Trade and Industrial Organisation Support Fund (TSF)

<u>Final Report on Approved Project</u>

Grantee	:	Hong Kong Logistics Association Limited
Implementation Agent(s) (if any)	:	(1) Hong Kong Quality Assurance Agency
		(2) GS1 Hong Kong Limited
Project reference no.	:	T21 004 004
Project title	:	Guidelines for application of emerging technologies in cold chain logistics
Period covered in this report (whole project duration)	:	From 01/03/2023 to 30/09/2024
		(dd/mm/yyyy) (dd/mm/yyyy)

1. Project Details

Project summary (in about 150 words)

Hong Kong is blessed with the advantages of free movement of capital and goods and has low tax rates. It is also an important global trading centre. With the continuous advancement of technologies and like many other industries, the future success of the Hong Kong's cold chain logistics industry shall depend on the technology-driven innovations in business processes operations. Therefore, it is necessary to develop a guidelines for application of emerging technologies in cold chain logistics for them to capture new opportunities in fast changing markets.

To meet the needs of the industry and the community, the Hong Kong Logistics Association has been granted by the Trade and Industry Institutions Support Fund of the Trade and Industry Department to develop a guideline for application of emerging technologies in "Cold Chain Logistics Management System". Under the scheme, not only can the industry establish an effective smart cold-chain logistics management system, or upgrade existing ones, but also the industry can be benefited from an optimized managerial and operational procedure.

Project objectives (in about 50 words)
a) To study and identify emerging technologies suitable for the cold chain logistics industry in Hong Kong encompassing third party logistics, cold warehouse service providers and in-house logistics operators to transform from traditional operations to technology-driven operations aiming to enhance competitiveness.
b) To develop Guidelines and disseminate know-hows for cold chain logistics service providers and operators to select appropriate technologies including but not limited to hardware, software, app, electronic and automated means in a feasible and cost-effective manner.

Collaborating Organisations (if any)
a) The Hong Kong Shippers' Council
b) Logistics and Supply Chain MultiTech R&D Centre Limited
c) Hong Kong Sea Transport and Logistics Association Limited
d) The Institute of Purchasing & Supply of Hong Kong Limited
e) The Chamber of Hong Kong Logistics Industry Limited
f) Hongkong Association of Freight Forwarding and Logistics Limited

Key personnel

	Name	Post title and name of organisation
Project Coordinator :	Mr. Paul Tsang	Chairman, Cold Chain Logistics Committee of Hong Kong Logistics Association Limited
Deputy Project Coordinator :	Mr. Carson Yeung	Assistant General Manager of Hong Kong Quality Assurance Agency

Project duration

	Commencement date (dd/mm/yyyy)	Completion date (dd/mm/yyyy)	Project duration (no. of months)
As stated in the project agreement	01/03/2023	31/08/2024	18
Revised (if applicable)	01/03/2023	30/09/2024	19

2. Summary of Project Results

Governance

Please state the composition of the steering committee (or other committees) formed under the project.
(1) Dr Paul Tsang, Chairman of Cold Chain Logistics Committee of Hong Kong Logistics Association Limited
(2) Mr Alex Chan, Chairman of Hong Kong Sea Transport and Logistics Association Limited
(3) Mr Gary Lau, Chairman of Hongkong Association of Freight Forwarding and Logistics Limited
(4) Mr Carson Yeung, Assistant General Manager of Hong Kong Quality Assurance Agency
(5) Ms Mignone Cheng, Chief Marketing Officer of GS1 Hong Kong Limited
(6) Dr Jack C. H. Wu, Associate Professor of the Department of Supply Chain and Information Management Programme of Hang Seng University of Hong Kong
(7) Mr Alex Koo, Executive Vice President of Hong Kong Logistics Association Limited
(8) Mr Stephen Chan, Honourable President & Honourable Advisor of Hong Kong Logistics Association Limited
(9) Mr Henny Loh, General Manager of Angliss Hong Kong Food Service Limited

Project deliverables

Please list out the project deliverables carried out during the project duration in accordance with the approved project proposal and provide details on the actual result achieved for each deliverable.

