TM Forum Revenue Assurance

KPI Metrics Workbook Instructions

GB941 Addendum A
TM Forum Approved Version 3.2





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1. Introduction

This document is an addendum to the GB941 Revenue Assurance Guide book and should be used as a source of background and as an instruction guide to its associated Excel workbook.

1.1. Metrics Workbook Content & Navigation

As you first familiarize yourself with the Metrics Workbook, it is recommended that you start with reviewing the Table of Contents within the Excel Workbook. This provides a good overview of the workbook with a description for each tab. A review of Figure 3.1: below, will explain how the metrics are organized.

1.2. Metrics Workbook Uses

The Metrics Workbook should be used as a reference document to provide an overview of the Metrics Set and detailed explanation of the individual metrics. All the information about the metrics is in the Metrics Workbook.

It is recommended that you provide the workbook to the individuals responsible for data collection. The Metrics Workbook provides the supporting detail to aid actual measurement.

Additionally, you may find it useful to actually capture the data in the workbook in preparation of data entry in the web portal. Similarly it may be helpful to review the questions in the Service Provider Profile. The web portal will ask you to fill out a Service Provider Profile for each Service Offering for which you will be providing data.

1.3. Metrics Workbook Security

This copy of the Metrics Workbook is for your use during the benchmarking process. Please make as many copies as you need, but keep them internal to your company. At no time should you mail or email a populated workbook to anyone outside your company.



2. Benchmarking Metrics Structure

2.1. Benchmarking Metrics Structure

A full breakdown and explanation of the Benchmarking Metrics structure can be found in GB935 Business Metrics Framework document, which is available in the document Library section of the TM Forum web page.

The section, 'Business Metrics: Background', explains the concept of domains and identifies the different domains. This section continues with details of how these domains decompose into topics.

The section titled 'Business Metrics: Descriptions', in GB935 concentrates on providing an understanding of the 'Process Focuses' which these domains are applied over.

2.2. Expanded Metrics Structure

The current industry focus on transformation to lean, triple play operations has spawned substantial benchmarking activity on a myriad of topics. There is increasing interest within the TM Forum to develop relevant business performance metrics for use internally to a specific service provider as well as for benchmarking. The Expanded Metrics Process has been created to facilitate this work and assure alignment with the Main Business Performance Metrics development done by the BMD team.

Expanded Metrics are most frequently focused on an aspect of business performance that has linkages into the Main Business Performance Metrics set, but by necessity goes into more detail. To accommodate increased detail, expanded metrics have additional characters in their Metric IDs. For example, the Revenue Assurance metrics link to the Main Business Performance Metrics in the Domain on Revenue & Margin with the Process Focus of General. This means that all RA metrics start with G-RM.

Secondly, to be understandable expanded metrics need to have a Topic identifier that is easily recognizable. Therefore instead of a topic identifier of 6. RA metrics use "RA". Similarly the RA expanded metrics have Topic separation. These are expressed as Sub-topics and are indicated with alpha Sub-topic identifiers. In the



case of the Revenue Assurance expanded metrics the sub-topics are DQ (Data Quality), RL (Revenue Leakage), and PE (Process Efficiency).

Finally, the individual metrics are designated by lower case alpha characters after the Sub-topic similar to the designations in the Main metrics set. Therefore, the complete Metric ID for an example Revenue Assurance Metric would be G-RM-RA-DQa. Since this can be cumbersome, it is permitted to call the metric simply RA-DQa with the G-RM- implied. When using the metric outside the specific RA context, the full Metric ID should be used to avoid confusion.



3. RA Metric Classification

The following diagram shows how the metrics are broken out and organized

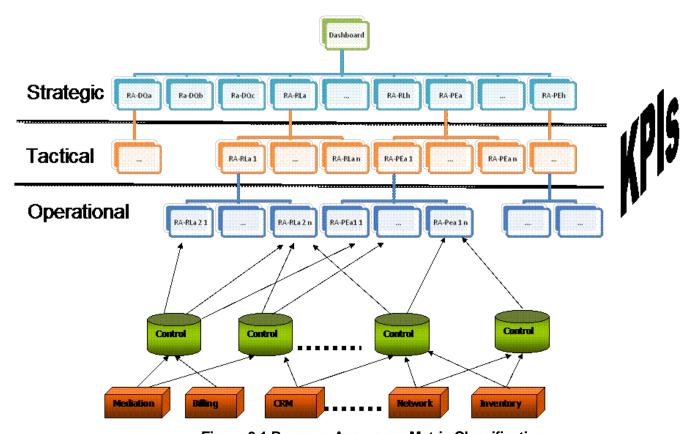


Figure 3.1 Revenue Assurance Metric Classification

A further summary is to be found in Table 3-1

Process Focus	Domain	Topic	Sub- Topic	#	Metric ID	Base Metric	Modifying Detail
General	Revenue & Margin	Revenue Assurance	Data Quality	1	<u>RA-DQa</u>	Percentage of validated data	By Line of Business: Prepaid, Pospaid (2) (Optional)



