

Alliance for Malaria Prevention

Commodity Management Audit

Nasarawa State - Nigeria

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Report on Commodity Management Audit

Nasarawa State – Nigeria

Foreword

The CMA in Nasarawa State took place between 29 April and 7 May 2015. It was a pilot exercise conducted by the national CMA core team and two AMP consultants, with the following objectives: (1) to field test and fine-tune the CMA tools, as well as the CMA implementation methodology, (2) to provide lessons learned on all aspects of the CMA process, as well as on the management of the LLIN supply chain¹, and (3) to produce a report that will serve as a model for all subsequent CMAs to be carried out by contracted firms.

The present report, hopefully, can be a model for future CMA reporting. Given the very large amount of detailed data generated by the CMA, it was necessary to provide consolidated results in a format that would be as easy as possible to understand and analyse. On the other hand, it was difficult to avoid going into some level of details, as it is in fact the essence of an audit.

In addition to the content of this report, all the CMA data (Assessment Workbooks, CMA Notes and scanned copies of all audited documents) from State level to 60 distribution points is available via DropBox.

For a quick “executive summary” view, section 5 of the report presents a brief summary of findings, as well as conclusions and recommendations.

1. Purpose and objectives of the CMA

- Within the audit sampling, the purpose of the CMA is to:
 - Verify if the LLIN “paper trail” is complete (ie: are all the LLIN tracking tools available?);
 - Verify if the LLIN tracking tools have been used correctly (quality assessment);
 - Verify if all the LLINs are accounted for;
 - Verify if the Reconciliation Report data is backed-up by supporting documentation (ie: by LLIN tracking tools).
- The CMA is conducted with the following objectives:
 - To document the level of accountability achieved in the management of the LLIN supply chain;
 - To strengthen the management of the LLIN supply chain for future campaigns (through the identification of weaknesses and appropriate recommendations aimed at improving overall transparency and accountability).

2. Methodology

The Nasarawa CMA was conducted in three phases:

- *Preparation*

The “audit team” (national CMA Core Team and two AMP consultants) met in Abuja during 2 days in order to:

 - Proceed to a random sampling of 12 distribution points (DPs) for each of the 5 LGAs previously selected². A “Master list” of the LGAs and DPs to be audited (along with their respective coding) is found in annex 1;
 - Prepare the filing structure (folders and sub-folders) for the CMA tools. Save the tools templates with appropriate naming/coding in their respective folders/sub-folders.

¹ These lessons learned will be one of the main focuses of the AMP mission report.

² See sampling protocol in section 1 of the CMA implementation package)

- Pre-populate the CMA tools with the Reconciliation Report data³.
- *Field work*
The audit team then travelled to Nasarawa State to carry out the CMA at State level as well as in the five sampled LGAs over a period of 6 days. In each location, the activities included:
 - Introductory meeting with local health authorities, including personnel directly involved in the LLIN supply chain management during the campaign held in October 2014;
 - Collecting from the local supply chain personnel all the required tracking tools⁴ (waybills, stocksheets, ICCs and tallysheets);
 - Organizing, naming, coding and scanning all available tracking tools;
 - Reviewing, assessing and auditing all above documents and entering data in the CMA tools.
- *Data analysis and report writing*
The audit team met again in Abuja during 3 days dedicated to CMA data analysis (which included the correction of a fair amount of data entry errors) and CMA report writing.

3. CMA tools

The tools used for data recording and analysis consist of three Excel workbooks: one for each audit level (State, LGA and DP) as illustrated in the diagram in annex 2. Each workbook contains several data entry spreadsheets linked to data summary and data consolidation tables.

DP workbooks are linked to LGA workbooks, which in turn are linked to the State workbook.

In this manner, the summary tables for 12 sampled DPs are consolidated at each of the 5 LGAs, and these are consolidated at State level.

Samples of summary and consolidation tables are found in annexes 3, 4 and 5 of this report, whereas detailed descriptions of the assessment workbooks can be found in section 4 of the CMA implementation package.

4. Findings

The findings of the Nasarawa CMA are presented below (for each of the three audit levels - State, LGA, DP) in accordance with the four focus areas listed in the CMA purpose (section 1):

- Availability of supporting documents (tracking tools)
- Quality of the tracking tools
- LLIN accountability
- Correctness/reliability of the Reconciliation Report

4.1 Availability and Quality of the tracking tools

A total of 89 waybills, 6 stocksheets (34 pages), 60 ICCs and 255 tallysheets were reviewed during the CMA field work. The detailed availability and quality scores for all these documents are given in Table 1 below. Scores are presented for each of the 3 audit levels, as well as globally.

However, before looking at the results, the following important points must be stressed regarding the scores:

- *An availability score of less than 100% means that supporting documents are missing (ie: could not be made available to the audit team) which is a major fault/unacceptable from an audit point of view⁵.*
- *An availability score of less than 100% will necessarily introduce an LLIN accountability discrepancy, as will be discussed later in this report.*

³ The preparation of all necessary electronic files prior to moving to the field is a time consuming (but essential) task that saves time and avoid filing errors once in the field work phase.

