

Participants: PV Raju (PVR)-Biological E, Komarapuram Krishnamurthy (KK)- Bharat Biotech, Marcella Pitanga (MP)-Bio-Manguinhos, N B Shiva Kuma (NBS)-Indian Immunologicals, Taufik Wilmansyah (TW)-Biofarma, Yiyuan Chen (YC)- CNBG, Sonia Villaseñor (SV)-DCVMN. Meeting started at 12:05 pm CET and adjourned at 12:48 pm CET.

PVR welcomed the participants and started a round of introductions.

PVR shared an introduction on the topics that the SCWG has worked in the last year (traceability and stockpile) and the topics that were mentioned as of interest from the members (Packaging Technologies & Standardization; and Supply Chain & Logistic costs). Within these two last segments he proposed the following targets for the group to discuss and identify which segment will have priority.

## Packaging Technologies (3S):

- 1. Sharing the best practices across the industry.
- 2. Standardization of Primary & Secondary Packing.
- 3. Status update about upcoming trends to members.
- 4. Surplus Stockpile liquidation among member's subjective Make & Specs matching (e.g.COVID-19) Member companies can offer to each other the surplus stockpile)

## Supply Chain & Logistic Cost Optimization:

- 1. Temperature monitoring and cold chain transit studies and cost optimization initiatives.
- 2. Volume/metric analysis Vs Air freight cost reduction. To minimize dead spaces in containers and minimize the cost/vial freight cost.
- 3. Labelling & Packing: Inspection-Manual Vs. Automation
- 4. Others if any......

SV emphasized that the WG is expected to issue 1 or 2 publications in journals showing the results of the project(s) that the SCWG would obtain.

KK suggested the 2 key areas in which the SCWG could focus are Cold Chain management from the facilities of the manufacturer to the end customer point, discussing on the - validation method that will be cost effective and beneficial to the integrity of the product when it reaches the end point. The main stages in which time is consumed is during custom clearances, and sometimes transshipments with further delay. The other topic is standardization of packing. UNICEF itself could suggest what is the best packing configuration they are looking for and manufacturers could adopt them at their end.

NBS added that packing standardization could also be useful for domestic transportation. He considers surplus stockpile should also be a priority.

SV and KK gave a brief summary of the traceability pilot project performed in 2022.



PVR thanked the inputs from the members. In conclusion, the first project that the WG could undertake are those in which no investment is required, only sharing between members, thus the Supply Chain & logistic cost optimization will be the first priority. SV emphasized that for the moment given there is no grant available to support the WG activities, so we could move forward with the initiatives that do not require funding. Or, in parallel, work on a project proposal to search for funding.

PVR said we will not be requesting for any confidential information from the members, only the outer dimensions of the shipping containers and pallets for shipping products to BMGF or UNICEF. Then, based on the volumetric analysis, the group will evaluate if there is a gap and then come back to UNICEF or other procuring agencies and show them the results on some cost optimization areas, who will be the ultimate beneficiary while buying the product. KK added that if there is a call for investment, based on the information sharing amongst the members could propose a packing standardization to optimize the space utilization which could be beneficial for all. The rest of the group agreed. TW also expressed his interest on working on Inspection – Manual vs, automated. This would take 15-20 days to analyze once having the inputs from the members.

Regarding custom clearance for the vaccines, PVR mentioned that there is a certification from the government of India and across the globe on the AEO (Authorized Economic Operations) that will recognize 160 countries across the globe status which have are T1, T2 and T3 levels; so based on the status, shipments will have immediate clearance, this will save at least 2 to 3 hours of cold chain during clearance. PVR offered support to any member interested in obtaining the AEO status, information can be shared on how to get the certification and support from Biological E.

Another project the WG could also do without investment is to work on the surplus stockpile. The SCWG webpage could be updated that members can offer their stockpile directly (type and quantity) to other members instead of buying from an OEM. This will help seller and buyer to liquidate without destroying the surplus vials. Then once listed, if there is any other member interested, they can contact directly the manufacturer.

PVR expressed he will be sending 1 to 1 email to members to get their inputs.

Chair of the Supply Chain WG