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			1	RA-DQb	Percentage of customers included to reconciliation	By Line of Business: Prepaid, Pospaid (2) (Optional)
			1	RA-DQc	Percentage of misaligned data records	By Line of Business: Prepaid, Pospaid (2) (Optional)
			1	<u>RA-DQd</u>	Percentage of misaligned customers	By Line of Business: Prepaid, Pospaid (2) (Optional)
		Revenue Leakage	2	B-OE-1a (RA-RLa)	Percentage of customer bills adjusted in a period	By Line of Business: Prepaid, Pospaid (2) (Optional)
			2	RA-RIb	% Revenue that could not be billed	By Line of Business: Prepaid, Pospaid (2) (Optional)
			3	RA-RLc	Total unbilled and under billed revenue	By Line of Business: Prepaid, Pospaid (2) (Optional)
			2	B-OE-3c (RA-RId)	% xDRs Falling Into Suspense	By Line of Business: Prepaid, Pospaid (2) (Optional)
			2	<u>RA-RLe</u>	% Missing xDRs	By Line of Business: Prepaid, Pospaid (2) (Optional)
			2	F-OE-3c (RA-Rlf)	% Orders Requiring Rework	By Line of Business: Prepaid, Pospaid (2) (Optional)



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			2	RA-RLg	% cost of assets that were unused or stranded	By Line of Business: Prepaid, Pospaid (2) (Optional)
			2	<u>RA-RLh</u>	Percentage of Verified and Accepted 3rd Party Settlement Reports over Total S/P Settlement Reports	By Line of Business: Prepaid, Pospaid (2) (Optional)
			2	<u>RA-RIj</u>	Percentage of over billed Revenue over Total Revenue	By Line of Business: Prepaid, Pospaid (2) (Optional)
			2	<u>RA-RIk</u>	Value of over billed Revenue over Total Revenue	By Line of Business: Prepaid, Pospaid (2) (Optional)
		Process Efficiency	3	RA-PEa	% Recovered Revenue Value	By Line of Business: Prepaid, Pospaid (2) (Optional)
			3	RA-PEb	Recoverable Revenue Value	By Line of Business: Prepaid, Pospaid (2) (Optional)
			3	RA-PEc	% Recoverable Revenue Value	By Line of Business: Prepaid, Pospaid (2) (Optional)
			ω	RA-PEd	Recoverable Revenue Value	By Line of Business: Prepaid, Pospaid



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		3	RA-PEe	Average time of recovery of revenue leakage	By Line of Business: Prepaid, Pospaid (2) (Optional)
		3	RA-PEf	% xDRs Successfully Recovered and Billed After Recycling	By Line of Business: Prepaid, Pospaid (2) (Optional)
		3	RA-PEg	% Recovered and Recoverable Revenue	By Line of Business: Prepaid, Pospaid (2) (Optional)
		3	RA-PEh	% unfilled error fixes orders	By Line of Business: Prepaid, Pospaid (2) (Optional)

Table 3-1 RA Metrics Summary



4. Recommendations: Tactical and Operational KPIs

The team feel that it is important to provide the following advice before the user starts to complete the GB941-RA Workbook.

- The KPIs defined in the GB941-RA.xls workbook are Strategic level KPIs. Strategic level KPIs are useful for understanding the "big picture" and for benchmarking purposes. It is recommended to further decompose these KPIs into more detailed Tactical and Operational KPIs.
- For the Tactical KPIs it is recommended to decompose the Strategic KPIs by line of business, e.g. Prepaid, Postpaid, Interconnect, Data, etc. The appropriate decomposition depends on the Service Provider's mayor lines of business and is not imposed by this document. It is recommended to calculate Tactical level KPIs either weekly or monthly.
- For Operational KPIs it is recommended to decompose the Tactical level KPIs by systems, e.g., Network, Mediation, Billing, etc., and by existing RA control. Note that this might cause duplicity of information, i.e., the same leakage might contribute to more than one instance of a KPI, once when viewed by 'system KPI' and the once when viewed by 'control KPI'. It is recommended to calculate Operational level KPIs either daily or weekly.
- The recommendation is to decompose all the strategic level KPIs, into Tactical and Operational KPIs. It is possible to add also Tactical and Operational KPIs that are not a direct result of the decomposition of the Strategic KPIs, however addition of KPIs at the Tactical and Operational levels should be done with caution, having too many KPIs will not serve the purpose of having KPIs