⁴ Samples, description and guidelines on how to use the LLIN tracking tools are found in section 3 of the CMA implementation package.

⁵ Similarly with financial audits, missing invoices or receipts are unacceptable.

- The quality score refers to how the tracking tools were used (properly filled out, all data readable, no information or signatures missing, etc) but DOES NOT refer to the correctness of the number of nets moved through the supply chain and distributed at DPs⁶. In other words, a document might get a 100% quality score regardless of the correctness of LLIN numbers. The verification and cross-checking of numbers between the various documents (ie: the LLIN accountability) is truly the “audit” part of the CMA. This aspect of the CMA was carried out in great detail during the field work, and the consolidated results are presented in section 4.2 below.

Table 1: Availability and Quality scores

Audit level	Type of document	Number of tracking tools AVAILABLE	Number of tracking tools MISSING	Availability score	Number of tracking tools REVIEWED	Quality score
DP level (60 DPs)	Waybills IN	59	1	98%	n/a	n/a
	Tallysheets	255	31	89%	255	90%
	ICC	60	0	100%	60	65%
LGA level (5 LGAs)	Waybills IN	30	1	97%	n/a	n/a
	Waybills OUT	230	-12	104%	60	96%
	Stocksheet	5	0	100%	5	82%
State level	Waybills IN	48	7	87%	n/a	n/a
	Waybills OUT	58	1	98%	29	100%
	Stocksheet	1	0	100%	1	75%
Globally	Waybills IN	137	9	94%	n/a	n/a
	Waybills OUT	288	-11	101%	89	95%
	Stocksheet / ICC	66	0	100%	66	74%
	Tallysheets	255	31	89%	255	90%
Total number of documents		746	29	96%	410	86%

4.1.1 Availability and Quality at State level (Table 1 - see also annex 3 for additional details)

- 7 waybills “IN” are missing, from a total of 55 listed in the State stocksheets and the reconciliation report. Availability score 87%.
- 1 waybill “OUT” is missing, from a total of 59 listed in the State stocksheets. Availability score 98%. Note that the reconciliation report lists only 54 waybills “OUT”.
- Waybills quality score is 100%, meaning that at State level, the waybills have been used correctly.
- State stocksheets quality score 75%. However, there are a number of issues around the State stocksheets that need to be noted:
 - The State warehouse was in reality split in two locations, one store in Lafia, and a second store in Akwanga⁷. Consequently, there are 2 “State” stocksheets, one for each location. LLIN deliveries from out-of-State were made directly to both locations.
 - The above stocksheets (that were made available to the audit team) appear to have been filled out “post-campaign” (ie: data was obviously copied from original stocksheets or entered directly from the waybills once the campaign was over).
 - Both stocksheets contain entries regrouping several waybills on a single line⁸. There are in total 25 deliveries regrouped in 3 stocksheets lines.

⁶ The purpose of the quality assessment is to identify weaknesses in the use of the tracking tools in order to provide a better training (focused on the weak areas) for future campaigns.

⁷ Both “State” warehouses were also used as LGA stores (for Lafia LGA and Akwanga LGA respectively).

⁸ The rule is one delivery or shipment (ie: one waybill) per line.

4.1.2 Availability and Quality at LGA level (Table 1 and annex 4)

- 1 waybill “IN” is missing, from a total of 31 listed in the LGAs stocksheets. Availability score 97%.
- Waybills “OUT” availability score 104%. *This score is obviously abnormal, as it shows a “surplus” of 12 waybills. This situation is due to LGA2, where it was found that the stocksheets was incomplete (missing a number of pages). Therefore, the number of waybills entries that were counted on the stocksheets was less than the number of waybills that were made available to the auditors. Outside this particular situation, it was found that among the remaining four LGAs, only one waybill “OUT” was missing, which would give a score of 99%.*
- Waybills “OUT” quality score is 96%, which indicates that at LGA level the waybills have generally been used correctly. However, in one of the 5 LGAs it was noted that all the “yellow” copies (which must remain with the sender) had been signed “for reception” by the consignee. It was explained to the audit team that all four copies of the waybills had been sent to the DPs, signed, and then the yellow and green copies returned to the sender.
- It is important to mention that the above scores are for the 5 LGAs together. The missing waybill occurred only in 1 LGA, so that 4 out of 5 LGAs have a 100% availability score.
- LGAs stocksheets quality score 82%. It must be noted that 4 out of 5 LGAs have a 100% score. However, the 5th LGA has a 10% score because the stocksheets is a complete mess (it is missing pages, and almost a third of the entries have been erased with correction fluid and re-written over).

