

Mozambique – Debrief document and recommendations

The AMP mission had three main objectives:

1. Observe the current campaign distribution to assess strategy and implementation and provide recommendations
2. Review existing planning documents and provide recommendations as Mozambique transitions to a single, rolling national campaign to achieve universal coverage
3. Work with NMCP and LLIN campaign stakeholders to determine the procurement details for moving forward with an order for the 2017 LLINs (including net specifications, quantification, port of entry and options for onward transport and storage, timing of deliveries based on distribution dates, etc.)

This document will cover each of these points, but the recommendations from objectives 1 and 2 are overlapping, so form one section.

NOTE: The mission did not specifically focus on the Nampula distribution that will take place at the end of 2016, but it is critical that the recommendations in this document are reviewed and decisions are taken quickly for certain aspects of the Nampula campaign. Specifically, there needs to be a decision on HOW the campaign is going to be supported (e.g. human resources) to be able to roll out in all districts at once so that an associated budget can be developed. Additionally, a strategy for the urban distribution needs to be defined to ensure that it rolls out with a minimum number of problems. As Nampula will be the “pilot” for the national campaign, there is a lot to do on the planning side to be well prepared. A detailed timeline of the upstream activities to be accomplished in early 2016 has been produced and is found in annex to the AMP mission report.

1. Observations, document review and recommendations

1.1 Coordination and staffing

- 1.1.1 Coordination between the PRs and SRs and between the PRs and the Global Fund is excellent – there is a shared responsibility for the achievement of the targets and the LLIN campaign is seen as a joint effort, with the Ministry of Health / National Malaria Control Program clearly in a leadership role on the planning and implementation of activities.
- 1.1.2 Assuming that the current household registration strategy will change (see below regarding pilot of new voucher strategy), it will be important to **revitalize the coordination structures at central level** to revise and finalize the operations manual, data collection tools and training manuals, as well as the supervision and monitoring forms, to reflect the findings of the pilot and lessons learned during its implementation. There will be upstream (central level) costs incurred during this revision process that should be accounted for in the budget.
- 1.1.3 It will be critical for NMCP to **review the coordination structures (and support to those structures) below national level**. To date, the distributions have been district-focused, but the national campaign will mean a shift to province-focused distribution. In the current planning and budgeting, there are meetings and activities that involve the provincial level health authorities, but for the upcoming planned nationwide universal coverage campaign strategy, for which distribution is to take place in all districts of a

province at the same time, there will be insufficient personnel to ensure activities at scale (with the current budgeting).

- 1.1.4 Decisions need to be taken on: (1) **expanding the number of provincial MOH personnel** (e.g. from other MOH departments) to ensure sufficient oversight to the districts and / or (2) **increasing the support to provinces from the central level** (e.g. by placing additional staff focused on logistics, operations and communication in the provinces for the duration of the implementation period) to augment the number of people overseeing activities in the districts. It will be necessary to expand the number of MOH people in the campaign (see EPI for models of how this happens for vaccination campaigns) if the methodology of covering an entire province at one time is going to achieve its objectives. In addition, the demand for personnel will increase for the national campaigns PRs / SRs will be trying to implement in some provinces, while also planning for the next provinces.
- 1.1.5 For WV and the SRs, it will be important to **do an assessment of what will be required in terms of personnel** to carry out distribution in every district in a given province at one time. There are a lot of payments to be made and, under current staffing patterns, insufficient personnel to be able to be in all districts of a province at the same time. The staffing and budgeting need to be reviewed in light of the national campaign to avoid creating bottlenecks on payments that, in turn, block implementation of planned activities. WV and the SRs will require additional resources (human and financial) to achieve the national-scale distribution. It will be important to plan the sequence of provincial roll out so that WV and the SRs will be engaged in only one province at a time, so as not to overburden their capacities.

