the Procurement Guidelines, or Consultant Guidelines, as the case may be.

#### Section II. Particular Methods of Procurement of Goods and Services (other than Consultants’ Services)

A. International Competitive Bidding. Except as otherwise provided in Part B of this Section, contracts for goods shall be awarded on the basis of International Competitive Bidding. The provisions of paragraphs 2.55 and 2.56 of the Procurement Guidelines, providing for domestic preference in the evaluation of bids, shall apply to goods manufactured in the territory of the Borrower.

#### B. Other Procurement Procedures

1. Limited International Bidding. Goods which the Bank agrees can only be purchased from a limited number of suppliers and estimated to cost less than EUR 200,000 equivalent per contract may be procured under contracts awarded on the basis of Limited International Bidding.

2. National Competitive Bidding. Goods estimated to cost less than EUR 500,000 equivalent per contract, may be procured under contracts awarded on the basis of National Competitive Bidding and the following additional provisions:

(a) Procedures

The public bidding method (open tendering) shall apply to all contracts. Invitations to bid shall be advertised in the Borrower's Official Gazette (*Narodne Novine*) and on the MSES's website allowing a minimum of thirty (30) days for the preparation and submission of bids.

(b) Assessment of Bidders' Qualifications

When pre-qualification shall be required for large contracts, invitations to pre-qualify for bidding shall be advertised in the Borrower's Official Gazette and on the MSES website a minimum of thirty (30) days prior to the deadline for the submission of pre-qualification applications. Minimum experience, technical and financial requirements shall be explicitly stated in the pre-qualification documents, which shall be determined by a 'pass/fail' method, not through the use of a merit point system. Where pre-qualification is not used, the qualifications of the bidder who is recommended for award of contract shall be assessed by post-qualification, applying minimum experience, technical and financial requirements which shall be explicitly stated in the bidding documents.

(c) Participation of Government-owned Enterprises

Government-owned enterprises located and operating on the Borrower's territory, shall be eligible to participate in bidding only if they can establish, to the Bank's satisfaction, that they are legally and financially autonomous, operate under commercial laws and are not a dependent agency of the Borrower's Government. Said enterprises shall be subject to the same bid and performance security requirements as other bidders.

(d) Bidding Documents

Procuring entities shall use the appropriate standard bidding documents for the procurement of goods or services (other than consulting services), as defined in the paragraph 1.1 of the Guidelines, which shall contain draft contract and conditions of contract acceptable to the Bank.

(e) Bid Submission, Opening and Evaluation

- (i) Bids shall be submitted in a single envelope containing the bidder's qualification information, technical and price bids, which shall be opened simultaneously at the public bid opening.

- (ii) Bids shall be opened in public, immediately after the deadline for submission of bids. The name of the bidder, the total amount of each bid and any discounts offered shall be read aloud and recorded in the minutes of the public bid opening.
  - (iii) The evaluation of bids shall be done in strict adherence to the monetarily quantifiable criteria specified in the bidding documents and a merit point system shall not be used.
  - (iv) Extension of bid validity shall be allowed once only for not more than thirty (30) days. No further extensions should be granted without the prior approval of the Bank.
  - (v) Contracts shall be awarded to qualified bidders having submitted the lowest evaluated substantially responsive bid.
  - (vi) No preference shall apply under National Competitive Bidding.
- (f) Rejection of All Bids
- (i) All bids shall not be rejected and new bids solicited without the Bank's prior written concurrence.
  - (ii) When the number of bids received is less than two, re-bidding shall not be carried out without the Bank's prior concurrence.
- (g) Securities

Bid securities should not exceed 2% (two percent) of the estimated cost of the contract; and performance securities -- not more than 10% (ten percent). The wording of all such securities shall be included into the bidding documents and shall be acceptable to the Bank.

3. Shopping. Goods estimated to cost less than EUR 60,000 equivalent per contract, may be procured under contracts awarded on the basis of Shopping procedures in accordance with the provisions of paragraphs 3.1 and 3.5 of the Guidelines, including as a form of such shopping, the electronic bidding carried out by the Borrower's Central State Administration Office for E-Croatia (*Sredisnji drzavni ured za e-Hrvatsku*) for procurement of computer and standard IT equipment, provided that technical specifications for said equipment shall be subject to the prior review by the Bank in accordance with the procedures set forth in Section IV of this Schedule.