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
1 Desktop research			
Desktop research was completed on 31 July 2023. Reviewed the following international standards: • ISO23412:2020 Indirect, temperature-controlled refrigerated delivery services food safety • ISO 28000:2007 Specification for Security Management Systems for the Supply Chain. and the following cases of technology adoption by local and international logistics enterprises: • Alimentaria San Francisco • La Juvenil • SuperValu • Tahuhu Cold Chain Logistics	Target no.: 1 time	Actual no.: 1 time Based on the findings of the desktop research, the project team defined the technology framework of the project and developed the draft of the "Guidelines for application of emerging technologies in cold chain logistics".	
Develop the draft of the "Guidelines for Application of Emerging Technologies in Cold China Logistics	Target no.: 1 time	Developed the draft of the "Guidelines for Application of Emerging Technologies in Cold Chain Logistics"	
2. Five focus Group Consultation with Stakeholders			
1st session Date: 28 June 2023 Time: 4:00 pm - 5:00 pm (1 hour) Venue: GS1 Hong Kong Office	Target no. of organizations: 3 Target duration: 1	Actual no. of organizations: 3 1. The Chamber of	

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
Category: Logistics Associations	hour	Hong Kong Logistics Industry Limited 2. Hong Kong Sea Transport and Logistics Association Limited 3. The Hong Kong Institution of Engineers Actual duration: 1 hour	
2nd session Date: 10 July 2023 Time: 3:00 pm -4:00 pm (1 hour) Venue: GS1 Hong Kong Office Category: Service providers	Target no. of enterprises: 3 Target duration: 1 hour	Actual no. of enterprises: 3 1. Chevalier AOC Freight Express Holdings Limited 2. Yuhu Cold Chain (China) Limited 3. Yamato Logistics (Hong Kong) Limited Actual duration: 1 hour	
3rd session Date: 11 July 2023 Time: 3:00 pm - 4:00 pm (1 hour) Venue: GS1 Hong Kong Office Category: Service providers	Target no. of enterprises: 3 Target duration: 1 hour	Actual no. of enterprises: 3 1. Kerry Logistics Network Limited 2. ETAK Logistics Limited 3. Tahuhu Cold Chain Limited Actual duration: 1 hour	
4th session Date: 24 July 2023 Time: 4:00 pm - 5:00 pm (1 hour) Venue: GS1 Hong Kong Office Category: Enterprises with in-house cold chain service providers	Target no. of enterprises: 3 Target duration: 1 hour	Actual no. of enterprises: 3 1. PARKnSHOP (HK) Limited 2. Angliss Hong Kong Food Service Limited 3. HAVI Logistics Services (Hong Kong) Limited Actual duration: 1 hour	
5th session Date: 7 August 2023 Time: 3:00 pm - 4:00 pm (1 hour) Venue: GS1 Hong Kong Office Category: Enterprises with	Target no. of enterprises: 3 Target duration: 1 hour	Actual no. of enterprises: 3 1. CK One Limited 2. Tai Hing Group	

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
in-house cold chain service providers		Limited 3. Sun Fat Heung Food Products Limited Actual duration: 1 hour	

