



Suruhanjaya Komunikasi dan Multimedia Malaysia
Malaysian Communications and Multimedia Commission

Guide to Spectrum Research Collaboration Program with Institutions of Higher Learning 2007

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Section 1: Spectrum Research Collaboration Program (SRCP)

1.1. Introduction

Collaboration work between Malaysian Communication and Multimedia Commission (*the Commission*) and the Institutions of Higher Learning (IHL) in spectrum related matters will occupy a unique role in developing and strengthening the capacity to generate advance level administrative, regulatory and technical expertise to address the issues on spectrum arising from the rapid advancement of wireless communications in the communication and multimedia industry.

Under this collaboration framework, a Spectrum Research Collaboration Program (SRCP) was formulated to facilitate the collaboration process and to promote research on spectrum related matters.

1.2. Objectives

The objectives of the SRCP are as follows:

- a. Serve as a focal point for information, knowledge development and research and development related to spectrum matters;
- b. Develop our knowledge resources in the management of spectrum; and
- c. Provide platform for collaboration, sharing and exchange of knowledge and expertise.

1.3. Governance

1.3.1. Research Collaboration Steering Committee (RCSC)

The SRCP will be governed by a committee called Research Collaboration Steering Committee (RCSC) comprising distinguished representative from the Commission, Ministry of Energy Water and Communications (MECW), Communication & Multimedia Industry, Stakeholders and Deputy Vice Chancellor (Research) of Universities who will provide vision and direction to steer the SRCP to achieve its objectives. The RCSC will be chaired by the Chairman of the Commission.

The RCSC will ensure:

- a. The integrity, transparency and independence of the SRCP;

- b. The establishment and maintenance of world-class standards and reputation;
- c. The appropriate networking of available resources. In this respect, the RCSC will have responsibility for strategic direction, policy aspects, determination of priorities, recommendation of collaboration projects to the Commission as well as approval of the annual operational plan of the SRCP; and
- d. The RCSC may modify the mandate of the SRCP as it considers appropriate.

1.3.2. Research Collaboration Panel (RCP)

The RCSC will be supported by a Research Collaboration Panel (RCP). Members of RCP will be elected by the RCSC. It consists of members from IHL and the Industry.

The RCP advises, manages and monitors the Research program. Its responsibilities include:

- a. Identification of the partnership programs;
- b. Identification of the appropriate existing resources available within the program perimeter (including subject matter experts);
- c. Development of programs in collaboration with the IHL committed to the implementation of the selected programs;
- d. Identification of research topics and evaluation of research proposals;
- e. Promotion of the SRCP to ensure goals are achieved;
- f. Management and administration of the SRCP;
- g. Coordination to optimize the use of resources within the partnership; and
- h. Analyses and advises the RCSC and Commission on research projects and their status.

1.3.3. The Research Collaboration Secretariat

The RCSC and RCP will be supported by a Secretariat (also known as the SRCP Secretariat) from the Commission. The tasks of the Secretariat also include maintenance and updates of the web page for the IHL Collaboration Program. The Secretariat will take functional direction from both the RCSC and the RCP.

Figure 1 shows the linkages between the relevant parties.

