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## APPENDIX A: QUESTIONNAIRE

02-10-2011

.....

Dear Sir / Madam,

### **Research Project - M.Sc. in Construction Project Management**

I am an postgraduate student of Department of Civil Engineering, University of Moratuwa undertaking the Master of Science Degree in Construction Project Management. In fulfilment of this Masters Degree program, I am required to conduct a research and produce a Thesis.

**Research Topic** : Effective Project Communication for Construction Project Managers in Sri Lanka.

**Purpose of the Research** : The central focus of this study is to propose an effective project communication plan for project managers in Sri Lankan construction industry by studying the existing project communication process.



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I would be much grateful if you could complete this questionnaire despite your busy work schedule as it will be essential in the achievement of the above objectives.

The information gathered through this survey will only be used for this particular research study and will not be disclosed to others or used for any other purpose. Results would also be summarised and therefore, no specific referees will be made to individuals or firms.

Thanking you,

Yours faithfully,

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**EFFECTIVE PROJECT COMMUNICATION FOR CONSTRUCTION  
PROJECT MANAGERS IN SRI LANKA**

**Part A. Communication process in construction**

This section asks you to think about the extent the following items were evident or practiced in the projects you were involved in. Please indicate your response by ticking which point on the scale best describe what happened.

| Item number | Communication process in construction   | To what extent |   |   |   |   |
|-------------|---|----------------|---|---|---|---|
|             |   | 1              | 2 | 3 | 4 | 5 |
| 1           | Effective communication   |                |   |   |   |   |
| 2           | A communication plan  |                |   |   |   |   |
| 3           | High levels personal/interpersonal skilled management                           |                |   |   |   |   |
| 4           | Culturally sensitive and appropriate communication                              |                |   |   |   |   |
| 5           | Two way communication   |                |   |   |   |   |
| 6           | Ongoing meetings between management/staff/stakeholders                          |                |   |   |   |   |
| 7           | Well established organisational culture and objectives                          |                |   |   |   |   |
| 8           | Awareness of national culture   |                |   |   |   |   |
| 9           | Clear communication of organisational objectives                                |                |   |   |   |   |
| 10          | Project managers with excellent communication skills                            |                |   |   |   |   |
| 11          | Project funding influencing tools and techniques of communication               |                |   |   |   |   |
| 12          | Project type and duration influences communication strategy and structure       |                |   |   |   |   |
| 13          | Ongoing communication between project proponents and stakeholders               |                |   |   |   |   |
| 14          | Understanding and appreciation of cultural difference involved                  |                |   |   |   |   |
| 15          | Determination/establishment of communication plans and strategies at the outset |                |   |   |   |   |
| 16          | Regular review and adjustments of communication plans                           |                |   |   |   |   |
| 17          | Selective use of communication media for specific purposes/audiences            |                |   |   |   |   |
| 18          | Effective timelines   |                |   |   |   |   |
| 19          | Clear communication clarifying roles of stakeholders                            |                |   |   |   |   |
| 20          | Effective communication reflecting openness and                                 |                |   |   |   |   |

|   |  |  |  |  |  |  |
|---|--|--|--|--|--|--|
|   | tolerance of cultural differences  |  |  |  |  |  |
| 21  | Communication strategies to help minimise potential disputes and misunderstandings |  |  |  |  |  |
| 22  | Flexibility of form and style of communication                                     |  |  |  |  |  |
| 23  | Essential communication to stakeholders for endorsement                            |  |  |  |  |  |
| 24  | Some control by management through open communication                              |  |  |  |  |  |
| 25  | Clear communication giving stakeholders opportunity to comment/ cast a vote        |  |  |  |  |  |
| 26  | Effective communication strategies ensuring successful technology transfer         |  |  |  |  |  |
| To what extent rating: 1-Never, 2-Seldom, 3-Sometimes, 4-Mostly, 5-Always |  |  |  |  |  |  |

### Part B – Communication Barriers

This section asks you to think about impact of communication barriers on your project and the extent they were overcome. Please indicate your response by ticking which point on the scale best describe what you experienced on your project.

| Rate the impact |   |   |   | Communication Barriers             | 2.Extent they were overcome |   |   |
|-----------------|---|---|---|------------------------------------|-----------------------------|---|---|
| 1               | 2 | 3 | 4 |                                    | 1                           | 2 | 3 |
|                 |   |   |   | Community interference             |                             |   |   |
|                 |   |   |   | Lack of/ inappropriate technology  |                             |   |   |
|                 |   |   |   | Varying perception/ interpretation |                             |   |   |
|                 |   |   |   | Conflicting cultural values        |                             |   |   |
|                 |   |   |   | Lack of support and commitment     |                             |   |   |
|                 |   |   |   | Varying capacity and capability    |                             |   |   |
|                 |   |   |   | Unclear channels of communication  |                             |   |   |
|                 |   |   |   | Ineffective reporting system       |                             |   |   |
|                 |   |   |   | Language difficulties              |                             |   |   |
|                 |   |   |   | Interpersonal conflict             |                             |   |   |
|                 |   |   |   | Age difference                     |                             |   |   |
|                 |   |   |   | Conflicting interest               |                             |   |   |
|                 |   |   |   | Resisting change                   |                             |   |   |
|                 |   |   |   | Gender issues                      |                             |   |   |
|                 |   |   |   | Lack necessary skills              |                             |   |   |
|                 |   |   |   | Varying concept of time            |                             |   |   |
|                 |   |   |   | Organisational mishap              |                             |   |   |
|                 |   |   |   | Limited resources                  |                             |   |   |
|                 |   |   |   | Poor planning                      |                             |   |   |
|                 |   |   |   | Limited time                       |                             |   |   |