3. Kick-off Seminar			
Date: 19 May 2023 Time: 3:00 pm - 5:00 pm (2 hours) Venue: HKQAA training room, 19/F K Wah Centre, 191 Java Road, North Point ((hybrid with webinar) Topics covered: 1. Welcoming speech 2. Introduction to the project 3. Introduction to the Guidelines 4. Discuss the current development and trends of Cold Chain industry 5. Analyse the challenges and difficulties faced by the logistics industry Speakers: 1. Ir. Elsa Yuen, President of Hong Kong Logistics Association 2. Ms. Meico Cheong, Assistant Director, Innovation Business of HKQAA 3. Mr. K.K. Suen, Chief Architect and Principal Consultant of GS1 Hong Kong 4. Dr. Paul Tsang, Research Assistant Professor at the Department of Industrial and Systems Engineering of The Hong Kong Polytechnic University 5. Mr. Stephen Chan, Managing Director of Power Hub Ltd eDM to promote the kick-off seminar was sent through the network of HKLA, HKQAA, GS1HK and three collaborating organisations.	Target no. of participants: 70 (25 onsite and 45 online) Target duration: 2 hours	Actual no. of participants: 74 (27 onsite and 47 online) Actual duration: 2 hours	

4. Workshops			
1st workshop Date: 20 March 2024 Time: 2:00-5:00pm (3 hours) Venue: HKQAA office Topics covered: 1. Welcoming speech	Target no. of participants: 20 Target duration: 3 hours	Actual no. of participants: 35 Actual duration: 3 hours	

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
2. Introduction to the project 3. Technology Introduction with demonstrations 4. Case illustrations 5. Individual and Group Exercises 6. Q&A Session Speakers: 1. Ir. Elsa Yuen, President of Hong Kong Logistics Association 2. Mr. Carson Yeung, Assistant General Manager, Intelligence Business of Hong Kong Quality Assurance Agency 3. Mr. K.K. Suen, Chief Architect and Principal Consultant at GS1 Hong Kong			
2nd workshop Date: 25 April 2024 Time: 2:00-5:00pm (3_hours) Venue: HKQAA office Topics covered: 1. Welcoming speech 2. Introduction to the project 3. Technology Introduction with demonstrations 4. Case illustrations 5. Individual and Group Exercises 6. Q&A Session Speakers: 1. Ir. Ram Wong, Chairman of Hong Kong Logistics Association 2. Ms. Wendy Cheung, Senior Account Manager of Hong Kong Quality Assurance Agency 3. Mr. K.K. Suen, Chief Architect and Principal Consultant at GS1 Hong Kong	Target no. of participants: 20 Target duration: 3 hours	Actual no. of participants: 23 Actual duration: 3 hours	
3rd workshop Date: 24 May 2024 Time: 2:00-5:00pm (___3_hours) Venue: HKQAA office Topics covered:	Target no. of participants: 20 Target duration: 3 hours	Actual no. of participants: 24 Actual duration: 3 hours	

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
1. Welcoming speech 2. Introduction to the project 3. Technology Introduction with demonstrations 4. Case illustrations 5. Individual and Group Exercises 6. Q&A Session Speakers: 1. Ir. Elsa Yuen, President of Hong Kong Logistics Association 2. Mr. Carson Yeung, Assistant General Manager, Intelligence Business of Hong Kong Quality Assurance Agency 3. Mr. K.K. Suen, Chief Architect and Principal Consultant at GS1 Hong Kong			
4th workshop Date: 27 June 2024 Time: 2:00-5:00pm (3_hours) Venue: HKQAA office Topics covered: 1. Welcoming speech 2. Introduction to the project 3. Technology Introduction with demonstrations 4. Case illustrations 5. Individual and Group Exercises 6. Q&A Session Speakers: 1. Mr. Alex Koo, Executive Vice President of Hong Kong Logistics Association 2. Ms. Wendy Cheung, Senior Account Manager of Hong Kong Quality Assurance Agency 3. Mr. K.K. Suen, Chief Architect and Principal Consultant at GS1 Hong Kong	Target no. of participants: 20 Target duration: 3 hours	Actual no. of participants: 21 Actual duration: 3 hours	
5. Experience sharing seminar			
Date: 28 August 2024 Time: 2:00-5:00pm (3_hours) Venue: Function Room 5, Hotel Icon Topics covered:	Target no. of participants: 40 onsite and 40 online	Actual no. of participants: 98 Onsite: 38 Online: 60	The actual no of participants for onsite cannot achieve the target. Due to several participants who