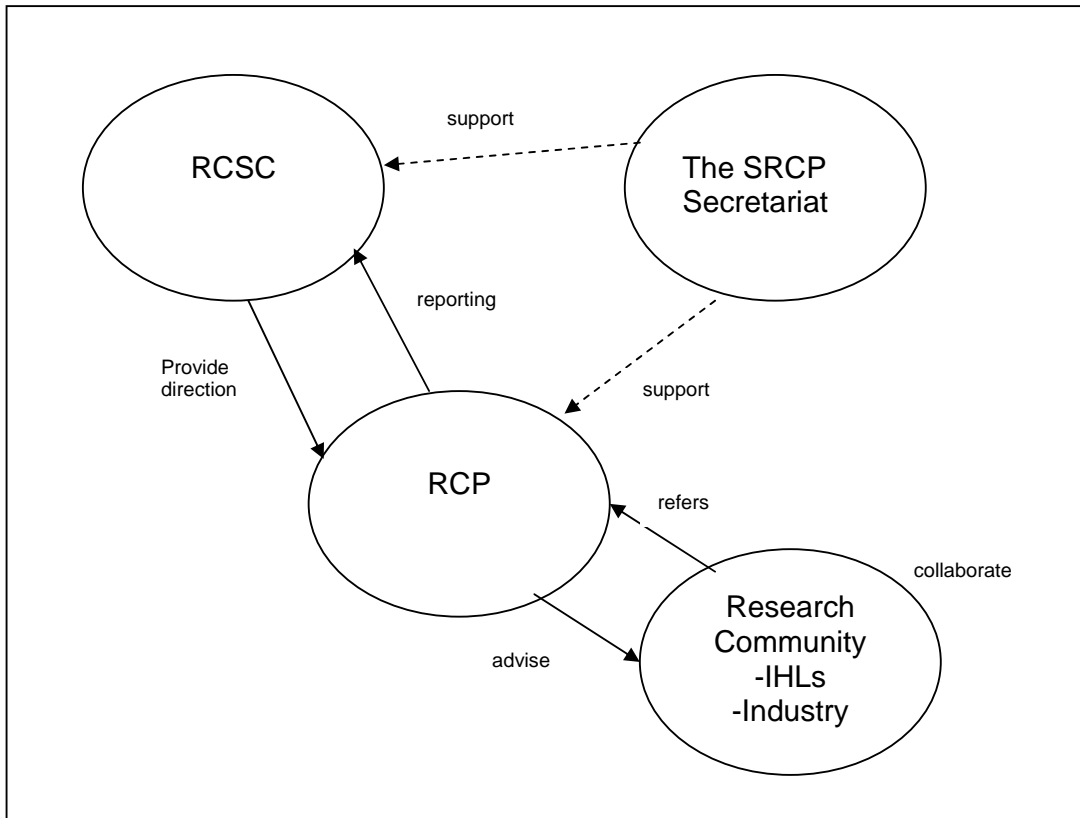


Figure 1: Relationships between parties in the Collaboration Program

1.4. Partnerships and Networking

The SRCP relies on strong commitments to the collaboration and networking activities. An essential target of the networking process is to keep this collaboration alive and to attract additional partners which could contribute to the strengthening of the expertise. In this respect, the SRCP will establish collaborative and exchange relationships with other Centers and other entities, locally, within the region and abroad, which are engaged in similar or related initiatives.

The purpose of these relationships is to increase the knowledge and other capabilities of the collaboration program and to keep it at the leading edge.

1.5. Key Focus Areas

Research interests under the program are converged towards three (3) main areas related to spectrum matters:

- a. Emerging wireless technology

- o Research on the emerging wireless technology and its impact on the future use and management of the spectrum;
- b. Spectrum Management
 - o Research that is focus on the spectrum management covering administrative, regulatory, economic and technical aspects such as spectrum sharing, use of spectrum economics in managing demands, spectrum pricing and strategies; and
- c. Spectrum & us
 - o Research on wireless lifestyle and its impact to social, health, business and productivity of the Malaysian society.

1.6. Eligibility

Only Malaysian IHLs in the public and private sector are eligible to participate in this SRCP. Other organizations who are interested to participate in the SRCP shall form collaborative partnerships with IHLs wherein the IHLs shall be the lead partner.

1.7. Research Method

The SRCP are open for proposals on any research method or approach to be used by the applicant. In the submission, the applicant shall indicate in details of its research method on its proposed topic.

1.8. Support for Research

Under this program, the Commission will provide the following support to ensure its sustainability:

a. Financing or funding

The Commission had allocated some financial support to part or fully finance the SRCP. The fund covers the followings:

Remuneration and Allowances

This scope includes wages and allowances for temporary and contract personnel who are directly engaged in the project.

Travel and Transportation

Under this scope, the expenses for travel and transportation trips which are directly related to the project will be based the Commission's "Terms and Conditions of Service for Executive" of Executive grade (P4).

✚ Rentals

Only rental expenses for building space, equipment, transportation and any other item directly related to the project should be included.

✚ Research Materials and Supplies

Only expenses for research materials and supplies directly related to the project should be included.

✚ Minor Modifications, Maintenance and Repairs

Only expenses for minor modifications and repairs of the building, laboratory, equipment or any other item directly related to the project. The maintenance costs of existing equipment used during the duration of project period should also be included. The cost of maintenance of any equipment purchased under the project will not be borne by this fund after the project is completed.