1.2 Review of current methodology and piloting of a new approach

- 1.2.1 The work to assess the efficiencies of the existing system versus a modified voucher-based system with different approaches to household registration, beneficiary identification and LLIN distribution is commendable. The current registration system is very data-heavy, which may be okay for small quantities of LLINs, but has a high potential to create bottlenecks in the timelines for the campaign when the quantity of nets to be distributed increases and all districts are implementing activities at the same time.
- 1.2.2 If the revised approach is adopted for the national campaign, there are **a number of changes that would need to take place** that have associated budget implications:
 - 1.2.2.1 Planning and implementation **tools need to be revised and approved** in line with the revised approach.
 - 1.2.2.2 **Communication plan and messaging need to be revised**, including the addition of key messages about the vouchers and their value. If there is a change in strategy, there will be a need to review the budget for upstream activities, particularly those related to advocacy, communication and social mobilization to align key messages with phases of activity, etc.
 - 1.2.2.3 **Training will be needed for the central teams** prior to beginning the national campaign to ensure familiarity with the revised approach, including the tools for data collection and collation, as well as for new personnel at the central level who will need to be brought on board for the first time in order to support the more demanding implementation plan.

1.3 Planning / operations

- 1.3.1 The operations manual that is available is good and has quite a lot of the required detail.
- 1.3.2 The **current manual will require significant revision** to align with the revised approach assuming that it is adopted. This manual should be seen as the “bible” for all stakeholders involved in the campaign. There should be enough copies of it made available to ensure that each individual involved in campaign planning and implementation has one, and it should form a core part of the central level training to familiarize anyone going to the field with the changes from the previous approach.
- 1.3.3 The **operations manual should be accompanied by a toolkit** (which already exists, but will need to be modified based on revised approach). Once the toolkit is finalized, the operations manual should make reference to the specific tools associated with each section in the manual to allow users to quickly understand which tools are linked to which activities.

1.4 Microplanning

- 1.4.1 Based on the experience in Mozambique with the LLIN distributions to date in the rural areas, a lot of the planning information is already available; such planning information needs to be updated in advance of the national campaign (such as distribution posts, possible storage locations, etc.) for the districts where LLIN UC distribution has taken place. However, the urban approaches to date have been less successful, so **a fully revised approach for the urban areas will be needed**.
- 1.4.2 It is recommended that the **initial preparation meeting at the provincial level be modified to become a microplanning workshop** that is focused on many of the same things included in the current planning for the meeting, but not including the training of trainers, which should take place closer to the implementation of activities in the field. The microplanning workshop should take place 4 – 5 months before the planned distribution dates (and independent of the LLINs arriving at the port – this can be done much earlier) and the specific outputs should be an operational microplan and budget for each district that reflect the local context, including barriers to uptake of health services or LLINs, planning for transport from district to distribution point (or pre-positioning site), mapping for household registration, etc. These final plans and budgets would then be submitted for approval by the GF to ensure timely disbursement for implementation of activities.
 - 1.4.2.1 The microplanning workshop should be used to **gather all relevant district information** (for logistics, operations and communication) to be used to develop the district-specific plans and budgets. In order to ensure that the correct information is collected by each district, a checklist of required data should be sent to the districts and province(s) at least 4 weeks prior to the microplanning workshop. Regular follow up from the central and provincial levels will be needed to ensure that the information is collected.
 - 1.4.2.2 The **District Health Education Officer should be included in the district team** participating in the workshop, so as to use the microplanning meeting to devise the district’s ACSM strategy and budget, as well as to be able to provide follow through.
- 1.4.3 If the decision is taken to do the microplanning closer to the time of the campaign (e.g. 2 – 3 months before the planned LLIN distribution), then the **number of days for the meeting could be increased** to include 3 days for the microplanning (and development of timeline) and 2 days for the training of trainers.

- 1.4.3.1 **The timing for the training of trainers** should be based on the planning for when campaign activities will actually start. If there is a long time lag between the microplanning and the start up of activities (which is typically the case when microplanning is done sufficiently early to avoid bottlenecks around disbursements), then there should be a separation between microplanning and the TOT to avoid quality problems during the implementation of activities because specifics have been forgotten.
- 1.4.4 A minimum of 3 central level (NMCP) staff should be present at each of the provincial meetings. These three should represent **logistics, communication and operations** and should be able to support the districts and province(s) with development of the microplans and budgets. The SRs should equally be represented with at least 3 people (either from province or from central level).
- 1.4.5 A **training or briefing** should take place **at the central level** for all of the personnel that will be supporting the provincial level microplanning workshops to ensure familiarity with tools and that the final product (microplan and budget) will be available for review and validation immediately after the workshop has ended.
- 1.4.6 The **microplanning is the first point of engagement with the provinces and the districts** regarding the campaign and the timeline developed should outline the advocacy and engagement activities to be implemented at the provincial and district levels from the end of the microplanning through to the post-campaign period. One advantage of the microplanning being done early is that it allows for early and consistent engagement with local authorities and leaders to encourage their participation and to emphasize their role in ensuring the full participation of the population targeted for the LLINs.