4.1.3 Availability and Quality at DP level (Table 1 and annex 4)

- 1 waybill “IN” is missing, from a total of 60 listed in the DPs ICCs. Availability score 98%.
- 31 tallysheets are missing, from a total of 286 distribution days⁹ listed in the DPs ICCs. Availability score 89%.
- It is important to mention that the above scores are for the 60 DPs together. The missing tallysheets occurred in 15 DPs, so that 45 out of 60 DPs have a 100% availability score.
- Tallysheets have a 90% quality score, as they have been generally used and filled out properly. However, with regard to LLIN accountability (see 4.2.9 and 4.2.10), they present many errors (discrepancies between nets received from the DP store, nets available for distribution, nets distributed, net cards collected, stock on-hand and nets returned to the DP store at the end of the day).
- DPs ICCs quality score 65%. This is mostly due to not properly recording the number of nets issued out to the distribution teams, and the number of nets returned to the DP stores (by the distribution teams) at the end of the day.

4.2 LLIN accountability

Table 2 (below) is a consolidated summary of all the data generated by the Nasarawa CMA with regard to LLIN accountability. It represents the sampled LLIN supply chain from State, to 5 LGAs and 60 DPs¹⁰.

(Table 2 is also found in annex 6 in a larger, easier-to-read format)

⁹ There is supposed to be one tallysheet per distribution day.

¹⁰ More detailed information can be found in the State Summary Table (annex 2), LGAs Consolidated Data (annex 3) and DPs Consolidated Data (annex 4).

Table 2: LLIN Accountability

Audit level	Data sources	LLINs received at State level	LLINs sent from State to all LGAs	LLINs sent from State to sampled LGAs	LLINs received at sampled LGAs	LLINs sent from sampled LGAs to all DPs	LLINs sent from sampled LGAs to sampled DPs	LLINs received at sampled DPs	LLINs handed-over to Distribution Teams	LLINs received by Distribution Teams	LLINs distributed
State level	Stocksheet	1,675,950	1,598,150	992,600							
	Waybills (IN/OUT)	1,418,350	n/a	983,700							
	Reconciliation Report	1,656,250	1,656,250	992,250							
LGA level (5 LGAs)	Stocksheets				992,250	878,350	255,914				
	Waybills (IN/OUT)				965,750	n/a	255,914				
	Reconciliation Report				992,250	992,250	255,900				
DP level (60 DPs)	ICCs							255,650	239,885		
	Waybills (IN)							254,864	n/a		
	Reconciliation Report							255,904	n/a		
DP level Distribution (60 DPs)	ICCs									n/a	n/a
	Tallysheets (nets received)									231,584	n/a
	Tallysheets (net tallying)									n/a	225,996
	Tallysheets (net cards)									n/a	215,573
	Reconciliation Report									n/a	254,520

There are two ways in which the data in Table 2 must be analysed:

- 1.) Comparing figures between the different sources of information within a given audit level (ie: comparing at State level the “nets received” as indicated in the three data sources: the warehouse stocksheet, the waybills and the reconciliation report);
- 2.) Comparing figures between nets sent from one level, and nets received at the next (lower) level (ie: comparing nets sent from State to sampled LGAs with nets received at sampled LGAs).

Ideally, figures between the different data sources should be the same, and nets sent from one level should be the same as nets received at the next level. This would indicate (1) that all nets are accounted for, and (2) that the reconciliation report is indeed backed up by supporting tracking tools.

In this regard, Table 2 speaks for itself: There are discrepancies both between data sources, and between supply chain levels. More specifically:

4.2.1 At State level (1st column)

- Nets received, according to waybills “IN”, are 15% (257,600 nets) less than indicated in the stocksheet, and 14% (237,900 nets) less than the reconciliation report.
- Nets received, according to the reconciliation report, are 1% (19,700 nets) less than indicated in the stocksheet.

4.2.2 At State level (2nd column)

- Nets sent to ALL LGAs are 5% (77,800 nets) less than nets received. The total balance (77,800 nets) left in the two State warehouses (Akwanga and Lafia) is indicated in the stocksheets. The auditors were told that these remaining nets were transferred to routine distribution at the end of the campaign. However, the auditors could not find any evidence/records of such transaction.
- According to the reconciliation report, all the nets received at State level have been sent down to the LGAs. This is in contradiction with the above.

4.2.3 At State level (3rd column)

- Stocksheet and reconciliation report agree on the number of nets sent from State to the sampled LGAs.
- Waybills indicate around 8,900 nets less (1%).

4.2.4 At LGA level (1st column)

- Stocksheet and reconciliation report agree on the number of nets received at sampled LGAs.
- Waybills indicate 26,500 nets less (3%).
- Nets received at sampled LGAs (figures above) correspond to nets sent by the upper level (State).