✚ Equipment and Accessories used in research

Only purchase of special equipment and accessories (including accessories to upgrade the capability of existing equipment), usage of computer facilities and data processing directly related to the project should be included.

The Commission will provide funding for this SRCP based on the agreed schedule and terms in the Research Collaboration Contract.

b. Technical experts

The Commission may provide support in terms of technical expertise or consultancy in areas that is related to the work of the Commission. Furthermore, the Commission may also engage experts from local or overseas to provide technical advice based on the request submitted and agreed in the terms and conditions of the Research Collaboration Contract.

c. Seminars and Workshops

The Commission may invite or facilitate participation in local and foreign seminar and workshops for participants in the Research Collaboration Program and/or organize local seminars or workshops to support development of knowledge in the areas or themes of spectrum research.

1.9. Research Collaboration Contract

The Commission (Tender Committee) will inform in writing the award to the Successful Applicant. The Commission may suggest changes and negotiate with the Successful Applicant on the proposed cost/funding, scope, intellectual property rights (IPR), timelines and collaboration/grouping/partners. On acceptance, the Successful Applicant is required to enter into a contract with the Commission.

1.10. Equipment used in Research

All equipment purchased under the project shall belong to the Lead Partner institution. Such equipment is not for the exclusive use of the institution but to be shared with other IHLs or research projects. The maintenance after the project completion of such equipment should be borne by the institution.

1.11. Duration of Project

There are 3 categories of projects duration outlined for this SRCP which it will be depending on the scope of each project. The categories are:

- a. Short duration (total project time is less than 6 months)
- b. Medium duration (total project time is more than 6 months and less than 18 months)
- c. Long duration (total project time is more than 18 months and less than 36 months)

Applicants shall indicate the project duration in its proposal.

Section 2: Application Process and Procedure

2.1. Preparing Proposal

The proposal shall be prepared based on the key focus areas (as in 1.5 above) and/or themes and application timelines as published by the Commission.

The proposal shall be submitted based on the format provided with the application form as in Appendix 1. The proposal shall be precise, concise and easy to understand. It shall clearly state the expected cost, milestones and results.

2.2. Submitting Proposal

The proposal shall be submitted to the SRCP Secretariat in electronic and hardcopy to the address as provided in this document.

An acknowledgement will be sent once the proposal has been received by the Commission. Applicants are to ensure that the proposal is complete and with all attachments, charts and references. All proposed members of the team must be supported with proper authorization and supporting letters from members.

2.3. Evaluation of Proposal

The Commission has appointed the RCP to evaluate, advise, monitor and manage the research collaboration projects. The Commission with the assistance of the RCP will evaluate proposals based on the following key criteria:

- a. Win-win for parties in the collaboration
- b. Relevance to subject matter, scope and contribution/add to knowledge and capacity building;
- c. Adequacy of assembled resources, skills and organization for successful completion of the project;
- d. Cost consideration;
- e. Level of collaboration; and
- f. Chance for success within the proposed timeline.

The RCP provides advice and recommendations to the Commission's Tender Evaluation Committee.

2.4. Reject/Award of Proposal

The Commission will consider the advise/recommendations of the RCP before making decisions to reject or award a proposal.

The Commission shall reject proposal that does not meet the submission and evaluation criteria.

The decision to award/reject a proposal shall be communicated by the Commission's Tender Committee to the applicants within three months of the closing date.

2.5. Variation of Research Project

Any requests for variations in scope and/or funding after a project has been approved must be made in writing with prudent justification to the SRCP Secretariat for consideration. The Commission after considering the advice from the RCP will make a decision on the request within three months of an application.

2.6. Extension of Project

Only written request addressed to the SRCP Secretariat three months before the targeted completion date will be considered. Extension shall not exceed six months from the targeted completion date. Nevertheless, the Commission reserves the right to grant additional extension period.

2.7. Application cycle

The table below depicts the overall application process for the SRCP.