1.5 Communication

- 1.5.1 The overall campaign needs to have **higher-level political buy in and visibility** – the national campaign will be one of the largest health activities in the country ever and advocacy for high level participation at the launch event, etc. needs to be planned for early.
 - 1.5.1.1 Elaborate a plan to **enhance the visibility of political leaders** from all major political parties in urging the public to cooperate with the campaign as a way to protect families and communities from malaria, as well to contribute to the economic development of the nation.
 - 1.5.1.2 A **campaign launch** should be planned and key national and international partners and stakeholders should be invited to participate. High-level representatives of the Government of Mozambique and Ministry of Health should host the launch.
- 1.5.2 Very **positive aspects noted** in planning and during campaign implementation included:
 - 1.5.2.1 **Advocacy with local leaders** planned for high level engagement in campaign
 - 1.5.2.2 **Health education / demonstration** to inform beneficiaries on malaria and how to hang nets properly took place at distribution points visited
 - 1.5.2.3 **Dissemination of net use** messaging planned at posts by distributors
 - 1.5.2.4 Personnel identified as being part of campaign with **t-shirts at posts**, including **campaign logo**
- 1.5.3 Good that data is being collected (e.g. the Malaria Consortium survey on net barriers and practices), but it will be important to work on **centralizing the information** to ensure it is easily accessible for developing materials based on data and evidence.

- 1.5.4 It is recommended to **develop a separate communication plan and timeline**, identifying key activities, channels, messages, audiences, etc., and ensure that activities are costed for inclusion in the campaign plan and budget.
- 1.5.4.1 Based on meetings with a number of communication partners (such as JHU and PIRCOM), there are plans for malaria communication and associated resources that should be integrated into the planning for the UCC. It will be **important to work centrally on a mapping of communication partners and resources** for malaria communication to see whether the existing funding can cover some of the communication aspects related to the UCC. It is recommended that the communication sub-committee hold a coordination meeting as soon as possible with key stakeholders to determine if there are non-GF resources that can be used to assist with the communication about the UCC and LLIN use, care and repair.
- 1.5.5 There are programs currently being supported / implemented by the NMCP and the Ministry of Education for increasing malaria knowledge and changing behaviour among teachers and students. These **school-based programs should be assessed in terms of how well they are functioning** and to determine if there is a value-added in building on existing activities. If the program is functioning, involved schools provide a cost-effective option for increasing IEC about the campaign and should be leveraged in the planning for communication. There is also a possible role for schools in the post-campaign period to ensure continuing information and BCC around malaria, LLIN use, care and repair.
- 1.5.6 **Clear and consistent messages are needed for beneficiaries to understand what they can and cannot do with old / non-viable LLINs** (for example, to be used for screening windows or eaves, etc.). Currently, there is an information vacuum around this issue, which will only lead to inappropriate practices as no information is provided. It is important to start providing consistent messages about old LLINs, particularly that they should not be used for fishing. **Time during the household registration will be needed to ensure that the messaging is clear** about what can and cannot be done with existing, non-viable nets. Most people learn through what they see – examples should be provided from the districts as to what people are already doing with old nets to reinforce any positive behaviours and continue messaging that they cannot be used for fishing.
- 1.5.7 **Early planning and mapping for communication needs** to be done in the preparatory meetings (see section on microplanning) at the province level (e.g. detailed listing of activities, timelines, messages, audience, etc.) and a budget should be developed to align with planned activities that fit with the context of each province / district.
- 1.5.7.1 A **generic table of activities, audiences, messages**, etc. should be developed as part of the communication plan and should guide decision-making during the microplanning around what will and will not work in each district and what messages need to be modified or added to address barriers to registration, LLINs and LLIN use / care / repair.
- 1.5.8 **Advocacy packages need to be developed** (and the content of the packages defined) for each target audience to give individuals materials to use for their own advocacy after they are briefed. Advocacy meetings should include the provision of a package of information about the campaign objectives, key activities, messages for each phase of the campaign and a list of specific tasks or activities that could be done by individuals to contribute to the success of the campaign (e.g. if you are a religious, traditional or political leader, you have a list of ways that you can disseminate information and ensure

