The 2021 Health and Humanitarian Logistics (HHL) conference was held virtually over three days, and focused on different regions each day (Africa and the Middle East, the Americas, Asia/Pacific) to enable active participation from delegates worldwide and gain an understanding of challenges in different contexts.

The conference theme of ‘building efficient supply chain connections’ focused on identifying locally sustainable and globally enabled supply chain management approaches which are adaptable to complex and challenging environments, and was looked at from the perspectives of the following conference sub themes.

1. **Sustainable Local Procurement** which focused on barriers to selling into the public health and aid sectors, policy around local manufacturing, quality assurance challenges, environmental issues and support to local suppliers.

2. **Health supply chain capacity strengthening** which highlighted how the current public health and aid systems can better support health service logistics and workforce capacity development in conflict zones, fragile states and developing economies, with a focus on critical delivery mechanisms such as mass vaccination.

3. **Last-Mile Transportation** looked at product innovations in transport technology as well as ways to address the challenges in accessing remote communities due to poor infrastructure, outdated transport policies and a lack of resources.

**Speakers**

Over the 3 days speakers from the private, public, academic, UN and aid sectors from around the world gave valuable insights into the challenges they face and current initiatives in varying supply chain contexts.

This year’s conference included wide reaching knowledge from speakers, panellists and facilitators from the following 18 impactful organisations. See the HLA Presentations webpage for a list of the speakers and links to their presentations, and the HLA Speakers webpage for biographies of speakers.
Speakers, panellists and facilitators from the following 18 impactful organisations from all sectors

| UNOPS | PAHO | National Agency for Food and Drug Administration and Control (ANVISA) | One ASEAN ONE Response
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Innovation Presentations

As well as key note and panel discussions and workshops, the conference also provided a space for organisations to present their innovations/ideas. This included 23 presentations on the following topics that supported knowledge sharing and inspired further discussions. Details of the presentations and their speakers can be found on the HLA Presentations webpage.

1. Supporting warehouse improvement operations in central medical stores in Togo and Niger
2. Virtual Learning for Supply Chain Data Use: Can it Work?
3. Private sector innovation for more effective supply chain partnerships (PSISC): Mozambique transportation outsourcing investment case
4. Building local capacity in responding to emergencies by training communities and SEs
5. Health supply chain capacity strengthening project, Africa
6. Local PPE Manufacturing
7. New approach to high quality 3D printing medical equipment, Kenya. Can respond within hours for speciality products, health and educational needs
8. Riders for Health: improving access to healthcare for over 21 million people across Africa
9. Pay as you go sustainable transport service in Rwanda to support Last Mile deliveries
10. Drone Trial projects for deliveries in Malawi and Vanuatu. The distances between health facilities are v. long, drones offer the opportunity to deliver h’care products and collect samples in a fast and safe transport method, ultimately benefiting the communities part. in helping with Malaria in children.
11. Entution vesta vaccine information management system (VIMS) powering COVID-19 vaccine distribution and administration
12. Towards Universal Health Coverage: Strengthening healthcare supply chain resilience to mitigate the impact of epidemic outbreaks
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<td>13.</td>
<td>Humanitarian Supply Chain during Pandemics: Preliminary research findings</td>
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<td>14.</td>
<td>INITIATE - a joint project launched by WHO &amp; WFP for the development of standardized technology solutions for health emergency response (including Oxygen Plant in a box)</td>
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<td>15.</td>
<td>Building local capacity in responding to emergencies by training communities and SEs</td>
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<td>16.</td>
<td>Aviation and Humanitarian Logistics: Key findings from three disaster-prone regions</td>
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<td>17.</td>
<td>EPSA’s journey: becoming a data- and performance-driven organization that is geared for future international quality certification</td>
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<td>18.</td>
<td>Humanitarian Community of Practice: A Solution-Oriented Collaboration at the Peak of the Pandemic</td>
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<td>19.</td>
<td>Using ships to supplement fuel supplies on islands for disaster recovery</td>
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<td>20.</td>
<td>Fleet Management as an enabler for improved health care services</td>
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<td>21.</td>
<td>Entution vesta vaccine information management system (VIMS) powering COVID-19 vaccine distribution and administration</td>
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<td>22.</td>
<td>Strengthening State Warehousing Systems through infrastructural upgrades; practical solutions towards achieving equitable access to medicines and health commodities</td>
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**Key Points from the Conference**

The following are the key points from the many presentations and workshop discussions based on which the HLA advocacy groups\(^1\) will bring together experts to further identify and communicate root causes and good practice, and advocate for the changes that have been identified to empower logisticians to deliver humanitarian aid and development assistance more effectively

- **Communication and coordination**: essential to supply-chain visibility in the last mile, where research is needed to better understand vulnerabilities, and more support provided to local transport initiatives, and importation and customs authority development projects like IMPAACT.

- **Last mile delivery**: new transport technologies can complement or enhance existing approaches, e.g. electric vehicles and bicycles. While there is also a need for greater understanding of appropriate, local, means of mobility.

- **Advocate for supply chain sustainability to (for example)**:
  - Encourage long-term government policies and strategies to better enable national supply chain capacity strengthening;
  - Develop environmental protection systems to dispose of waste safely;
  - Enforce human rights to combat the use of slave/child labour in supply chains

- **International aid sector procurement**: is perceived as limiting the potential of local manufacturing and cooperatives in developing economies.
  - There needs to be a structural change in aid sector procurement to improve use and growth of local manufacturers and cooperatives which can have a significantly increased role in resilience to emergencies.
  - This structural change should tackle the questions related to corruption in aid sector buyers, risk transfer and trust, and quality assurance.

- **Disaster preparedness**: must recognise the value of local collaboration, partnerships and knowledge sharing and the importance of capacity building local markets and regional / national organisations.
  - Facilitate dialogue among stakeholders to transform knowledge into Action, and therefore increase agility and resilience of health/ aid supply chains.

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\(^1\) HLA and partners including People that Delivery, IAPHL and Field Ready host aid logistics Advocacy Groups that aim to generate and share evidence of barriers and solutions, and advocate for structural change that drives cross sector local sustainable solutions that are globally enabled.
• **HR development**: In addition to logistics education at graduate and undergraduate level, develop more affordable (and achievable) courses that provide micro credentials.
  o Ethics need to be at the forefront of training to help combat corruption.
  o Gender equality and inclusion within the supply chain workforce point of concern.

• **Data management**: Collaborate (locally) to support the exchange of goods, services, and supply chain data.
  o Poor data quality and management affects supply chain visibility, planning and demand forecasting. It can limit understanding of demand, market capacity for supply, and delivery to the last mile.
  o Organisations and businesses should focus on developing information systems that enable efficient, effective, and equitable supply chain and procurement decision making; with information easily shared between aid sector stakeholders; recognising that having the right data and metrics in place is essential to effective supply chain and procurement management as well as preparedness and resilience.