No	Process	Date
1.	The Commission issues Request For Proposal (RFP)	20 April 2007
2.	Close of submission for application	12 noon, 1 June 2007
3.	Tender opening and evaluation process	1 June – 27 July 2007
4.	Notification of results	14 August 2007
5.	Project commencement	27 August 2007

The application process flow is shown in Figure 2.

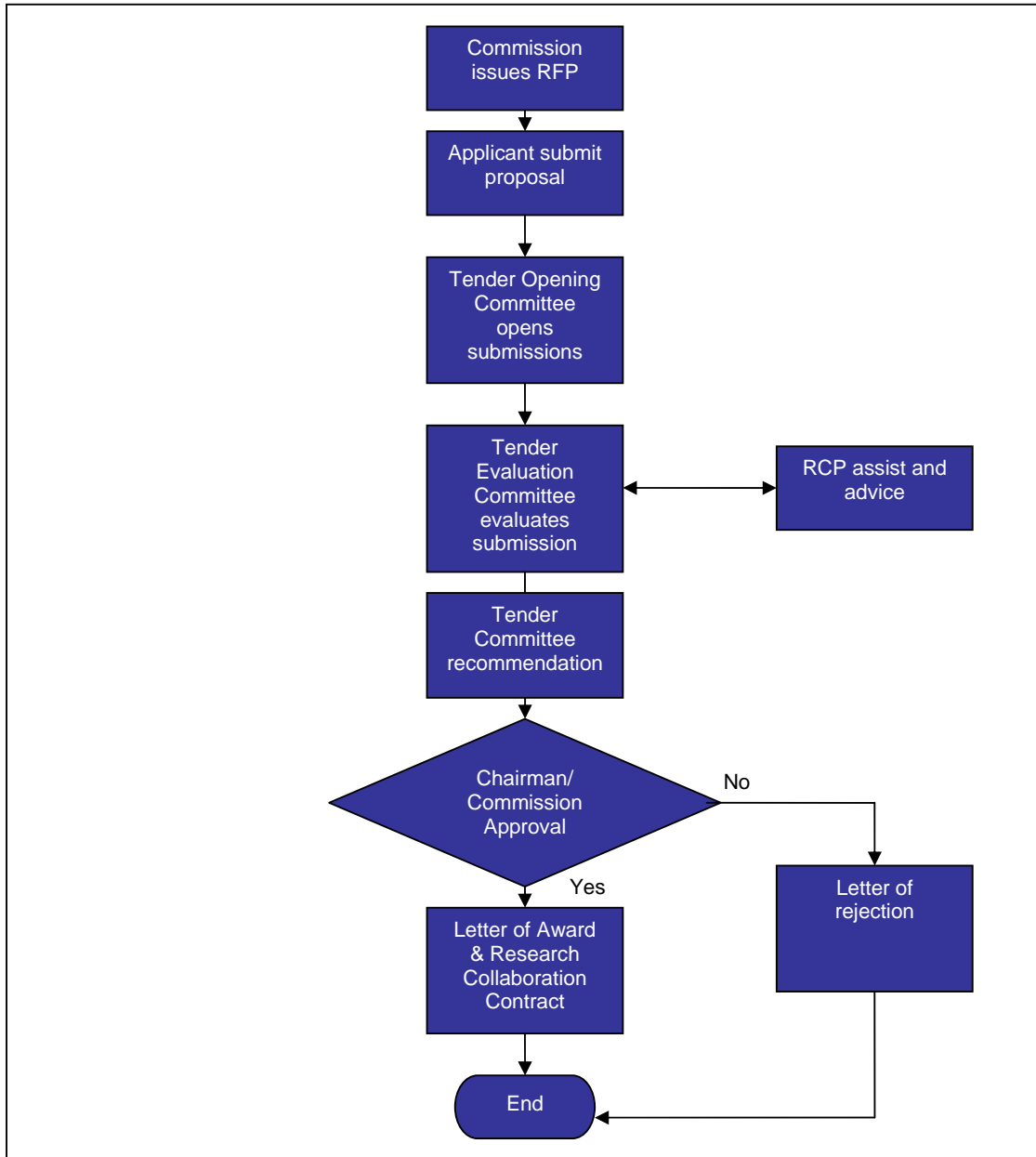


Figure 2: Application process flow

Section 3: Project Implementation and Monitoring

3.1. Reports by Lead Partner

The Lead Partner is responsible to implement the project and is required to submit the following reports:

a. Periodic Progress Report (PPR)

The Lead Partner shall submit quarterly report by the 7th day after the end of each quarter. The project shall also include its statements of expenses incurred during each period. These reports will be analysed against the deliverables and the Commission will use this mechanism to determine whether it will continue to support the project.