4. Direct Contracting. Goods which the Bank agrees meet the requirements for Direct Contracting may be procured in accordance with the provisions of said procurement method.

5. Commercial Practices. Goods estimated to cost less than EUR 200,000 equivalent per contract and to be financed under Sub-financing made for Sub-projects under Parts B.2, B.3, B.5, and C.2 of the Project, may be procured in accordance with commercial practices acceptable to the Bank.

### Section III. Particular Methods of Procurement of Consultants' Services

A. Quality- and Cost-based Selection. Except as otherwise provided in Part B of this Section, consultants' services shall be procured under contracts awarded on the basis of Quality- and Cost-based Selection. For purpose of paragraph 2.7 of the Consultant Guidelines, the short list of consultants for services estimated to cost less than EUR 200,000 equivalent per contract may comprise entirely national consultants.

#### B. Other Procedures

1. Quality-based Selection. Services for assignments which the Bank agrees meet the requirements set forth in paragraph 3.2 of the Consultant Guidelines may be procured under contracts awarded on the basis of Quality-based Selection in accordance with the provisions of paragraphs 3.1 through 3.4 of the Consultant Guidelines.

2. Selection Under a Fixed Budget. Services for assignments which the Bank agrees meet the requirements of paragraph 3.5 of the Consultant Guidelines may be procured under contracts awarded on the basis of a Fixed Budget Selection in accordance with the provisions of paragraphs 3.1 and 3.5 of the Consultant Guidelines.

3. Least-cost Selection. Services for assignments which the Bank agrees meet the requirements of paragraph 3.6 of the Consultant Guidelines may be procured under contracts awarded on the basis of Least-cost Selection in accordance with the provisions of paragraphs 3.1 and 3.6 of the Consultant Guidelines.

4. Selection Based on Consultants' Qualifications. Services estimated to cost less than EUR 160,000 equivalent per contract may be procured under contracts awarded in accordance with the provisions of paragraphs 3.1, 3.7 and 3.8 of the Consultant Guidelines.

5. Single Source Selection. Services for tasks in circumstances which meet the requirements of paragraph 3.10 of the Consultant Guidelines for Single Source Selection,

may, with the Bank's prior agreement, be procured in accordance with the provisions of paragraphs 3.9 through 3.13 of the Consultant Guidelines.

6. Commercial Practices. Services estimated to cost less than EUR 160,000 equivalent per contract and to be financed under Sub-financing made for Sub-projects under Parts B.2, B.3, B.5 and C.2 of the Project may be procured in accordance with commercial practices acceptable to the Bank.

7. Individual Consultants. Services for assignments that meet the requirements set forth in the first sentence of paragraph 5.1 of the Consultant Guidelines may be procured under contracts awarded to individual consultants in accordance with the provisions of paragraphs 5.2 through 5.3 of the Consultant Guidelines. Under the circumstances described in paragraph 5.4 of the Consultant Guidelines, such contracts may be awarded to individual consultants on a sole-source basis, subject to prior approval of the Bank.

#### Section IV. Review by the Bank of Procurement Decisions

Except as the Bank shall otherwise determine by notice to the Borrower, the following contracts shall be subject to Prior Review by the Bank: (a) each contract for goods and services (other than consultants' services) procured on the basis of International Competitive Bidding, Limited International Bidding or Direct Contracting; (b) the first contract awarded by each Project Agency under National Competitive Bidding procedure and the first contract awarded by each Project Agency under the Shopping Procedures; (c) each contract for consultants' services provided by a firm estimated to cost the equivalent of EUR 100,000 or more and provide by an individual estimated to cost the equivalent of EUR 50,000 or more; (d) the first contract awarded by each Project Agency under the Least-Cost Selection method and all contracts above EUR 100,000 awarded under the said method, or under the Fixed-Budget Selection method, or under Commercial Practices procedures; (e) all Single Source contracts; and (f) each contract with the PMU staff or staff of a respective Project Agency or an RDI to be financed from the Loan proceeds. All other contracts shall be subject to Post Review by the Bank.

