Section A: Introduction

- Approximately US$ 5-10 million (2-4%) of the Board-approved funding for the Cold Chain Equipment Optimisation Platform (CCEOP) is likely to remain unspent due to a small number of countries choosing not to utilise their full allocation.

- Based on a recommendation from the Programme and Policy Committee (PPC), this paper asks the Board to approve allocating the unused funds to be used for a learning agenda to test innovative supply chain technologies that the Alliance may choose to scale in the next strategic period.

Section B: Facts and data

1.1 The Alliance launched the CCEOP in 2015 to rehabilitate and extend the cold chain in eligible countries, accelerate uptake of innovative technologies and shape the market for cold chain equipment (CCE). The Board approved US$ 250 million for CCEOP and a formula to allocate funding equitably across countries. Country demand for CCEOP has been high with 48 of 55 eligible countries having applied for support. Procurement of CCE is now underway for 29 countries and deployment has started in 14, with 20,000 units delivered and 12,000 installed by the end of 2018.

1.2 The Secretariat projects that US$ 5-10 million of the Board-approved funding will be unused by the original eligible countries for two reasons:

a) Two countries have indicated they do not plan to apply to CCEOP.

b) Six other countries did not utilise the full amount they were entitled to under the allocation formula. The Secretariat is confirming if these countries will apply for an additional amount, which is why there remains some uncertainty over the total quantum of unused funds.

1.3 Two countries which were not eligible for CCEOP at the time of the Board decision – Congo and Syria – have since entered eligibility. Using the Board-
approved allocation formula, the envelopes for these two countries would be US$ 3.3 million. This would leave an estimated US$ 2-7 million unused.\(^1\)

1.4 The Secretariat and Alliance partners considered reallocating these funds to eligible countries. However, if allocated equitably, this would have resulted in a very small increase in the ceiling for each country while incurring significant transaction costs to revise country applications and deployment plans. Therefore, it is proposed to use the remaining funds for a learning agenda to evaluate innovative CCE technologies and approaches that the Alliance may choose to scale in the next strategic period. Three options for this learning agenda were presented to the PPC:

a) Leveraging the CCEOP investment in solar devices to catalyse broader solarisation of health facilities
b) Freeze-free transportation devices to reduce the risk of freezing vaccines during transportation
c) Creating a surveillance network of remote temperature monitoring devices to monitor and ensure functionality of equipment.

1.5 The PPC was supportive of using the remaining funds for a learning agenda and discussed several potential focus areas. Its guidance was to focus on investments which support equity and strengthen primary healthcare (PHC). PPC members also suggested other potential uses such as the roll-out of the updated effective vaccine management (EVM) tool, the new WHO wastage calculator and strengthening maintenance but the Secretariat clarified that these could be supported by other funding streams such as the Partners' Engagement Framework (PEF) and health systems strengthening (HSS) grants.

1.6 The Secretariat, in discussion with Alliance partners, therefore proposes to prioritise solarisation of health facilities. This could make a major contribution to PHC and improve equity of healthcare since sites receiving solar refrigerators are typically in communities without access to basic services. Providing power to a health facility can significantly improve the ability of that site to offer an extended range of PHC services (e.g. births at night by enabling electric lighting), heat water, power medical equipment and introduce digital technologies (e.g. using mobile phones for data management). A recent study by WHO on the impact of electrification of health facilities on maternal and newborn health services in Ghana and Uganda demonstrated that access to power improved availability of services, facility-based deliveries, user and health provider satisfaction, and access to communication and reporting tools, while reducing accidents.

1.7 Currently, solar CCE represents over half of the equipment procured through the CCEOP and this is likely to increase in Gavi 5.0 given the focus

\(^1\) In addition, Haiti and Guinea have received a higher level of CCEOP support than they would have been entitled to under the allocation formula since their applications were approved before the formula was introduced.
on extending services to zero-dose and underserved communities. CCEOP support includes not only procurement of a refrigerator but also a significant investment for procurement and high-quality installation of a solar panel. Currently these solar panels, despite being oversized for purpose, are used only to power the fridge. There are two potential models through which the panels could be used to provide broader electrification to health facilities:

a) Limited electrification: There are already kits available, which for a limited additional investment (~10-15% of the cost of procuring and installing a solar refrigerator) can provide basic electrification using the same panel as the refrigerator. This could provide basic lighting, a fan, charging of digital devices and some basic diagnostics.

b) Complete electrification: An alternative model would be to fully solarise facilities, in which case they would no longer require solar refrigerators but could instead use cheaper plug-in devices. Gavi could invest the cost differential (typically 2-3-fold) to contribute to the cost of full electrification, co-investing with the government or other investors in PHC strengthening.

1.8 The proposal is to test both models over the next 18 months to evaluate the pros, cons and risks and inform potential implementation at scale in Gavi 5.0. If implemented at scale, this could contribute to electrification of tens of thousands of health facilities by 2025.

1.9 Depending on the final amount of unused funds and cost of the above efforts, the Alliance may also proceed with a smaller investment to test the introduction of freeze-free technologies for last mile distribution, protecting vaccine potency. Vaccine carriers and cold boxes are typically used to deliver vaccines to health facilities and for outreach, which is an essential strategy to reach the hardest to serve communities. With traditional technologies, ice packs must be partially thawed before being packed into the vaccine carrier. If this is not done correctly, vaccines can be exposed directly to the frozen ice pack, permanently damaging their potency. New freeze-free technologies, such as improved vaccine carriers and phase change materials, are arriving on the market which will eliminate this risk, as well as keeping vaccines cold for longer and reducing the burden on health workers to prepare outreach. The Alliance would test and evaluate the pathway to scale for these technologies in a select number of countries.

1.10 Subject to Board endorsement, the Secretariat and Alliance partners on the Immunisation Supply Chain Steering Committee will fully scope the proposed learning agenda investments and budget, and launch a request for proposals to select providers to implement and evaluate these innovative projects. The Secretariat will provide periodic updates to the PPC on the progress and lessons learned from these investments.
Section C: Actions requested of the Board

The Gavi Alliance Programme and Policy Committee recommends to the Gavi Alliance Board that it:

Approve the use of unallocated or underspent funds under the Cold Chain Equipment Optimisation Platform to support a learning agenda to evaluate innovative cold chain equipment technologies and approaches that the Alliance may choose to scale in the next strategic period.