Question 1

“Please clarify discrepancies in vaccine and operational costs across the application document”

Vaccine costs

There are three discrepancies in the proposal document for vaccine costs, and relates to Annex 3.1 D.

1) The GAVI and MOH spreadsheets for estimating MR SIA vaccine requirements use a wastage rate of 25%, with a corresponding wastage factor of 1.33. For the GAVI spreadsheet, an absolute 1.33 is used, but the MOH excel spreadsheet calculates this more accurately as 1.3333333... This small difference in the decimal rounding of wastage factor in the GAVI Annex 3.1.D has a larger impact on the absolute number of doses needed [GAVI: 6,587,760 vs. MOH 6,604,271]. The difference of 16,511 MR doses between these two estimates relates to the more accurate calculation of the wastage factor by the MOH and is considered correct.

2) GAVI estimates for MR vaccine requirements for the SIA includes a buffer stock of 25% (0.25) in the calculation of total MR vaccine doses needed (line G), which are not included in the estimates of MR doses for the SIA in the MOH calculations (Total MR doses needed: GAVI – 8,234,700 vs. MOH 6,604,271). The current practice of the MOH is not to include vaccine buffer stock in estimates for SIA vaccine requirements, but if this is the policy of GAVI for supporting countries for MR vaccine introduction through SIA, this is fully accepted by the MOH.

3) Freight – GAVI estimates in this table use a freight rate of 13% of the total cost of vaccines in Annex 3.1. MOH estimate as per the cMYP use a freight rate of 15%. The MOH considers this difference inconsequential, given that an accurate estimate of true freight cost will be determined on the placement of the vaccine order through UNICEF.

Operational Costs

Operational costs for the MR SIA are fully consistent within the application document (see p7, 24 and 26), but possibly confusing in their presentation. Summary of full operational costs for this MR SIA is:

Total Operational Cost: 3,962,562 USD

GAVI supported*: 3,219,582 USD

Other partners: 742,980 USD

*[GAVI supported operational costs have been calculated at 0.65 USD per target child for the MR SIA component and do not include the GAVI MR introduction grant activities or funding].

There is a discrepancy in table 7.2.2 (Cost (and finance) of the MR campaign USD, - see p. 26) that notes the total MR SIA operational costs as 4,012,562, which is an increase of 50,000 USD from the above (3,962,562 USD) mentioned above. This additional 50,000 USD relates to the cost of short term technical assistance to be provided from the World Health Organization to support SIA planning, implementation and assessment, and will be funded from within internal WHO sources. Table 7.2.2 was added by GAVI very late in the MR application process after the application had already been finalized and this error was not detected – and relates to operational costs that will not be born by the MOH. The MOH decided to include these WHO supported activities in the final costing of the MR
SIA to give a more complete picture of the real cost of conducting an immunization campaign of this magnitude.

**Question 2**

"Please provide correct figures for the birth cohort"

The birth cohort referred to on the IRC NVS Country Report (p1 – 4,953,203) is incorrect; this should be the target cohort for the MR SIA from 9 months to 14 years, 11 months of age. This appears to have been automatically included by the GAVI database.

The IRC NVS country report also highlights discrepancies between surviving infants [JRF: 343,998 and Proposal: 388,003]. The GAVI MR Vaccine application uses birth cohort from the cMYP 2008 to 2015 with figures noted as follows:

- p.13 – surviving infants 388,003 [2012]
- p.20 – births 397,160 [2013]
- p.29 – births 397,160 [2013]

As has been reported by the NIP Manager on 06 October, 2012 to GAVI in response to this issue with the review of the 2012 APR, under 1 year population estimates developed in the 2008 cMYP when projected forward appear to overestimate the actual < 1 year population. These figures are being continually updated by the MOH to ensure program reporting accuracy, and were the reason that a lower under 1 population was reported in the 2011 JRF, which is the source of discrepancies. Incorporation with updated estimates of births and under 1 year population figures will be fully addressed in the next update of the cMYP (expected early 2014) inline with improved reporting of these figures by the Ministry of Health, Department of Planning and Health Information, which is being supported by the WHO to improve processes of estimation.