New knowledge or technological development in the due course of the research may prompt the Commission to make changes to the project while it is being carried out. Any proposed changes will require the agreement of parties involved in the Research Collaboration Contract.

b. End-of-term Report (ER)

The ER is required to be submitted through the Lead Partner institution within 3 months of project completion to the Commission. In the ER, the Lead Partner shall include (not limited to) the following:

- ✚ Direct outputs of the project;
- ✚ Achievements based on the original project objectives;
- ✚ Full financial report for the whole project duration (if any);
- ✚ Impacts of the project to the nation; and
- ✚ Assessment of the whole project.

The Commission may appoint independent experts at any stage, to carry out specific, scientific, financial or technological audits to ascertain the status/performance of the project.

3.2. Reports by RCP

RCP shall review all reports submitted from the Lead Partner and made recommendations to the Commission. RCP will produce 2 types of reports as follows:

a. Assessment Report on PPR (ARP)

Upon receiving the PPR reports from the Lead Partner, the RCP will assess the overall progress of the projects and to give advice to the on its direction. The RCP shall also give recommendation on improvements in the project to achieve the milestones. The recommendation may include whether to continue support of the project depending on the progress and status of the research. All these information will be reflected in the ARP.

b. Assessment Report on ER (AER)

Upon completion of projects, an ER shall be submitted to the Commission. The RCP is to review the ER and highlight to the RCSC on the outcome of the projects and way forward in the AER.

The project monitoring and implementation flow chart is shown in Figure 3.