population participation in the campaign activities). Budget implications for the enhancement of the advocacy packages should be reviewed and discussed during the coordination meeting with communication partners.

- 1.5.8.1 Advocacy should **focus beyond the governmental and non-governmental structures** that would be involved in a campaign normally (e.g. religious and traditional leaders), in order to include private sector partners (such as mobile phone companies, energy sector companies, storage and transport companies) in order to request in-kind contributions to the campaign that can reduce costs and increase visibility in cost-effective ways.
- 1.5.9 Planning for communication activities at the province and district levels should **include meetings with local broadcasters** to develop plans for roll out of key messages and work on translation of information from Portuguese to local languages. These meetings should also include local health officials who may then be better positioned to speak to the public through local stations to promote the campaign objectives.
- 1.5.10 The **training and implementation materials need further review** to ensure that the volunteers undertaking the mobilization and registration of households, as well as the LLIN distribution, have job aids and key message sheets for clear and consistent communication.
- 1.5.11 It will be important to **involve other Ministries** in some of the communication planning and development of messages. For example, the Ministry of Agriculture and the Ministry of Fisheries should be aware of the messages developed for non-viable nets so that they can review and agree to them. The Ministry of Education may have a large role to play for expansion of the messages being disseminated to children through schools and school-based activities.
- 1.5.12 **Clear information about what should be done for migrant and seasonal workers should** be included in the campaign guidelines, as well as in the communication plan and messages.

1.6 Branding

- 1.6.1 The process of branding the LLINs and the LLIN distribution campaign has commenced with the logo and slogan, but there are a lot more things that can be done to more broadly **ensure that the branding of the campaign is recognized nationally**. The suggestions for the expansion of the existing plans towards an overall umbrella branding can be found in the communication report.

1.7 Net hanging

Examples should be provided regarding how to hang nets in different ways. An example of how to convert a rectangular net to a conical net can be seen at this link: <https://www.youtube.com/watch?v=RPtaSimhNpk>

We will send on examples of other ways of hanging, including using two strings and hanging in a way that the net can be slid out of the way when not in use.

1.8 Post-campaign strategy for ensuring use / care / repair

This will be sent as part of the detailed communication recommendations – under review now.