4.2.5 At LGA level (2nd column)

- According to the stocksheets, the nets sent from sampled LGAs to ALL DPs are 12% (113,900 nets) less than nets received at sampled LGAs. A look at the LGAs Summary Tables¹¹ indicate that the discrepancy lies with LGA2 (all other four LGAs have records of sending ALL the nets received down to the DPs with nothing remaining in their warehouses). LGA2 did not provide evidence that remaining 113,900 nets are either still in stock, or transferred to routine distribution.
- According to the reconciliation report, all the nets received at sampled LGAs have been sent down to the DPs. This is in contradiction with the above.

4.2.6 At LGA level (3rd column)

- All three data sources agree on the number of nets sent from sampled LGAs to sampled DPs.

4.2.7 At DP level (1st column)

- ICCs and reconciliation report agree on the number of nets received at sampled DPs. Waybills “IN” show a slight difference 0.4% (around 900 nets).
- Nets received at sampled DPs (figures above) correspond to nets sent by the upper level (LGAs).

4.2.8 At DP level (2nd column)

- According to ICCs, nets handed-over to distribution teams are 6% (15,765 nets) less than nets that were received at the DPs.

4.2.9 At DP level DISTRIBUTION (1st column)

- According to tallysheets, nets received by the distribution teams are 3.5% (8,301 nets) less than nets that were handed-over to them¹².

4.2.10 At DP level DISTRIBUTION (2nd column)

- The number of nets distributed vary significantly according to the data source:
 - Net tallying (taken from the tallysheets) show 225,996 nets
 - Number of nets cards collected (taken also from the tallysheets) show 215,573 nets
 - Reconciliation report show 254,520 nets
- According to the tallysheet figures, nets distributed are significantly less (12% and 15%) (29,654 nets and 40,077 nets) than the number of nets received at DPs.
- The reconciliation report indicates nets distributed slightly less (1,384 nets) than nets received at DPs. However, this distribution number is not supported by the tallysheets nor by the ICCs.

¹¹ The summary tables can be found in the “LGA Assessment Workbooks” (excel files) provided in the “CMA Report” folder (see DropBox).

¹² The “nets received by the distribution team” are recorded on the tallysheet (by the head of the distribution team) whereas the “nets handed-over to the distribution team” are recorded on the ICC (by the person responsible for the DP store). Normally, these net quantities should be the same. However, the auditors noted that these transactions between tallysheet and ICC have rarely been recorded accurately, if recorded at all.

5. Conclusions and recommendations

In order to try and make sense of all the above information, and draw conclusions on the CMA findings, it will be necessary to focus on the most significant issues that came out of the pilot exercise. These are:

5.1 Quality of tracking tools

- Waybills have a high quality score as they have been used and filled out correctly (with a few exceptions, as mentioned in 4.1.2).
- With the exception of LGA2 stocksheets which is a total/unacceptable mess, the stocksheets have generally been used correctly (79%). Most serious issues noted:
 - Regrouping of several deliveries in a single entry (single line)
 - A number of stocksheets filled out “post-campaign”
- ICCs have a low quality score, mainly because:
 - All of them failed to properly record the number of nets issued out to the distribution teams, and the number of nets returned to the DP stores (by the distribution teams) at the end of the day.
- Tallysheets have a high quality score, as they have been generally used and filled out properly. However, they present serious issues regarding LLIN accounting, as discussed below.

5.2 Availability of tracking tools and LLIN accountability

State level

- There is a significant difference between stocksheets and waybill data regarding nets received from out-of-State. Waybills indicate 15% less (257,600 nets). The difference is most likely due to 7 waybills “IN” missing (4.2.1).
- 77,800 nets are not accounted for. This is the difference between nets received from out-of-State and nets sent out to all 13 LGAs, as recorded in the stocksheets. The auditors were told that remaining nets were transferred to routine distribution at the end of the campaign. However, the auditors could not find any evidence/records of such transaction (4.2.2).
- The reconciliation report, for its part, indicates that all nets are accounted for.

LGA level

- All nets are accounted for in 4 of the 5 sampled LGAs. This means that all the nets received have been sent to DPs, supported by documented records (4.2.5).
- 113,900 nets are not accounted for in the 5th LGA. This means that there are no records that these nets were sent to DPs, nor that they are still in stock at the LGA store. This is likely because the LGA stocksheets were found incomplete, some pages missing (4.2.5).
- The reconciliation report, however, indicates that all nets in all 5 LGAs are accounted for.

DP level

- 29,654 nets are not accounted for, which means that there are no records that these nets have been distributed, or are still in DP stores (4.2.10). This is likely due to 31 tallysheets (11%) missing.
- The reconciliation report indicates only 1,384 nets not distributed (4.2.10).

Conclusion # 1

From a strict audit point of view, the State of Nasarawa has failed to provide evidence (supporting documentation) that all the nets it received are accounted for (ie: have all been distributed, or those not distributed are still in stock). This is a conclusion of an audit at State level, as well as in 5 LGAs and 60 DPs randomly selected.

Consequently, Nasarawa is responsible for a total of 221,354 nets not accounted for (77,800 at State level, 113,900 at LGA and 29,654 at DP levels) which represent 13% of all campaign nets.