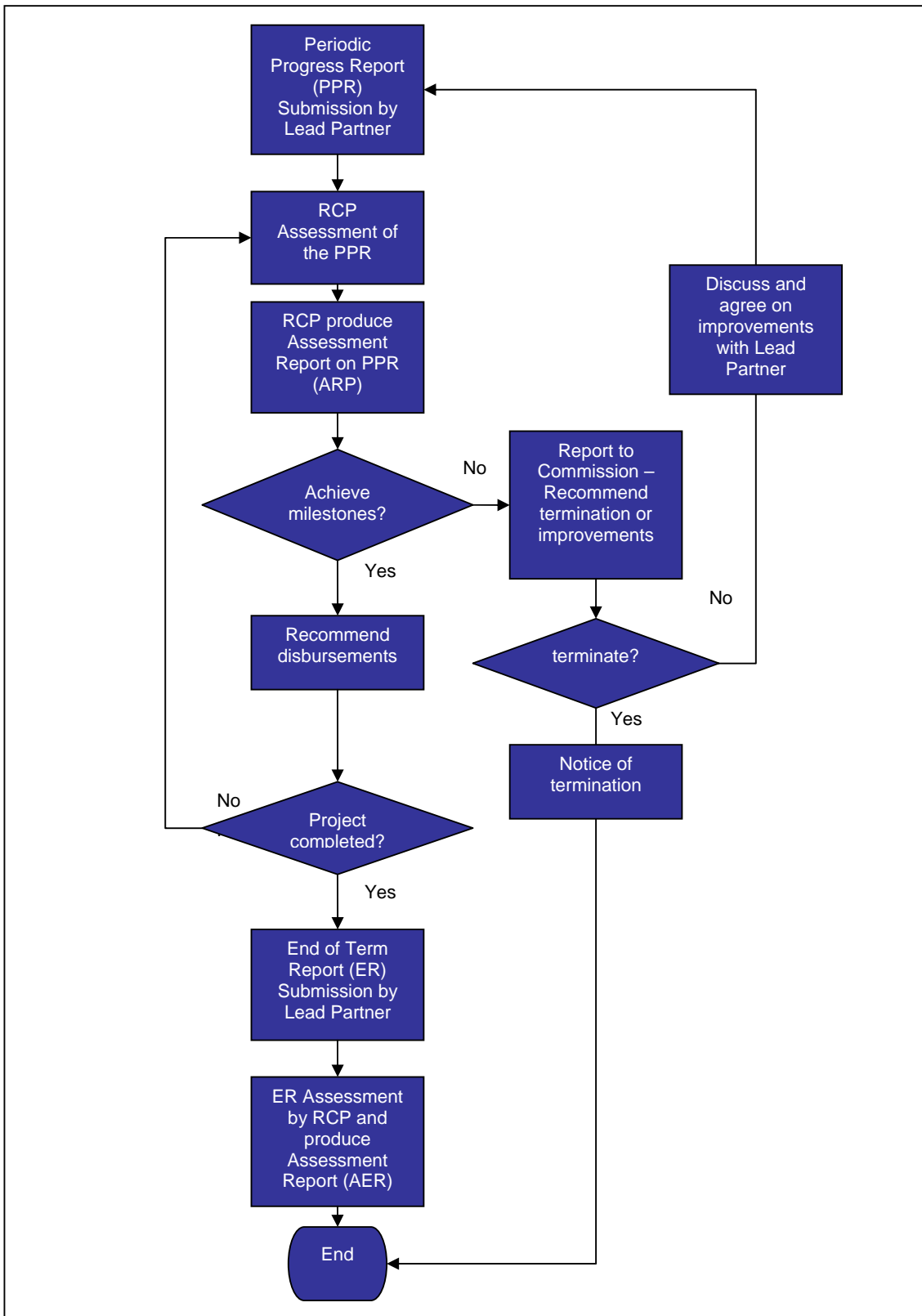


Figure 3: Project monitoring and implementation flow chart

Section 4: Intellectual Property (IP)

4.1. Intellectual Property (IP)

Ownership and management of IP, royalties and any other forms of fees received by the institution resulting from the findings or outputs of the research such as, licensing of the IP or any other forms of commercialisation, shall be governed in accordance with the agreed terms and conditions outlined in the Research Collaboration Contract.

4.2. Publications

Publications and presentations of the project results to local or international events/media are required. Prior to the publications/presentations, the Lead Partner shall obtain approval from the RCP.

Lead Partners are encourage to come out with technical research papers in referred journals / conferences on a regular basis. A copy of all publications shall be submitted to the SRCP Secretariat.

Lead Partner shall denote and acknowledge the sources of research support for the project and the contribution of the various entities.

APPENDIX 1: APPLICATION FORM FOR SPECTRUM RESEARCH COLLABORATION

A APPLICANT DATA		
1.	Lead Institution Name	
2.	Address	
3.	Contact Person	
4.	Designation	
5.	Contact number	(Office) (Mobile)
6.	Fax	
7.	Email address	

B PROJECT DETAILS		
8.	Project Theme	
9.	Project statement (Please attach proposal and supporting documents as requested)	
10.	Lead partner - person and IHL (please provide CV)	
11.	Collaborative Partners (CV of all partners)	
12.	Research Methods	
13.	Commencement date Research period or duration and its End Date	
14.	Gantt chart showing activities and expected outcome/ deliverables and the milestones	
15.	To explain risk and provide its mitigation in the following aspects:	Explanation of risk How to mitigate?
16.	Technology risk	
17.	Funding risk	
18.	IPR Proposal	
19.	Quantum and schedule of disbursement (in brief, detail disbursement to be attached)	

C DECLARATION	
<p>a) I, _____ (IC no. _____) hereby declare that the information contained in this application forwarded to the Malaysian Communications and Multimedia Commission is true, accurate and complete to the best of my knowledge and belief and that I have not withheld/ distorted any material facts.</p> <p>b) I also declare that I am free from any litigation pending litigation, claims, demands or actions pertaining to the proposed project. I understand that if the grant is obtained by false or misleading statements, I may be prosecuted and in addition, the Commission may, at its discretion, withdraw the grant and recover immediately from me any amount of the grant that may have been disbursed.</p> <p>c) I also agree to abide to the terms and conditions of the SRCP.</p>	
Signature:	Date of application:
Designation:	Registered institution stamp:
Name (in BLOCK letters):	

For the Commission's use only

D RC Secretariat Comments
Date:
<input type="checkbox"/> Recommend to be tabled to RCP
<input type="checkbox"/> Reject