## **SCHEDULE 5**

### **Implementation Program**

1. The Borrower shall delegate to MSES the responsibility for Project management and coordination, including the overseeing the implementation by Project Agencies of their respective Parts of the Project.
2. The Borrower shall ensure that the Project shall be implemented by the PMU, the Project Agencies and selected RDIs in accordance with the provisions of the PIP and the Operational Procedures (with respect to Parts B and C.2 of the Project) and shall not amend, suspend, abrogate or waive the provisions of the PIP or the Operational Procedures without prior agreement with the Bank.
3. During Project execution, the Borrower shall maintain the PMU within MSES with terms of reference and scope of responsibilities agreed with the Bank, qualified staff and other adequate resources, which shall be responsible for management of the Project activities, procurement, disbursement, financial management, monitoring, reporting and coordination with Project Agencies.
4. The Borrower shall, through the PMU, cause each of the Project Agencies to:
  - (a) maintain policies and procedures adequate to enable them to monitor and evaluate on an ongoing basis, in accordance with indicators acceptable to the Bank, the carrying out of the Project and the achievement of the objectives thereof;
  - (b) prepare, under terms of reference agreed with the Bank, and furnish to the Bank, on or about May 31, 2007, a report integrating the results of the monitoring and evaluation activities performed pursuant to sub-paragraph (a) of this paragraph, on the progress achieved in the carrying out of the Project during the period preceding the date of said report and setting out the measures recommended to ensure the efficient carrying out of the Project and the achievement of the objectives thereof during the period following such date; and
  - (c) review with the Bank, by June 30, 2007, or such later date as the Bank shall request, the report referred to in sub-paragraph (b) of this paragraph, and, thereafter, take all measures required to ensure the efficient completion of the Project and the achievement of the objectives thereof, based on the conclusions and recommendations of the said report and the Bank's views on the matter.

5. For the purposes of carrying out Part A of the Project, the Borrower, through MSES, shall select RDIs based on the criteria set forth in the PIP and agreed upon with the Bank, and shall enter into agreements with each selected RDIs with terms and conditions agreed with the Bank and which shall include, without limitation:

(a) the obligation of RDI to carry out the activities to be financed out of the proceeds of the Loan with due diligence and efficiency and in accordance with the provisions of the PIP and this Agreement, and to provide promptly as needed, funds, facilities, services and other resources required for carrying out such activities;

(b) the obligation of RDI to procure goods and services to be financed out of the Loan proceeds in accordance with the provisions of this Agreement and the PIP;

(c) the obligation of RDI to maintain a satisfactory financial management system, including maintaining records and accounts for expenditures financed from the proceeds of the Loan, and to conduct regular audits of such accounts and provide reports to the Borrower and to the Bank, all in accordance with the provisions of this Agreement; and

(d) the obligation of RDI to report to MSES and the Bank on the progress in carrying out the activities financed from the proceeds of the Loan and to enable representatives of the Borrower and of the Bank, if the Bank shall so request, to visit facilities or other sites financed from the proceeds of the Loan.

6. Not later than December 31, 2005, the Borrower shall enter into an agreement, referred to in paragraph 5 of this Schedule, with at least one eligible RDI, acceptable to the Bank.

7. The Borrower shall and shall cause each Project Agency to prepare and submit for the Bank's approval business plans, including annual training and study tours plans in substance and format acceptable to the Bank.

8. The Borrower shall take all necessary actions to enable BI and other RDIs to open and maintain their respective institutional renewal accounts, on terms and conditions agreed with the Bank.

9. The Borrower, through MSES, shall complete a Science and Technology Policy Study in a format and substance as agreed with the Bank, endorse recommendations of the said study by October 31 2005, and implement the approved policy thereafter.

10. The Borrower shall ensure that the Unity Through Knowledge Fund shall operate in accordance with the policies and operating and monitoring procedures agreed with the Bank.