Extrapolating these figures to the entire State would bring the total to 620,940 nets not accounted for (37% of all campaign nets).

Recommendation:

Nasarawa should be given a period of one week to produce original documentation accounting for the “missing” nets identified within the CMA sampling.

Conclusion # 2

Missing waybills, incomplete stocksheets and missing tallysheets are responsible for most of the discrepancies (missing nets) noted above. An incomplete “paper trail” is an explanation for, but not an excuse for discrepancies.

Four out of five LGAs have provided near perfect records in terms of LLIN accountability. This is a clear indication that supply chain personnel can, with the current tools, manage the LLINs in full transparency and accountability. Proper filing and keeping of all supporting documents is obviously the key.

Recommendations:

1. *Should LGA2 (Karu) fail to produce original documentation accounting for 113,900 missing nets (as recommended above), a full review of the entire LGA supply chain should be carried out.*
2. *Increased emphasis must be put on the importance and necessity of proper filing/archiving and keeping of all supply chain documents. As a matter of policy, DP documents should be stored and kept at LGA level.*

Conclusion # 3

LLIN tracking tools have achieved relatively high quality scores, which means that they were generally filled out and used correctly. However, at DP level, the ICCs and tallysheets contained numerous errors in LLIN accounting, which contributed to the discrepancies noted above.

Recommendation:

Increased training and supervision for personnel at DP level. This appears to be the weakest link in the supply chain, but is at the same time the most critical.

Conclusion # 4

Physical inventory records, as well as reverse logistics records were almost inexistent in the entire sampled supply chain. These are essential elements of proper supply chain management. The fact that (1) physical inventories were not taken and documented at the end of the campaign, and (2) the movement of leftover nets towards the upper levels has not been recorded, is yet another factor contributing to discrepancies in LLIN accountability.

Recommendation:

Clear directives must be given as how to process leftover LLINs (reverse logistics), as well as the need to carry-out documented physical inventories of all warehouses at the end of the campaign.

Conclusion # 5

Within the CMA sampling, the Nasarawa reconciliation report is not fully supported by corresponding LLIN tracking tools. Again, missing waybills and tallysheets are likely the reason for most of the discrepancies noted between the report and the tracking tools. However, the audit team has also noted a number of errors in the report itself (excel formulas, names of DPs allocated to wrong wards, etc).

Recommendation:

The reconciliation report should be entirely reviewed and corrected.