The current agreed target for infants < 1 year in 2013 with GAVI (see email correspondence from Raj Kumar dated 08 Oct, 2012) is 373,116 and the MOH recommend that this figure be used for the calculation of the NVI Grant [under 1 year target population x 0.8 USD]. The corresponding table in the application (7.2.6) has been updated accordingly (see below).

**Question 3**

"Provide more specification and justification of the expenditure items (in tables/section 7.2.2 & 7.2.6). Especially important are those expenditures on human resources, training and social mobilisation. It is also necessary to ensure that there are clear linkages with the descriptions of the activities described in the text of the proposal”.

Details information on the expenditure items for table/section 7.2.2 and 7.2.6 is provided in the attachments with the GAVI MR Vaccine application. Costing estimates for the 2013 MR SIA are based on analysis of actual expenditures from the 2011 February Measles SIA (nationwide – 9 months to 5 years) which had an overall operational cost of 1.11 USD per child. This has been reduced to 0.80 USD per child for the 2013 MR SIA given the expected efficiencies gained from having a large proportion of children reached by immunization teams in the school setting.

Further detailed specifications and justification of expenditure items:

**Table 7.2.2**

1) Training (290,000 USD) – this will encompass national and provincial health offices to conduct training course for health centre staff and community volunteers on the justification for the SIA, planning concepts including identification of high risk communities, system of monitoring and reporting, the safe administration and disposal of vaccines and injection related supplies, and adverse events from immunization. As has been noted in the IRC NVS Country Report, a key
challenge with the implementation of the MR SIA will be “adequate planning that will deal with scaling up human resources, especially within urban community health centers (sic)”. The NIP is fully aware of these challenges and the importance of achieving high immunization coverage rates in urban areas to ensure the overall success of the MR SIA and rubella vaccine introduction. One of the main strategies to address the workforce issue will be the temporary use of nursing, medical and dental students from the major universities and training institutions at regional centers throughout Cambodia to support Government health workforce staff in the field. This cadre of students while significantly augmenting the immunization teams, will also require intensive training on the SIA and safe delivery of immunizations, and will be also supported from this training line item. A standard grant of 10,000 USD per provinces has been allocated for all 24 provinces with an additional 50,000 USD allocated to the NIP for national MR SIA training workshop and to support provincial level activities and student training at the national capital.

2) Human resources (1,485,961 USD with 842,981 USD to be supported from GAVI sources) – this will be used to fund outreach allowance for health workers and non health staff (e.g. education workers that will be fundamental to the implementation of the MR SIA in the school based setting and nursing/medical/dental students as per above). Rates for outreach allowances are standardized by the Ministry of Health (and full aligned with donor support under the current SWAp arrangements, and are determined by distance travelled and need for overnight accommodation [current rates are distance travelled < 10km – 2 USD a day, > 10km < 40 km – 7 USD a day, and > 40 km 7 USD food and 10 USD for accommodation]. The MR SIA in 2013 is expected to mobilize over 5,000 health care workers to support this activity over a 120 day period, with an average 1,500 health care workers in the field each day of the SIA. Assuming an average cost of 5 USD per day per Health Care worker, total allowance costs are in the order of 900,000 USD for the full period of the SIA, and do not include allowances that will also be paid to non health staff (e.g. education support staff at schools and student volunteers that will be paid a small stipend as well). The human resource cost for the MR SIA is approximately 0.30 USD per child and is again inline with expenditure from the 2011 measles SIA.