## **SCHEDULE 6**

### **Special Account**

1. For the purposes of this Schedule:
  - (a) the term “eligible Categories” means Categories (1) through (6) set forth in the table in paragraph 1 of Schedule 1 to this Agreement;
  - (b) the term “eligible expenditures” means expenditures in respect of the reasonable cost of goods, services, training, Sub-financing, Severance Payments and operating costs required for the Project and to be financed out of the proceeds of the Loan allocated from time to time to the eligible Categories in accordance with the provisions of Schedule 1 to this Agreement; and
  - (c) the term “Authorized Allocation” means the amount of EUR 3,000,000 in respect of the Special Account for Part to be withdrawn from the Loan Account and deposited into the Special Account pursuant to paragraph 3 (a) of this Schedule, provided, however, that unless the Bank shall otherwise agree, the Authorized Allocation shall be limited to the amount of EUR 1,500,000 until the aggregate amount of withdrawals from the Loan Account plus the total amount of all outstanding special commitments entered into by the Bank pursuant to Section 5.02 of the General Conditions shall be equal to or exceed the equivalent of EUR 5,000,000.
2. Payments out of the Special Account shall be made exclusively for eligible expenditures in accordance with the provisions of this Schedule.
3. After the Bank has received evidence satisfactory to it that the Special Account has been duly opened, withdrawals of the Authorized Allocation and subsequent withdrawals to replenish the Special Account shall be made as follows:
  - (a) For withdrawals of the Authorized Allocation, the Borrower shall furnish to the Bank a request or requests for deposit into the Special Account of an amount or amounts which do not exceed the aggregate amount of the Authorized Allocation. On the basis of such request or requests, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount or amounts as the Borrower shall have requested.
  - (b) (i) For replenishment of the Special Account, the Borrower shall furnish to the Bank requests for deposits into the Special Account at such intervals as the Bank shall specify.

- (ii) Prior to or at the time of each such request, the Borrower shall furnish to the Bank the documents and other evidence required pursuant to paragraph 4 of this Schedule for the payment or payments in respect of which replenishment is requested. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount as the Borrower shall have requested and as shall have been shown by said documents and other evidence to have been paid out of the Special Account for eligible expenditures. All such deposits shall be withdrawn by the Bank from the Loan Account under the respective eligible Categories, and in the respective equivalent amounts, as shall have been justified by said documents and other evidence.

4. For each payment made by the Borrower out of the Special Account, the Borrower shall, at such time as the Bank shall reasonably request, furnish to the Bank such documents and other evidence showing that such payment was made exclusively for eligible expenditures.

5. Notwithstanding the provisions of paragraph 3 of this Schedule, the Bank shall not be required to make further deposits into the Special Account:

- (a) if, at any time, the Bank shall have determined that all further withdrawals should be made by the Borrower directly from the Loan Account in accordance with the provisions of Article V of the General Conditions and paragraph (a) of Section 2.02 of this Agreement;

- (b) if the Borrower shall have failed to furnish to the Bank, within the period of time specified in Section 4.01 (b) (ii) of this Agreement, any of the audit reports required to be furnished to the Bank pursuant to said Section in respect of the audit of the records and accounts for the Special Account;

- (c) if, at any time, the Bank shall have notified the Borrower of its intention to suspend in whole or in part the right of the Borrower to make withdrawals from the Loan Account pursuant to the provisions of Section 6.02 of the General Conditions; or

- (d) once the total unwithdrawn amount of the Loan allocated to the eligible Categories minus the total amount of all outstanding special commitments entered into by the Bank pursuant to Section 5.02 of the General Conditions shall equal the equivalent of twice the amount of the Authorized Allocation.

Thereafter, withdrawal from the Loan Account of the remaining unwithdrawn amount of the Loan allocated to the eligible Categories shall follow such procedures as the Bank shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Bank shall have been satisfied that all such amounts remaining on deposit in the Special Account as of the date of such notice will be utilized in making payments for eligible expenditures.

6. (a) If the Bank shall have determined at any time that any payment out of the Special Account: (i) was made for an expenditure or in an amount not eligible pursuant to paragraph 2 of this Schedule; or (ii) was not justified by the evidence furnished to the Bank, the Borrower shall, promptly upon notice from the Bank: (A) provide such additional evidence as the Bank may request; or (B) deposit into the Special Account (or, if the Bank shall so request, refund to the Bank) an amount equal to the amount of such payment or the portion thereof not so eligible or justified. Unless the Bank shall otherwise agree, no further deposit by the Bank into the Special Account shall be made until the Borrower has provided such evidence or made such deposit or refund, as the case may be.

(b) If the Bank shall have determined at any time that any amount outstanding in the Special Account will not be required to cover further payments for eligible expenditures, the Borrower shall, promptly upon notice from the Bank, refund to the Bank such outstanding amount.

(c) The Borrower may, upon notice to the Bank, refund to the Bank all or any portion of the funds on deposit in the Special Account.

(d) Refunds to the Bank made pursuant to paragraphs 6 (a), (b) and (c) of this Schedule shall be credited to the Loan Account for subsequent withdrawal or for cancellation in accordance with the relevant provisions of this Agreement, including the General Conditions.



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