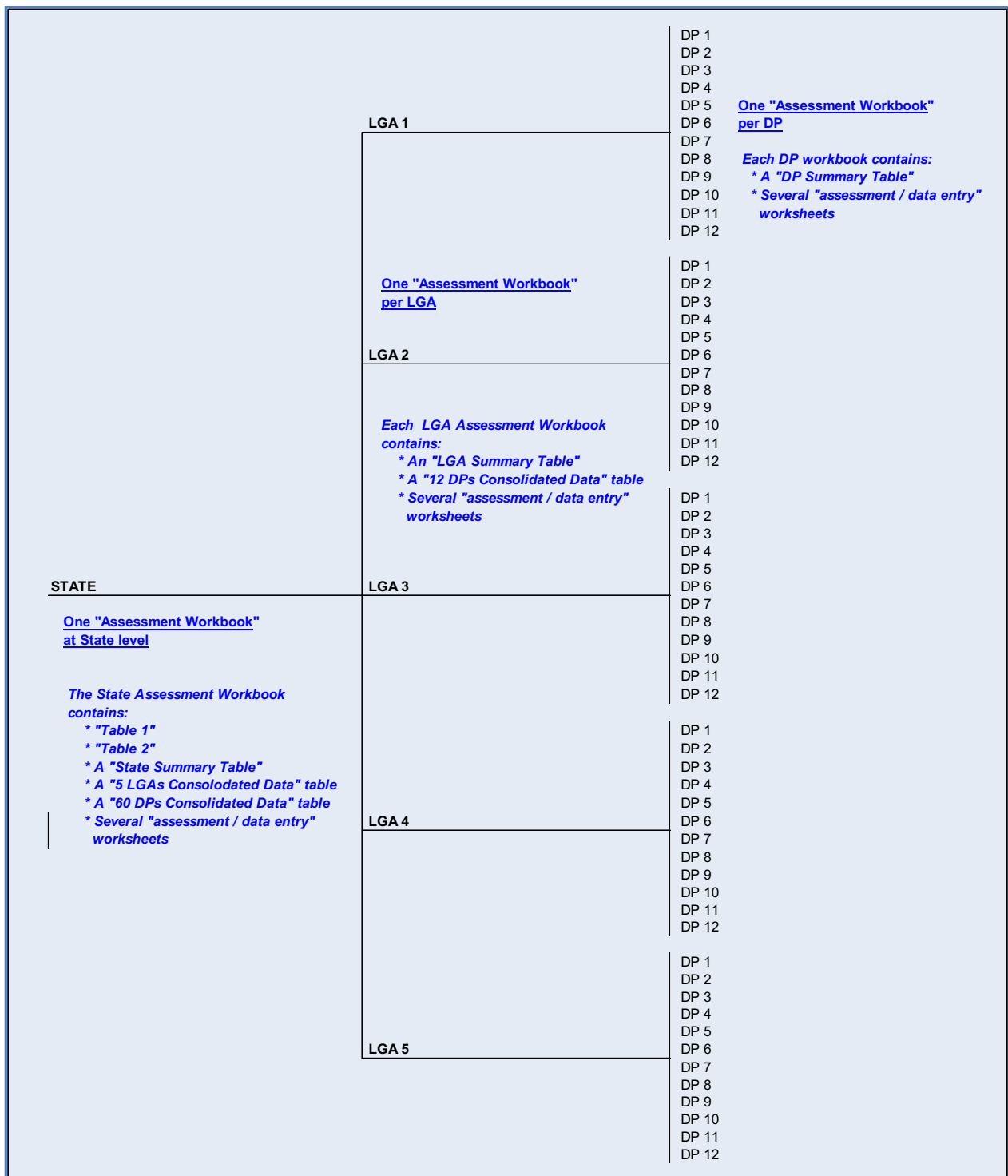
List of Acronyms

AMP	Alliance for Malaria Prevention
CMA	Commodity Management Audit
DP	Distribution Point
ICC	Inventory Control Card
LGA	Local Government Area
LLIN	Long Lasting Insecticide treated Net

List of Annexes

Annex-1	List of sampled LGAs and DPs
Annex-2	CMA Tools Diagram
Annex-3	State Summary Table
Annex-4	LGAs Consolidated Data
Annex-5	DPs Consolidated Data
Annex-6	Table 2 – LLIN Accountability

CMA Tools diagram



State Summary Table

Nasarawa

1. State level: Waybills "IN"

1.1 Waybills "IN" - Availability (waybills from National level and from any other origin)	
Number of waybills ("IN") listed in State Stocksheat	55
Number of waybills ("IN") listed in State Reconciliation Report	55
Number of waybills ("IN") available (found at State level)	48
Waybills ("IN") Availability Score (against the State Stocksheat)	87%
Waybills ("IN") Availability Score (against the State Reconciliation Report)	87%
1.2 Waybills "IN" - LLIN Quantities Sent versus Received	
Number of nets sent to State (from WBs)	1,431,600
Number of nets received by State (from WBs)	1,418,350
Difference (in LLINs)	13,250
Discrepancy (within waybills "IN")	1%
1.3 Waybills "IN" - LLIN Quantities compared to State warehouse Stocksheat	
Total LLINs received from National as indicated in the waybills ("IN")	1,418,350
Total LLINs received from National as recorded in the State warehouse Stocksheat	1,675,950
Difference (in LLINs)	-257,600
Discrepancy between Waybills and Stocksheat	-15%
1.4 Waybills "IN" - LLIN Quantities compared to State Reconciliation Report	
Total LLINs received from National according to the State Reconciliation Report	1,656,250
Difference (in LLINs)	-237,900
Discrepancy between Waybills and State Reconciliation Report	-14%
Discrepancy between Stocksheat and State Reconciliation Report	1%

2. State level: Waybills "OUT" to all LGAs

2.1 Waybills "OUT" - Availability (waybills to all LGAs and to all other destinations)	
Total number of Waybills "OUT" listed in the State Stocksheat	59
Number of Yellow copies available	58
Number of Green copies available	58
Number of Waybills "OUT" listed in State Reconciliation Report	54
Waybills Availability Score (against the State Stocksheat)	98%
Waybills Availability Score (against the State Reconciliation Report)	107%

3. State Stocksheat data

3.1 State Stocksheat data - LLIN Quantities	
LLINs received from National (and all other origins)	1,675,950
LLINs sent to LGAs (all LGAs and all other destinations)	1,598,150
Stock (LLINs) left in warehouse (RECEIVED minus SENT)	77,800
Stock (LLINs) in warehouse (as indicated in Stocksheat)	77,800
Stock (LLINs) in warehouse (as indicated by physical inventory report)	200
Discrepancy (within the Stocksheat)	0%
Discrepancy between Stocksheat balance and physical inventory	38800%