5. Administrative Appendix

This Appendix provides additional background material about the TM Forum and this document. In general, sections may be included or omitted as desired, however a Document History must always be included.

5.1. About this document

GB941-RA is an addendum to the GB941 Revenue Assurance Guide Book and must be used in conjunction with its associated Excel Workbook of the same title.

5.2. Document History

5.2.1. Document Version History

Version Number	Date Modified	Modified by:	Description of changes
0.1	19-Jul-06	Sreedhar Guggalla	First Draft
0.2	21-Dec-06	Gadi Solotorevsky	Updated Draft
0.3	26-Jan-07	Elena Ustyugova	Corrections to and addition of RA-DQd
0.4	10-Mar-07	Gadi Solotorevsky	Last version before TMF members review
0.5			



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	0.5	03-Jun-07	Gadi Solotorevsky	 Using IMF PPP for currency based KPIs (RA-PEb, RA-RLg, RA-RLc, RA-Ped) Addition of Short and full Metrics Id in all KPIs Correction of the Preferred field to have the same meaning as the TMF benchmarking initiative (Low - means low value is good, High - means High value is good) Rephrasing metrics to look more like formulas (due to benchmarking initiative compatibility). e.g. Percentage of Unbilled and Underbilled Revenue over Total Revenue -> unbilled and underbilled revenue / total SP Operating Revenue Change nominator and denominator descriptions to use the same formulation as the metric description 			
	1.1	12-Jun-07	Gadi Solotorevsky	Clarification of the denominator exclusion in RA-PEc and RA-PEd			
	1.2	13-Jun-07	Gadi Solotorevsky	Improvement of the description of RA-PEg			
٠	1.3	23 July 2007	Tina O'Sullivan	Restructured GB941 RA addenda into a guide part and a workbook part. This word document is to be incorporated into GB941 main in due course.			
	1.4	8-Aug-2007	Tina O'Sullivan	New Logo & front page, fixed links, minor team corrections.			
	1.5	20-Nov-2009	Alicja Kawecki	Updated cover page, copyright, footers and version history to reflect TM Forum Approved status			
	3.0	1-March- 2011	Gadi Solotorevsky	 Following the decision at the TAW in Paris 2011 - two new KPI added G-RM-RA-RLj and G-RM-RA-RLk for calculating the percentage and the value of the overbilling. Three of the metrics in GB941-A V2.0 were practical identical to 3 metrics that existed in the TM Forum metric repository and that were used instead of the original metrics in all the TM Forum studies, therefore B-OE-1b replaces RA-RLb B-OE-3c replaces RA-RLd F-OE-3c replaces RA-RLf Format change + minor lingo change to fit in the same style used by the metrics in the TM Forum metrics repository G-RM-RA-DQa, G-RM-RA-DQb, G-RM-RA-DQc, G-RM-RA-DQd, 			



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			 G-RM-RA-RLb G-RM-RA-RLc G-RM-RA-RLe G-RM-RA-PEa G-RM-RA-PEb G-RM-RA-PEc G-RM-RA-PEd G-RM-RA-PEd G-RM-RA-PEe G-RM-RA-PEg G-RM-RA-PEg G-RM-RA-PEg G-RM-RA-PEh 	
3.1	21 April 2011	Alicja Kawecki	Notice updated, minor formatting corrections prior to web posting and ME	
3.2	16 Sep 2011	Alicja Kawecki	Updated to reflect TM Forum Approved status	

5.2.2. Release History

Release Number	Date Modified	Modified by:	Description of changes
1.1	July 23, 2007	< <name>></name>	Includes a new addendum, GB941-RA to the GB941 guide book.
3.0	March 1, 2011	Gadi Solotorevsky	Addition of 2 new metrics.
			Replacement of RA- RLb, RA-RLd, RA- RLf by metrics from the TM Forum standard repository

5.3. Acknowledgments

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