|  |  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|--|
|  |  |  |  |  | Lack of motivation   |  |  |  |
|  |  |  |  |  | Information filtering  |  |  |  |
|  |  |  |  |  | Religious issues   |  |  |  |
|  |  |  |  |  | Poor Listeners   |  |  |  |
|  |  |  |  |  | Family commitments   |  |  |  |
|  |  |  |  |  | Lack of confidence   |  |  |  |
|  |  |  |  |  | Poor leadership  |  |  |  |
|  |  |  |  |  | Personal preference  |  |  |  |
|  |  |  |  |  | Poor negotiation skills                                      |  |  |  |
|  |  |  |  |  | Conflicting business/industry ethics                         |  |  |  |
|  |  |  |  |  | Unclear Objectives   |  |  |  |
|  |  |  |  |  | Lack of concern  |  |  |  |
|  |  |  |  |  | Lack of trust  |  |  |  |
| Impact Rating: 1-Insignificant, 2-Minor, 3-Moderate, 4-Major, 5-Catastrophic |  |  |  |  | Extent overcome rating: 1-Not at all, 2-Partially, 3-Totally |  |  |  |

### Part C – Communication Strategies

This section asks you to think about communication strategies and the extent they were employed on your project. Please indicate by ticking which point on the scale most describes in your view the extent each strategy was employed in your project.

| Item number  | University of Moratuwa, Sri Lanka<br>Electronic Theses & Dissertations<br>Comprehensive Communication plan | Extent they were Employed Rating |   |   |   |   |
|--|--|----------------------------------|---|---|---|---|
|  |  | 1                                | 2 | 3 | 4 | 5 |
| 1  | Comprehensive communication plan   |                                  |   |   |   |   |
| 2  | Clear communication channels   |                                  |   |   |   |   |
| 3  | Delegating responsibilities  |                                  |   |   |   |   |
| 4  | Adjusting and adopting   |                                  |   |   |   |   |
| 5  | Team meetings  |                                  |   |   |   |   |
| 6  | Cultural initiation  |                                  |   |   |   |   |
| 7  | Regular reviewing and reality checks   |                                  |   |   |   |   |
| 8  | Training   |                                  |   |   |   |   |
| 9  | Consultative approach  |                                  |   |   |   |   |
| 10   | Suggestion Box   |                                  |   |   |   |   |
| 11   | Continuous Improvement process   |                                  |   |   |   |   |
| 12   | Instrumental changes   |                                  |   |   |   |   |
| 13   | Resource levelling   |                                  |   |   |   |   |
| 14   | Feedback processes   |                                  |   |   |   |   |
| 15   | Timely reports   |                                  |   |   |   |   |
| 16   | Dispute resolution   |                                  |   |   |   |   |
| 17   | Problem solving  |                                  |   |   |   |   |
|  | Other(s):  |                                  |   |   |   |   |
| Extent they were employed rating: 1-Never, 2-Seldom, 3-Sometimes, 4-Regularly, 5-Mandatory |  |                                  |   |   |   |   |

1. What is your profession? ..... (e.g. Architect, Engineer, Quantity surveyor)
2. What is your role for the project? ..... (e.g. Project Manager, Construction Manager, Construction Engineer)


***Thank you very much for your participation – your responses are very much appreciated.***



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## APPENDIX B: SUMMARY OF FINDINGS