1.9 Logistics

- 1.9.1 The logistics aspects of the campaign are currently acceptable, but ***it is recommended that a review is done of the tools used for LLIN tracking*** (both in terms of quantity of tools and in terms of amount of data collected / complexity of tools, as well as to ensure linkage between logistics and program tools at DP level). ***It is also recommended that a review is done of the training for logistics*** that is currently planned and implemented. It is critical that people involved in the supply chain are trained prior to the arrival of the LLINs and that they have the necessary supply chain management tools available to record LLIN movement as it is happening for increased accuracy and accountability.
- 1.9.2 The cost per net for warehousing and transport is quite high, but this may be the reality of what the costing really is. However, it is recommended that the NMCP and World Vision ***assess the possibility of using third party logistics (3PL)*** to see if this could create economies. While the process of contracting local transport options would be the same, there is a chance that an umbrella private sector company could better negotiate down costs of individual transporters given added leverage of dealing with multiple sub-contractors at a time (and thus reducing the necessity for one-on-one negotiations by the SRs with individual transporters). The feasibility of this (and cost-effectiveness) should be tested.
- 1.9.3 There is a need to ***expand on the logistics aspects of supervision and monitoring tools*** so that supervisors / monitors are doing more than just verifying that nets are in warehouses / at distribution points. All supervisors / monitors should be trained to spot check the logistics tools for quality errors during their field visits.
- 1.9.4 ***Development of logistics plans of action by province*** to capture local details and to ensure that planning is detailed enough to be easily operationalized to avoid campaign delays.
- 1.9.5 ***Recruitment of sufficient and appropriate personnel for the management of the supply chain*** will be critical for LLIN accountability. The Ministry of Health, particularly staff working in malaria and EPI, should be the main source for the logistics personnel that need to be recruited and trained. While it is clear that they have other responsibilities in terms of their day-to-day work, the huge needs of the campaign will mean that people will need to be incorporated into the implementation for the period of the household registration and LLIN distribution.
- 1.9.6 ***NMCP will need to closely monitor, on a daily basis, the status of the LLIN pipeline.*** Although the nets will ultimately be delivered to the districts by PPM, NMCP at central level (NMCP to take a decision on the coordination and sub-committee structures and roles and responsibilities (for example, will there be a central logistics team that oversees the logistics operation) – this needs to be expanded in the current operational guidelines) still has an important role to play in monitoring the situation. It will be absolutely essential to maintain an up-dated global picture of how many containers have been shipped from factory, received at port of entry, cleared and transported to main storage locations, as well as to know the ETAs for every step of the supply chain. This information is vital for the global planning and coordination of the rolling campaigns. It is also essential for planning and coordinating activities at district level. The monitoring of the pipeline situation requires regular contacts with PPM and its local agents in-country. A template should be developed in order facilitate the collection of data and its dissemination among all those involved.
- 1.9.7 ***Identification and assessment of adequate warehouses*** at provincial and district level should follow strict criteria to ensure compliance with donor requirements and provide a maximum of security for the nets. The cost for renting warehouses in campaigns to

date appears to be high. Any public premises used for storage should be free of charge, while advocacy for engagement of the private sector should bring the costs down when private premises are the only option.

- 1.9.8 It is recommended that a **commodity management assessment (CMA)** be performed after each campaign roll-out. A CMA will provide important insight in the level of accountability achieved in the management of the LLINs, as well as in the proper use of LLIN tracking tools. Lessons learned from the CMA should be used to improve both accountability and LLIN management in subsequent campaign roll-out. CMAs should be included in the budget revision.
- 1.9.9 Clear **guidelines and budget** must be developed for **reverse logistics** (i.e.: processing of left over nets at the end of the campaign). It is also essential to properly track the nets on their reverse path, and to ensure that storage and/or hand-over to other programs (if applicable) is duly recorded.
- 1.9.10 It is recommended that a **reconciliation report** (matching logistics data with distribution data) be part of the standard end-of-campaign reporting requirements for the provincial teams (AMP can help developing a standard template).

1.10 Local procurement

- 1.10.1 Timing for local procurement needs to be assessed given the increased needs and local capacity. It is likely going to need to begin much earlier to avoid delays related to late printing and delivery for commencing activities.

1.11 Criteria for selection of personnel

- 1.11.1 For **logistics**, the **selection of personnel for warehousing should be strengthened**. Where possible, individuals in the MOH (either NMCP or EPI) with logistics experience should be selected to ensure that there is commodity accountability throughout the supply chain (remuneration can come through supervision and monitoring missions for LLIN logistics – transport and storage at lowest levels). The hiring of inexperienced individuals, combined with insufficient training and complex tools, is a risk for the LLIN accountability and should be rectified. It is recommended to use experienced personnel within the MOH for the warehouse management / oversight.
- 1.11.2 For the **household registration**, **it is important that the personnel selected for this task are perceived by community members as neutral** and that households will not be excluded on the basis of politics, religion, etc. While the criteria for the selection of personnel are clearly laid out in the campaign documents, these criteria are reportedly not always being respected, which is one of the causes for households' refusal to register for LLINs. This issue (anecdotally) is less than in the past as people become familiar with the fact that the registration is for nets, but that does not negate the importance of respecting the criteria developed for selection of personnel. Where there are health volunteers (including activistas, mobilizadores and agentespolivalentes e elementares) performing routine health activities in the communities, these are the people that should be used for the household registration and for the dissemination of the key messages during the household visits (to avoid the message being confounded with the messenger and diminishing its validity and acceptance). Deploying health volunteers in registration helps to reinforce the community-based health system.