4. State level: Waybills "OUT" to sampled LGAs

4.1 Waybills "OUT" - Availability (sampled LGAs)	
Number of waybills ("OUT") listed in State Stocksheat	29
Number of Yellow copies available for assessment	29
Number of Green copies available for assessment	29
Number of waybills listed in State Reconciliation Report	30
Waybills Availability Score	77%
4.2 Waybills "OUT" - Quality	
Waybills Quality Score - Yellow copies	100%
Waybills Quality Score - Green copies	100%
Waybills Quality Score	100%
4.3 Waybills "OUT" - LLIN Quantities compared to State warehouse Stocksheat	
Total LLINs sent to sampled LGAs as recorded in the waybills	983,700
Total LLINs sent to sampled LGAs as recorded in the State warehouse Stocksheat	992,600
Difference (in LLINs)	-8,900
Discrepancy between Waybills and Stocksheat	-1%
4.4 Waybills "OUT" - LLIN Quantities compared to State Reconciliation Report	
Total LLINs sent to sampled LGAs according to the State Reconciliation Report	992,250
Difference (in LLINs)	-8,550
Discrepancy between Waybills and State Reconciliation Report	-1%

LGAs Consolidated Data**Nasarawa****1. LGA level: Waybills "IN"**

1.1 Waybills "IN" - Availability (waybills from State level and from any other origin)	
Number of waybills ("IN") listed in LGAs Stocksheets	31
Number of waybills ("IN") listed in LGAs Reconciliation Reports	30
Number of waybills ("IN") available	30
Waybills ("IN") Availability Score (against the LGAs Stocksheets)	97%
Waybills ("IN") Availability Score (against the LGAs Reconciliation Reports)	100%
1.2 Waybills "IN" - LLIN Quantities Sent versus Received	
Number of nets sent to LGAs (from WBs)	966,000
Number of nets received by LGAs (from WBs)	965,750
Difference (in LLINs)	250
Discrepancy (within waybills "IN")	0.03%
1.3 Waybills "IN" - LLIN Quantities compared to LGAs warehouse Stocksheets	
Total LLINs received from State as indicated in the waybills ("IN")	965,750
Total LLINs received from State as recorded in the LGAs warehouse Stocksheets	992,250
Difference (in LLINs)	-26,500
Discrepancy between Waybills and Stocksheets	-3%
1.4 Waybills "IN" - LLIN Quantities compared to LGAs Reconciliation Reports	
Total LLINs received from State according to the LGAs Reconciliation Reports	992,250
Difference (in LLINs)	-26,500
Discrepancy between Waybills and LGAs Reconciliation Reports	-3%
Discrepancy between Stocksheets and LGAs Reconciliation Reports	0%

2. LGA level: Waybills "OUT" to all DPs

2.1 Waybills "OUT" - Availability (waybills to all DPs and to all other destinations)	
Total number of Waybills "OUT" listed in the LGAs Stocksheets	218
Number of Yellow copies available	222
Number of Green copies available	230
Number of Waybills "OUT" listed in the LGAs Reconciliation Reports	222
Waybills Availability Score (against the LGAs Stocksheets)	104%
Waybills Availability Score (against the LGAs Reconciliation Reports)	102%

3. LGAs Stocksheets data

3.1 LGAs Stocksheets data - LLIN Quantities	
LLINs received from State (and all other origins)	992,250
LLINs sent to DPs (all DPs and all other destinations)	878,350
Stock (LLINs) left in warehouses (RECEIVED minus SENT)	113,900
Stock (LLINs) in warehouses (as indicated in Stocksheets)	2,425
Stock (LLINs) in warehouses (as indicated by physical inventory reports)	315
Discrepancy (within the Stocksheets)	-98%
Discrepancy between Stocksheets balances and physical inventories	87%

4. LGA level: Waybills "OUT" to sampled DPs

4.1 Waybills "OUT" - Availability (sampled DPs)	
Number of waybills ("OUT") listed in LGAs Stocksheets	60
Number of Yellow copies available for assessment	60
Number of Green copies available for assessment	59
Number of waybills listed in LGAs Reconciliation Reports	60
Waybills Availability Score	99%
4.2 Waybills "OUT" - Quality	
Waybills Quality Score - Yellow copies	98%
Waybills Quality Score - Green copies	95%
Waybills Quality Score	96%
4.3 Waybills "OUT" - LLIN Quantities compared to LGAs warehouse Stocksheets	
Total LLINs sent to sampled DPs as recorded in the waybills	255,914
Total LLINs sent to sampled DPs as recorded in the LGAs warehouse Stocksheets	255,914
Difference (in LLINs)	0
Discrepancy between Waybills and Stocksheets	0%
4.4 Waybills "OUT" - LLIN Quantities compared to LGAs Reconciliation Reports	
Total LLINs sent to sampled DPs according to the LGAs Reconciliation Reports	255,900
Difference (in LLINs)	14
Discrepancy between Waybills and LGAs Reconciliation Reports	0%