| Area covered  | Factors  | Output  |
|---|--|---|
|   | Communication process in construction  |   |
| <u>Communication Planning</u><br>Project Communication Hand Book (2003)<br>Gathering Planning inputs<br>Identify Stakeholders<br>Determine stakeholders needs<br>Identify Communication method<br>Prepare communication plan draft<br><br><u>Information Distribution</u><br><br>Work results (Fewaz, 2008)<br> Communication management plan (Project Communication Hand Book 2003)<br>Project plan (PMBOK 2004)<br>Project records (PMBOK 2004)<br>Project reports (Mehra, 2003)<br>Project presentations (Fewaz, 2008)<br><br><u>Manage Stakeholders</u><br>(Karlson 2002)<br>Client/ consultant/ contractor<br>End Users/<br>Competitors<br>Financial institutions<br>Public authorities<br>Media/ Third parties | 1. Effective communication   | Two-way communication   |
|   | 2. A communication plan  | Technological transfer  |
|   | 3. High levels personal/ interpersonal skilled management                              | Project-type influence  |
|   | 4. Culturally sensitive and appropriate communication                                  | Outset plans  |
|   | 5. Two way communication   | Flexi form-style  |
|   | 6. Ongoing meetings between management/ staff/ stakeholders                            | Communication in Cultural differences                             |
|   | 7. Well established organisational culture and objectives                              | Project-proponent communication                                   |
|   | 8. Awareness of national culture   | Project funding influencing tools and techniques of communication |
|   | 9. Clear communication of organisational objectives                                    | Effective timelines   |
|   | 10. Project managers with excellent communication skills                               | A communication plan  |
|   | 11. Project funding influencing tools and techniques of communication                  | Communication Media   |
|   | 12. Project type and duration influences communication strategy and structure          | Review plan   |
|   | 13. Ongoing communication between project proponents and stakeholders                  | Clarify roles   |
|   | 14. Understanding and appreciation of cultural difference involved                     | National culture  |
|   | 15. Determination/ establishment of communication plans and strategies at the outset   |   |
|   | 16. Regular review and adjustments of communication plans                              |   |
|   | 17. Selective use of communication media for specific purposes/ audiences              |   |
|   | 18. Effective timelines  |   |
|   | 19. Clear communication clarifying roles of stakeholders                               |   |
|   | 20. Effective communication reflecting openness and tolerance of cultural differences  |   |
|   | 21. Communication strategies to help minimise potential disputes and misunderstandings |   |

|   |  |  |
|---|--|--|
| <u>Performance Reporting</u><br>(Mehra, 2003)<br>Work performance information<br>Performance measurements<br>Forecasted completion<br>Quality control measurement<br>Approved change requests and deliverable<br>Time and cost estimates  | 22.Flexibility of form and style of communication                              |  |
|   | 23.Essential communication to stakeholders for endorsement                     |  |
|   | 24.Some control by management through open communication                       |  |
|   | 25.Clear communication giving stakeholders opportunity to comment/ cast a vote |  |
|   | 26.Effective communication strategies ensuring successful technology transfer  |  |
|   | Communication Barriers   | OUTPUT   |
| <u>Barriers impact on effectiveness</u><br>(mehra, 2003)<br><br>Physical –noise, distance, time<br>Cultural - ethnic, religious, and social<br>Perceptual<br>Words<br>lack of similar experience<br>Emotional<br>Linguistic<br>Non-verbal misunderstood gestures<br>Variations in language<br><br>Adeleke (2004)<br><br>Lack of detailed drawings<br>Misinterpretation<br>Poor writing<br>Geographical location where communication cannot be easily passed<br>Poor recording of bills of quantities<br>Fear of the authority<br>Inferiority complex of | Community interference   | Varying capacity and capability<br>Varying concept of time<br>Poor planning<br>Community interference<br>Lack necessary skills |
|   | Lack of/ inappropriate technology  |  |
|   | Varying perception/ interpretation   |  |
|   | Conflicting cultural values  |  |
|   | Lack of support and commitment   |  |
|   | Varying capacity and capability  |  |
|   | Unclear channels of communication  |  |
|   | Ineffective reporting system   |  |
|   | Language difficulties  |  |
|   | Interpersonal conflict   |  |
|   | Age difference   |  |
|   | Conflicting interest   |  |
|   | Resisting change   |  |
|   | Gender issues  |  |
|   | Lack necessary skills  |  |
| Varying concept of time   |  |  |
| Organisational mishap   |  |  |
| Limited resources   |  |  |
| Poor planning   |  |  |
| Limited time  |  |  |

|   |  |  |
|---|--|--|
| artisans<br>Telephone message<br>wrongly received   | Lack of motivation   |  |
|   | Information filtering  |  |
|   | Religious issues   |  |
|   | Poor Listeners   |  |
|   | Family commitments   |  |
|   | Lack of confidence   |  |
|   | Poor leadership  |  |
|   | Personal preference  |  |
|   | Poor negotiation skills  |  |
|   | Conflicting business/industry ethics   |  |
|   | Unclear Objectives   |  |
|   | Lack of concern  |  |
|   | Lack of trust  |  |
|   | Communication Strategies   | OUTPUT   |
| <u>Strategies for effective communication</u><br>Adeleke (2004)<br>Using Feedback<br>Using reinforcement of backup<br>Using a direct sample of language<br><br>Carter (2003)<br>Well prepared working drawings<br>free hand to perform the duties<br>Good relationship between client and workers | 1.Comprehensive communication plan<br>2.Clear communication channels<br>3.Delegating responsibilities<br>4.Adjusting and adopting<br>5.Team meetings<br>6.Cultural initiation<br>7.Regular reviewing and reality checks<br>8.Training<br>9.Consultative approach<br>10.Suggestion Box<br>11.Continuous Improvement process<br>12.Instrumental changes<br>13.Resource levelling<br>14.Feedback processes<br>15.Timely reports<br>16.Dispute resolution<br>17. Problem solving | Timely reports<br>Team meetings<br>Delegating responsibilities<br>Clear communication channels<br>Adjusting and adopting<br>Problem solving. |