Directorate of Staff Development

Issue Date: May 14, 2011

Issue # 2

Revision # 1

Title: SOP for Data Analysis and Performance Evaluation for All Trainings
Doc. # SOP-004

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<th>Job Title</th>
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<td>Prepared by</td>
<td>Deputy Director (QA/M&amp;E)/Management Representative</td>
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Change Record:

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1. **Purpose:**
The purpose of this SOP is to implement QMS through the analysis of quality assurance data received from monitoring of various training workshops\(^1\) and convert it into meaningful information which can be disseminated periodically.

2. **Scope:**
This SOP is applicable for all training workshops, which are monitored through QRs.

3. **Responsibility:**
The primary responsibility for ensuring quality through analysis of data and dissemination of meaningful information to respective management on periodic basis lies with the DD (QA) and associated team.

4. **Procedure:** The procedure for implementation of QMS is given below:

A. **Quality Parameters**

The first step towards the implementation of QMS is the collection of data through monitoring tools. Various QRs are currently being used to monitor in house activities of the field training workshops, but the following QRs capture some key quality parameters:

- QR-(004)-02 – RPs Evaluation by Trainees / Participants
- QR-(001)-04 Trainees Feedback Form
- QR-(001)-14 In-House Training Monitoring by DSD Staff and Observers

*These forms are filled by the trainees (QR-(004)-02 & (001)-04) and DSD officials (QR-(001)-14) respectively. These are detailed forms covering a number of academic and logistical quality parameters, along with feedback on trainers\(^2\).*

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\(^{1}\) This SOP currently lays out procedure for analyzing data collected from *trainees QR-(004)-02, (001)-04* and *DSD officials (QR-(001)-14)*. The scope of this SOP can gradually be expanded to include additional QRs or by amending the above-mentioned QR, incorporating new quality parameters.

\(^{2}\) Although this form is the crux of the QA activities, due to the heavy volume of incoming forms, all the incoming forms cannot be examined and the QA staff only reviews a randomly selected sample of these forms for report generation. Recently, these forms are also being filled by TEs, adding substantially to the volume of incoming forms.
B. Data Analysis

The QA Wing will analyze the data collected through these QRs and after analysis, will send periodic performance reports each quarter. The performance report will be developed.

In these QRs, the responses for all other indicators range from poor to good. These options are awarded following numerical values so that they can be analyzed:

- Poor 1
- Un-satisfactory 2
- Average 3
- Satisfactory 4
- Good 5

These numbers are added to calculate average scores. The average is calculated using the following formula:

$$\text{Average} = \frac{n1 + n2 + n3 \ldots + nN}{N}$$

where:

“N” is number of total participants responding on the response sheets, and
“n” is the total score given by each participant in his/her respective response sheet.

For trainers’ performance parameters, the responses range from good to poor. These parameters are accorded the following numeric value:

- 50 to 59 C
- 60 to 69 B
- 70 to 79 B+
- 80 to 89 A
- 90 and above A+

The average scores are calculated in a similar fashion as described above (while excluding empty or ‘no’ responses).
For Material and Study Tours parameters, the responses are in the form of yes and no options. These options are awarded following numerical values so that they can be analyzed:

Yes = 1
No = 0

These numerical values will be added to find the numbers of responses.

For the Quality Performance Sheet, these scores are averaged over total number of observations, so hypothetically, the maximum score on an academic and logistical parameter is 5 while the score on trainers performance parameter is 100.

C. Performance Indicators

The following performance indicators were used in assessing the quality standards of training activities:

- Academic performance
  - Material
  - Class room
  - Science Lab
  - Computer Lab
  - Library
  - Syndicate work
- Logistical performance
  - Cafeteria
  - Hostel
  - Study Tours
- Trainer’s performance
  - Personality
  - Content
  - Methodology
  - Computer application
  - Supporting Material
Notations:

The following notations are used in the form:

**Indicators for the Respective Trainings at DSD:**

- **CQ** = Current Quarter *(Average for current quarter)*
  It represents the average score of training activities for the quarter for which the data was collected.

- **CY** = Current Year *(Average for current year)*
  It represents the cumulative average score of training activities for the year. Therefore, CY and CQ scores would be same for the first quarter of the year.

**Indicators for Comparative Analysis:**

- **CQ Min** = Current Quarter Minimum
  It represents the minimum score for the quarter for which the data was collected.

- **CQ Max** = Current Quarter Maximum
  It represents the maximum score for the quarter for which the data was collected.
**Supporting Documents:**

The following QRs are used / referred to in this SOP:

<table>
<thead>
<tr>
<th>QRs</th>
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<tbody>
<tr>
<td>RPs Evaluation by Trainees / Participants</td>
<td>QR-(004)-02</td>
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<tr>
<td>Trainees Feedback Form</td>
<td>QR-(001)-04</td>
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<tr>
<td>In-House Training Monitoring by DSD Staff and Observers</td>
<td>QR-(001)-14</td>
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5. Distribution:

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