1.12 Training

- 1.12.1 There is no upstream training (e.g. refresher at the central level for all implementing partners) in the current planning. This is strongly recommended to be included in the planning and budgeting, particularly if the distribution strategy is going to be changed based on the pilots. Based on some proposed modifications around supervision and monitoring, including with the tools, a **central level refresher training will be needed** to ensure a high quality campaign.
- 1.12.2 Upstream training – if introducing new activities (like microplanning and vouchers, etc.), there needs to be a **central training** to familiarize people with the guidelines, etc.

1.13 LLIN distribution

- 1.13.1 Activities and time for LLIN distribution – if the current method for the distribution is maintained, two aspects for consideration / review are: (1) is there a way to better organize the registers to facilitate finding names and reducing waiting time of beneficiaries; (2) is it possible to put the majority of the marking on the LLIN at the point of the manufacturer (versus doing it all at the DP).

1.14 Distribution timeline

- 1.14.2 Needs to have more detail in order to ensure that activities stay on track and milestones can be identified and adhered to.

1.15 Data compilation / verification / management

- 1.15.1 Compilation and verification is well planned for – an impressive system is in place to verify the lists generated. Will the same system work for urban areas or is there a need to review what will be possible for the non-rural areas?
- 1.15.2 Communication pyramid
- 1.15.3 Data collection and verification, as well as supervision, monitoring and transmission, **should be detailed in the operational manual**

1.16 Supervision versus monitoring

- 1.16.1 Supervision and monitoring are separate activities and each is critical for the campaign. Supervision involves oversight of activities and taking corrective actions to improve the quality of the implementation of activities. Supervisors should be provided with checklists so that they are consistent in what they are observing / looking for and should be directly interacting with the implementation personnel (e.g. volunteers for household registration and LLIN distribution) to make sure that activities are correctly implemented. Monitoring is a separate activity that should focus on whether the activities are reaching the targets. Monitors should be visiting households during the household registration and LLIN distribution to ensure that they have been reached and are participating in the campaign. Specific tools will be developed for monitoring for each phase of activities.
- 1.16.2 Proposal to have supervision from the district levels and monitoring from the provincial / central levels. If accepted, then the roles and responsibilities of each level will need to be defined and the tools for each phase of activity for supervision and monitoring differentiated for training and implementation purposes.
- 1.16.3 Supervisors and monitors need to be trained to be polyvalent – they should be capable of looking at all aspects of the campaign (operations, communication and logistics) during their period in the field.

1.17 Urban distribution

1.17.1 Urban distribution is a major problem and the past experiences in Mozambique have illustrated challenges. There is need for a specific plan for urban areas that can be tested during the distribution in Nampula and modified based on lessons learned. It is important that what works in rural areas is not assumed to be feasible for urban areas as the contexts and needs are significantly different. It is particularly important to review the number of people required to adequately support the implementation of activities in urban areas and to discuss the engagement of security forces, if needed, in advance (often, payment of the security forces will need to be funded via a Government contribution).

1.18 Budget

The cost per net is quite high, but maybe realistic. The majority of costs go to warehousing and transportation, so it may be worthwhile to assess the possibility of contracting third party logistics versus dealing with people on an individual basis to see if costs can be reduced.

1.19 Review of the tools

The review of the tools was deemed to be a poor use of limited time given that the strategy for the UC campaigns is under review. If the strategy is changed, the tools will need to be modified to align the adopted strategy.

2. Work with NMCP and LLIN campaign stakeholders to determine the procurement details for moving forward with an order for the 2017 LLINs (including net specifications, quantification, port of entry and options for onward transport and storage, timing of deliveries based on distribution dates, etc.)

2.1 Quantification

From all accounts, the system to date for the distribution of LLINs in each district has relied on the ability to move LLINs from one area to another in order to meet the LLIN needs following household registration. This lateral movement of the nets from one district to another is inefficient and incurs costs that should be avoided by planning ahead with a margin of error on the number of nets – there is little point in investing millions of dollars in a mass distribution while knowing that you cannot achieve the UC targets because the LLINs will not be sufficient to cover the entire population registered. In addition, given that the campaign is going to be done in all districts at once (in principle), there will be less flexibility for moving nets from one district to another, thus making it difficult to avoid shortages.