60 sampled DPs Consolidated Data**Nasarawa****1. DP level: Waybills "IN"**

1.1 Waybills "IN" - Availability (waybills from LGA level and from any other origin)	
Number of waybills ("IN") listed in DPs ICCs	60
Number of waybills ("IN") listed in DPs Reconciliation Reports	60
Number of waybills ("IN") available	59
Waybills ("IN") Availability Score (against the DPs ICCs)	98%
Waybills ("IN") Availability Score (against the DPs Reconciliation Reports)	98%
1.2 Waybills "IN" - LLIN Quantities Sent versus Received	
Number of nets sent to DPs (from WBs)	254,864
Number of nets received by DPs (from WBs)	254,864
Difference (in LLINs)	0
Discrepancy (within waybills "IN")	0.00%
1.3 Waybills "IN" - LLIN Quantities compared to DP ICC	
Total LLINs received from sampled LGAs as indicated in the waybills ("IN")	254,864
Total LLINs received from sampled LGAs as recorded in the ICCs	255,650
Difference (in LLINs)	-786
Discrepancy between Waybills and ICCs	0%
1.4 Waybills "IN" - LLIN Quantities compared to DP Reconciliation Report	
Total LLINs received from sampled LGAs according to the DPs Reconciliation Reports	255,904
Difference (in LLINs)	-1,140
Discrepancy between Waybills and DPs Reconciliation Reports	0%
Discrepancy between ICCs and DPs Reconciliation Reports	0%

2. DP level: Tallysheets used during LLIN distribution

2.1 Tallysheets - Availability	
Number of days that distribution took place at the DPs	286
Number of Tallysheets available	255
<i>Number of Tallysheets missing</i>	31
Tallysheets Availability Score	89%

3. DPs Inventory Control Cards (ICC) data

3.1 DPs ICCs data - LLIN Quantities	
LLINs received from LGA (and all other origins)	255,650
LLINs handed-over to Distribution Teams (ie: total for the whole distribution period)	254,089
LLINs returned to DPs stores by Distribution Teams	250
Stock (LLINs) left in DPs stores (RECEIVED minus SENT)	1,811
Stock (LLINs) in DPs stores (as indicated in ICCs)	3,934
Stock (LLINs) in DPs stores (as indicated by physical inventory reports)	4,602
Discrepancy (within the ICCs)	-117%
Discrepancy between ICCs balances and physical inventories	-17.0%

4. DPs to Distribution Teams data

4.1 Tallysheets - Quality	
Tallysheets Quality Score	90%
4.2a Tallysheets - LLIN Quantities compared to DPs store ICCs	
LLINs handed-over to Distribution Teams as recorded in the DPs ICCs	239,885
LLINs received by the Distribution Teams as recorded in the Tallysheets	231,584
Difference (in LLINs)	-8,301
Discrepancy between Tallysheets and ICCs (nets handed-over)	-3%
4.2b Tallysheets - LLIN Quantities compared to DPs store ICCs	
LLINs returned to DPs stores as recorded in the DPs ICCs	168
LLINs returned to DPs stores as recorded in the Tallysheets	15,717
Difference (in LLINs)	15,549
Discrepancy between Tallysheets and ICCs (nets returned to DP store)	9255%
4.3 Tallysheets - LLIN Quantities distributed	
Daily total of LLINs distributed (based on net tallying)	225,996
LLINs distributed based on net cards	215,573
Difference (in LLINs)	-10,423
Discrepancy within the Tallysheets	-5%
4.4 Tallysheets - LLIN balance stock with Distribution Teams (at end of day)	
Expected balance stock with Distribution Teams (received – daily total distributed)	5,458
Actual balance (counted stock)	60,583
Difference (in LLINs)	55,125
Discrepancy within the Tallysheets	1010%
4.5 Tallysheets - LLIN Quantities distributed compared to DPs Reconciliation Reports	
Total LLINs distributed as indicated in the DPs Reconciliation Reports	254,520
Total LLINs distributed based on net tallying	225,996
Difference (in LLINs)	28,524
Discrepancy between Tallysheets and DPs Reconciliation Reports	11%

Table 2: LLIN Accountability

Audit level	Data sources	LLINs received at State level	LLINs sent from State to all LGAs	LLINs sent from State to sampled LGAs	LLINs received at sampled LGAs	LLINs sent from sampled LGAs to all DPs	LLINs sent from sampled LGAs to sampled DPs	LLINs received at sampled DPs	LLINs handed-over to Distribution Teams	LLINs received by Distribution Teams	LLINs distributed
State level	Stocksheet	1,675,950	1,598,150	992,600							
	Waybills (IN/OUT)	1,418,350	n/a	983,700							
	Reconciliation Report	1,656,250	1,656,250	992,250							
LGA level (5 LGAs)	Stocksheets				992,250	878,350	255,914				
	Waybills (IN/OUT)				965,750	n/a	255,914				
	Reconciliation Report				992,250	992,250	255,900				
DP level (60 DPs)	ICCs						255,650	239,885			
	Waybills (IN)						254,864	n/a			
	Reconciliation Report						255,904	n/a			
DP level Distribution (60 DPs)	ICCs									n/a	n/a
	Tallysheets (nets received)									231,584	n/a
	Tallysheets (net tally/ing)									n/a	225,996
	Tallysheets (net cards)									n/a	215,573
	Reconciliation Report									n/a	254,520