

**MOTOROLA INC.**

**GOVERNMENT ELECTRONICS GROUP  
INTER-OFFICE CORRESPONDENCE**

**DATE:** 13 November 1989

**FROM:** Mike Harry / Russ Benson

**TO:** Distribution List

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**SUBJ:** Completion of Metric Proposal Format

As many of you may know, Jim Baum announced the new *GEG Performance Metrics Manual* at the 1989 Executive Conference. The target for publication release was given as Q1-90. In the spirit of "total customer satisfaction," it is our intent to provide a six-sigma manual, on time. To do this, several specific events need to transpire. Those events are listed in Attachment A.

Attachment B is the current list of champions and their respective metric assignments. Each champion is enthusiastically encouraged to follow the aforementioned project plan. If we are to complete the Metrics Manual on time, optimum coordination, cooperation, and communication are a must.

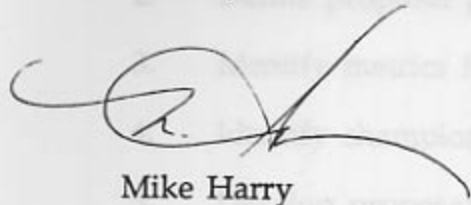
Be aware that the Proposal Format Training session for the metric champions will be held in Room #S120D (Scottsdale Commerce Center) on *Friday, 17 November 1989*. The session will start promptly at 1:00 p.m. and run until 4:00 p.m. Notice that this is given as Event No. 10 in the action plan. During the mini course, each of the proposal blocks (see attached proposal format) will be discussed in detail by Russ Benson; e.g., what must be in each block, etc. Therefore, if you have completed the proposal format for your metric in advance of the course, specific questions and resultant answers can significantly enhance the final preparation of your metric proposal.

Each Metric Committee member will be working with their respective champions in preparation for Event No. 12. Remember, the bulk of editing must be done by this time; i.e., the proposal must be complete and "ready to go." Here again, six-sigma performance will be required if we are to meet our schedule.

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## ACTION PLAN

EVENT	DUE DATE (YLD)	STATUS (%)
For those that participated in the pilot study of the metric proposal format, we extend a hearty thanks. Your efforts significantly enhanced the final revision.	N/A	100
Develop metrics for first release	N/A	100
Develop proposals	N/A	100
Develop proposal format	N/A	100
6. Pilot proposal format	N/A	100
7. Revise proposal format	N/A	100
8. Develop example application of format	N/A	100
9. Distribute format & example to champions	N/A	100
10. Conduct proposal format training	Nov 17	0
11. Complete proposal format for each metric	Nov 22	0
12. Present final proposals to metric committee	Nov 29	0
13. Write supplementary material	Dec 4	50
14. Submit proposals & material to Tech Pubs	Dec 5	0
15. Review metric manual draft	Dec 12	0
16. Submit revisions to Tech Pubs	Dec 15	0
17. Submit to Print Shop	Dec 17	0
18. Make distribution of manuals	Dec 21	0



Mike Harry



Russ Benson

New Performance Metrics Manual Summary

Metrics Report	Status	Category	Recommendation	Committee Assignment	Champion
5-UP Chart					
Acceptance/Reliability Test Rejects	Retain	5-up	Change to be IAW standard report specification	Benson	Lawson
Cost of Non-Conformance	Retain	5-up	Change to be IAW sales	Harry	Cliff Hayes
Defects per million opportunities - Test & In	Retain	5-up	Change to be IAW standard report specification	Benson	Maschino
Delivery Delinquencies - Hardware	Retain	5-up	Add 3 month rolling average ??	Graves	Moyer
Purchased Material Quality(Supplier Caused)	Retain	5-up		Bernath	Proctor
Defects per cost proposal (quarterly)	Retain	Accuracy		Stewart	Bob Bailey
Technical Documentation Accuracy	Retain	Accuracy		Graves	Bjornholt
Time Card Accuracy	Retain	Accuracy		Stewart	Bill Hook
Delivery Delinquencies - CDRLS	Retain	Delivery		Graves	Moyer
Cycle time	New	Efficiency	Report to reflect our cycle time improvement	Davis	Davis (acting)
Productivity	New	Efficiency		Harry	Welt
Assembly Defect Rate (Mil-Std 2000)	New	M-Defect	Report to be IAW with Mil-Std 2000 req.	Benson	Hathaway
Defects per million opportunities - Mfg	Retain	M-Defect	Change normalizer to opportunities	Benson	Maschino
Solder Defect Rate (Mil Std 2000)	New	M-Defect	Report to be IAW with Mil-Std 2000 req.	Benson	Hathaway
Total Defects per Unit	Delete	M-Defect	Replace with DPMOP and M-DPMOP	Benson	Benson
Purchased Material Quality (GEG Caused)	Retain	Material		Bernath	Proctor
Cost of Quality	Retain	QA		Graves	TBD
Method B's (QDR's)	Retain	QA		Graves	Cymbalski
MRB Actions	Retain	QA		Graves	Mc Clouth
Standard Repairs	New	QA		Graves	Mc Clouth
Waivers	Retain	QA		Graves	Moyer

New Performance Metrics Manual Summary

Age of Closed Problems(software)	New	S/W		Noel	John Smith
Age of Open Problems(software)	New	S/W		Noel	John Smith
Engineering Cost of Fixing Problems(software)	New	S/W		Noel	Matte Torre
Estimation Error(software)	New	S/W		Noel	Bart Nigro
Failure Rate(software)	New	S/W		Noel	Frank Arkel
New Open Problems(software)	New	S/W		Noel	Barbara Atkinson
Phase Containment Effectiveness(software)	New	S/W		Noel	Ron Columbo
Schedule Estimation Error(software)	New	S/W		Noel	Bart Nigro
Software Defects	New	S/W		Noel	Bruce Brady
Total Defect Containment Effectiveness(software)	New	S/W		Noel	Ron Columbo
Total Open Problems(software)	New	S/W		Noel	Barbara Atkinson
First Time Subassembly Rejects	Retain	Test	Change to be IAW standard report	Benson	Budge
First Time System Rejects	Retain	Test	Change to be IAW standard report	Benson	Budge

# PERFORMANCE METRIC PROCESS

To create a new metric or to modify an existing metric. The intent of this process is to provide a standard cycle for those metrics to be included in the CSO Performance Metric Manual. The process will also assist in providing the technical and managerial information, validity, and reporting consistency. In addition, the process will also provide the use metric (i.e. the appropriate metric associated with certain administrative functions). The overall process is also governed by various steps to which optimum flexibility and control.

