HASANUDDIN UNIVERSITY

ENGINEERING FACULTY DEVELOPMENT PROJECT

under

JBIC Loan Agreement No. IP-541

INTERIM REPORT

Date : 11 July 2012

University: Kyushu University

Name : Rudy Djamaluddin

Signature:

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Academic and research activities

1. Your current academic activities

(1) Research Theme of your specialized field

Generally, the field of research doing in the short research program involves of application of the FRP material for the strengthening of a deteriorated concrete structures. Therefore, during the program, the research focus on the two topics are :

- (1) Study on the strengthening of the deteriorated of bridge concrete slab using CFRP Grid.
- (2) Study on the strengthening of the pre-yielded reinforced concrete beams using GFRP sheet.

The topic #1 is mainly doing in Kyushu University and the #2 topic is mainly doing in Hasanuddin University. Both topics are under the frame of the collaboration research between Hasanuddin University and Kyushu University.

Daily academic activities is mainly doing at the laboratory room (Kenyushitsu) and the laboratory workshop (Jikkentou). Activities at the laboratory room are reference review and, analyzing and writing scientific paper or reports. Therefore, most of activities will be done on the laboratory room, while activities at the workshop are only for preparing the specimen and testing. Figure 1 shows the laboratory room and workshop. Figure 2 shows main activities at the laboratory room.





(a) Laboratory room (Kenkyushitsu)

(b) Workshop (Jikkentou)

Figure 1 Laboratory room and Workshop

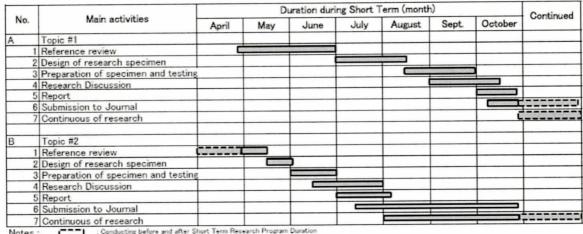


Figure 2 Activity at the Laboratory room

(2) Plan and Result of writing dissertation and contribution to the technical journals

The plan of both topics are shown in Table 1:

Table 1: Research Plan during Short Term Research Program



Notes:

Conducting during short research program

Contribution target of the research activities under this program are:

- (1) Submission to the international conferences
- (2) Submission to the international or national (Indonesia) journal
- (3) Formal collaboration research after the program

Almost all plans can be implemented as the schedule. A paper has been submitted to an International Symposium of ISLT 2012 in Bali (Indonesia) on September 2012. Also a journal has been submitted to an accredited journal in Indonesia.

(3) Performances in the academic conference

A paper has been submitted to the ISLT 2012 International Symposium conducted in Bali on September 2012. The topics published in the conference may be an interest issue since it support the environmental matter as well as proposing an alternative method for strengthening of a deteriorated structures due to disasters such as an earthquake.

(4) Academic and research environment in your laboratory/university

Academic and research environment in the laboratory is very good and the supporting equipment is complete to perform the advanced research. In order to share the research theme between each other as well as to have advices from professor, a seminar of each theme is conducted by all laboratory members. Figure 3 shows the seminar conducting in the laboratory.

[Type text]





Figure 3 Monthly seminar at the laboratory

Current circumstances to acquire the advanced study in your field of study and related with development needs of eastern Indonesia and comparative advantage for UNHAS (Hasanuddin University)

The advance study can be conducted smoothly and under good advices from adviser as well as supporting form laboratory members. Since the topics has strong relation to the my research road map, the advanced studies doing in Kyushu University will be a valuable foundation to strengthen the research networking after the program. Strong collaboration is needed to support the development of the Hasanuddin University becoming a research based faculty. Almost the research equipment using in structure laboratory of Kyushu University are similar to what will be used in New Engineering Faculty of Hasanuddin University. The advanced research doing during short term program is just a starting point to do comprehensively advanced research in Indonesia to support the development needs of the particularly eastern Indonesia under the scheme of the international collaboration between my laboratory in Engineering faculty of UNHAS and the structure laboratory of Kyushu University Engineering Faculty.

Comments related with having the better understanding of <u>Labo-based Research</u>
 <u>Activities and Education System</u> in Japan and to consider how to introduce the
 system in UNHAS

In order to implement a lab-based education system in UNHAS, the most important needs are :

- (a) Research road map of each laboratory must be cleared as a part of the main research rod map of the Engineering Faculty of UNHAS
- (b) Educational management system between under graduate and post graduate school should be integrated.
- (c) Infrastructure and Research Equipment
- (d) Research networking between industry-community and Faculty should be established $[Type\ text]$

strongly and effectively.

- (e) Governmental regulation and professionalism of the faculty staffs and lecturer to support a mutual benefit based research environment.
- 4. Current circumstances to get advices from Japanese professors with regard to the curriculum of UNHAS.

Japanese professor is open to provide advices with regard to the curriculum of UNHAS.

5. Comments related with finding ideas for future joint research program between Japanese universities and UNHAS, and establish the close relationship between Japanese universities and UNHAS.

Since the topics doing in Kyushu University has strong relation to the my research road map, many ideas can be realized under the scheme of the research collaboration. The idea of the strengthening of the damaged structures due to disasters such as earthquake is one of very challenge idea since still less researcher doing on that fields. The advanced research doing during short term program is just a starting point to do comprehensively advanced research in Indonesia under the scheme of the international collaboration between my laboratory in Engineering faculty of UNHAS and the structure laboratory of Kyushu University Engineering Faculty.

6. Evaluate, request and comments from your academic supervisor

Advices from academic supervisor:

- (1) Even we have complete equipment and good infrastructure, most important things is how to utilize it and contribute to the development of the knowledge
- (2) Research results should be published to share the findings and to get input from other researcher.

Daily life in Japan

1. Living condition such as living environment, expenses and others

I am living in the guest house of the Kyushu University at Ito Campus. It has comfort environment and convenience to the daily activities in the Kyushu University. However, it is located enough far to the center of the district. So it is not convenience to get shopping for daily needs. Figure 4 shows the Guest house of Kyushu university where I am living during the program. Figure 5 shows the environment of Kyushu University Ito Campus





Figure 4 Guest House of Kyushu University Ito Campus



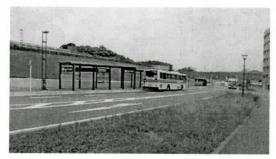


Figure 5 Ito Campus Environment

2. Other matters related with daily life in Japan

- (1) Transportation is limited only bus with rarely time table at evening. It can be a problem when we have a trip back to guest house at late evening.
- (2) The health insurance should use public government insurance for the convenience of utilization. It simpler because the payment can be discounted directly at time. But, for the applied insurance, we have to pay all and then it will be reimbursed by the insurance company after filling forms and report to them, it is complicated and not convenience.

Health matter

1. Physical conditions

Physical conditions is good so far. Hot weather make more tired.

2. Mental conditions

Mental conditions is good and enjoy.

3. Other matters related with health

No other matters.

(End of the sheet)