In order to address this, the TA has started the process of collecting the information on the number of people registered from the last district campaigns (including year of distribution) in order to provide a percentage difference between the projected population and the registered population to quantify for the LLINs needed.

There are clear sensitivities about using figures that do not come from the official population projections for the purposes of the LLIN quantification, but the objective is not to change the base figure that is used. The objective of collecting the household registration information is to provide a rational basis for the quantification of a buffer stock needed in each province to achieve the universal coverage objectives. The buffer stock should be seen as similar to that

used by EPI for planning vaccination campaigns, though the control over the buffer stock will need to be much tighter given the value of the LLINs. It is proposed that nets are not moved to districts from the main storage location until the household registration is complete and final figures for LLIN needs are available. Any remaining stock will be left in the warehouse and a plan for redistributing supplementary LLINs (to routine distribution) should be developed as part of the overall campaign planning.

Note that at this point in time, the **household registration data has still not been made available** so the attached file does not include a buffer stock in the quantification. In order to provide a more realistic picture, an estimated 20% buffer stock could be included in the quantities that are reflected in the preliminary roll-out plan (see annex) and the in-country logistics scenarios.

2.2 Specifications

The country has standard specifications that have been used for all past distributions. There are a few considerations that should be reviewed when determining the specifications for the national campaign:

- 2.2.1 Will the nets come in **individual packaging**? With the large quantity of LLINs to be procured, waste management becomes a major concern. At the same time, Mozambique is moving towards a banning of plastics to reduce environmental waste. Documents for helping to guide this decision-making process are attached with this report (see: LLIN packaging infographic and LLIN packaging considerations).
- 2.2.2 Is it possible to **include at least part of the marking** for the net identification in the specifications? Assuming that it is agreed that a buffer stock should be procured, there should be little possibility that nets would need to move from one province to another. Therefore, the UC campaign year and the province marking could already be included at the level of the supplier and then the district information added at the distribution point if it is deemed necessary.
- 2.2.3 If nets are coming without plastic packaging, **can the necessary pamphlets / inserts be included in each bale coming from the supplier**? If there is an information sheet needed on hanging, care and repair of LLINs, it is suggested that this is printed at the level of the supplier and included in each bale to reduce the printing needs in-country (since capacity of local suppliers is limited to produce these in the quantities needed in a timely manner). The number of pamphlets / inserts should be approximately 50% of the total number of nets in a bale (e.g. 25 pamphlets for a bale of 50 nets) since most households will be receiving 2 – 3 nets at the distribution point.

2.3 Delivery locations for PPM (see campaign roll-out plan – see annex)

The initial delivery points in the country will be the three main ports: Nacala, Beira and Maputo. The final delivery destination will be each district. However, it is proposed that nets are kept in a main storage location within each province (or two storage sites depending on the logistics challenges in a province) until the household registration figures are available to trigger movement of the correct quantity of nets to each district. This system will avoid the costs incurred through moving LLINs laterally between districts and will reduce the storage time in each district as the nets should arrive shortly before the LLIN distribution.

The quantity of LLINs for each province, as well as the delivery location and timing, is found in the annex to this document (to be sent by NMCP and WV once it has been agreed to in-country).

It is expected that NMCP will be in a position to place its net order for 2017 before the end of the year for each of the port locations, assuming that the increases in the population can be agreed to in Mozambique. It should be noted that one of the factors considered in defining how the distribution will roll out through the country is the capacity of the MOH and SRs – for each wave of campaigns, an SR will only have one province to manage to avoid overextending capacity.

2.4 Internal movement of LLINs for PPM

While the final delivery point for the LLINs will be the district (where the PPM in-country agent will handover to the MOH and SR), the PRs have a proposed schema for the movement of the nets from the port to the main storage locations (where the nets will remain until the household registration data is confirmed for each district). Working with the NMCP and WV, discussions have taken place regarding areas where storage is available closer to the districts for provinces that are distant from the initial port of entry (to avoid delays between the household registration and the LLIN distribution, as well as to ensure that LLINs are moved as close as possible to the districts for the provinces that will be distributing right at the end of the rainy season.