3) Social mobilization (615,000 USD with 515,320 USD to be supported from GAVI) - Effective social mobilization both before and during the course of the 2013 SIA will be critical to its success. Lessons from previous recent SIA in Cambodia (H1N1, measles) confirm the impact of TV spots in creating high awareness within the community, and this will remain central to social mobilization efforts for the 2013 MR SIA. In addition, radio spots, street banners, post banners, posters, leaflets, t-shirts and community groups using loud speakers will also be relied on. An increasing focus of the social mobilization efforts will be the involvement of village chief, local leaders and village health volunteers, especially with the coordination of SIA activities with their local communities. UNICEF will take the lead in supporting the MOH with the development and implementation of social mobilization strategies and activities, based on their strong achievements and experience in the past. Breakdown of the total social mobilization cost are:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV spot and radio production:</td>
<td>15,000 USD</td>
</tr>
<tr>
<td>TV spot and radio airing:</td>
<td>250,000 USD (for a 3 month period)</td>
</tr>
<tr>
<td>IEC materials:</td>
<td>200,000 USD (posters, banners leaflets, T-shirts)</td>
</tr>
<tr>
<td>National and Provincial launches:</td>
<td>20,000 USD</td>
</tr>
<tr>
<td>Delivery of materials:</td>
<td>25,000 USD</td>
</tr>
<tr>
<td>Community meeting:</td>
<td>50,000 USD</td>
</tr>
<tr>
<td>Community pre registration:</td>
<td>55,000 USD</td>
</tr>
</tbody>
</table>

Table 7.2.6

Estimate of the lump-sum grant for MR vaccine introduction has been updated with the new 2013 under 1 year population estimate of 373,116 which will give a grant amount of 298,493 USD. Cost activities for Table 7.2.6 have been updated to incorporate this new introduction grant amount below.
<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Full cost/needs for new vaccine introduction in US$</th>
<th>Funded with GAVI introduction grant in US$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training</td>
<td>173,493</td>
<td>173,493</td>
</tr>
<tr>
<td>Social Mobilization, IEC and Advocacy</td>
<td>85,000</td>
<td>85,000</td>
</tr>
<tr>
<td>Cold Chain Equipment</td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Vehicles and Transportation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Programme Management</td>
<td>20,000</td>
<td>20,000</td>
</tr>
<tr>
<td>Surveillance and Monitoring</td>
<td>10,000</td>
<td>0</td>
</tr>
<tr>
<td>Human Resources</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Waste Management</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Technical assistance</td>
<td>20,000</td>
<td>0</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>$328,493</strong></td>
<td><strong>$298,493</strong></td>
</tr>
</tbody>
</table>

Cost for all items has been amended to work within the lump sum funding grant. All activities will be able to be supported under this grant; however, additional technical support for MR vaccine introduction will be provided through the World Health Organization, under their internal funding.

Further specifications and justification for the expenditure items are:

1) Training:
   - Updating of NIP Policy and guidelines for the new immunization schedule, printing and distribution to all provinces, districts and health centres
   - Developing of training curriculum and materials for MR vaccine introduction for the staff at different level in Khmer language:
     - Basic facts about rubella disease—for parents and health workers
     - Basic facts about rubella vaccine—for parents and health workers
     - MR vaccine schedule, coverage and wastage monitoring
     - Injection safety and AD use
     - Immunization safety and AEFI surveillance
   - Partial support to extend by one day national, 24 province and 77 district and 1000 + Health Centre currently planned immunization program review/training workshops to incorporate sessions on MR vaccine

2) Social Mobilization and IEC
   - Preparation of IEC materials—posters, brochures targeted to decision makers, health workers for display in health facilities and for parents’ information
   - Distribute IEC materials to all the health facilities down to health centers level
   - Implementation of the IEC programs through radio and television spot announcements for MR SIA and MR routine vaccine introduction
   - Media releases and launch ceremonies at National and Provincial level to ensure high visibility for Rubella vaccine incorporation in National Immunization Schedule

3) Cold Chain
   - Procurement of additional cold chain equipment at the provincial and health centre level to replace aging equipment, and ensure full coverage of MR vaccine throughout the country

4) Programme Management
   - Support costs for the National Immunization Program for oversight of MR vaccine introduction, field visits, printing and communication costs,
• Workshops with NGOs and attendance at forums to inform of immunization schedule improvements and ensure coordination for activities,
• Coordination with the Department of Planning and Health information for modification of infant immunization cards and monitoring charts to incorporate switch from measles to MR vaccine and printing and pilot introductions

5) Surveillance and monitoring [note WHO funded]

• Financial support for continuation of the CRS surveillance at 2 sentinel sites, incentives for clinical staff to report suspected cases, collect serum samples and shipment and testing at the national measles/rubella laboratory

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