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
1. Welcoming speech 2. Reporting the project achievements 3. share the development, trends and opportunities of Hong Kong's cold chain logistics industry 4. Introduction of the Guidelines 5. Companies sharing insights and practical experiences on implementing cold chain practices Speakers: 1. Ir. Elsa Yuen, President of Hong Kong Logistics Association 2. Ms. Amy Chan, Deputy Secretary for Transport and Logistics 5 3. Mr K T Ting, Chief Operating Officer of Hong Kong Quality Assurance Agency 4. Ms Anna Lin, Chief Executive of GS1 Hong Kong 5. Mr Stephen Chan, Honourable President & Honourable Advisor of Hong Kong Logistics Association 6. Mr. Carson Yeung, Assistant General Manager, Intelligence Business of Hong Kong Quality Assurance Agency 7. Mr. K.K. Suen, Chief Architect and Principal Consultant at GS1 Hong Kong 8. Mr Jack Lo, General Manager - Business Development of Chevalier AOC Freight Express Holdings Ltd 9. Mr Tony Leung, Deputy Director of Integrated Logistics of Kerry Logistics (HK) Ltd	Target duration: 3 hours	Actual duration: 3 hours	originally signed up to attend the seminar in-person but switched to online seminars.

6. Guidelines for application of emerging technologies in cold chain logistics

Publishing date: 29 Feb 2024 Languages: Chinese and English No. of pages: 85 Topics covered: (i) The overall introduction (e.g. aim and objective of the project) of the Guidelines for Application of Emerging Technologies in Cold Chain Logistics	Target no. of printed copies: 400	Actual no. of printed copies: 400	

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
(ii) The terms and definition used in the Guidelines (iii) The processes involved in cold chain operation (iv) Technology implementation guidelines with selection guides and recommendations Distribution channels: • 80 for distribution to participants of experience sharing seminar • 200 for HKLA distribution • 45 for HKQAA distribution • 45 for GS1 distribution • 30 for other Collaborating Organisations (5 copies x 6 organisations, sent by post) Soft copy available at: https://www.hkla.org.hk/wp-content/uploads/2024/04/Cold-Chain-Practice-Note-2.0.pdf			
7. Website / webpages			
Launching date: 28 April 2023 Web address: https://www.hkla.org.hk/en/cold-chain-2-0/	Target no. of website / webpages: 1	Target no. of website / webpages: 1	
8. Promotional activities			
8.1 eDM for Kick-off seminar (one time) email sent by HKQAA Date: 4 April 2023 eDM for workshops (four times) email sent by HKQAA 1st workshop Date: 8 March 2024 2nd workshop Date: 9 April 2024 3rd workshop Date: 14 May 2024 4th workshop Date: 14 June 2024 eDM for Experience sharing seminar (one time) email sent by HKQAA Date: 9 August 2024 eDM Publication of the Guidelines (one time) email sent by HKQAA	Target no. of eDM: 7 times	Actual no. of eDM: 7 times	

Details of the deliverable conducted	Quantifiable target (as stated in the approved project proposal)	Actual result achieved	Reasons for not achieving the target (if applicable)
Date: 27 February 2024			
8.2 Advertisement on HKQAA's e-newsletter Publish date: 17 September 2024	Target no. of issue and page: 1 issue, 1 full page	Actual no. of issue and page: 1 issue, 1 full page	
8.3 Advertisement on HKLA's newsletter Publish date: 21 July 2023 Publish date: 28 March 2024	Target no. of issue and pages: 2 issues, 1 full page each	Actual no. of issue and pages: 2 issues, 1 full page each	
8.4 Post-event highlights on GS1HK's e-magazine (Business Connect) Publish date: 27 September 2024	Target no. of issue and page: 1 issue, 1 full page	Actual no. of issue and page: 1 issue, 1 full page	

Key implementation stages

Please indicate in the status below if the deliverable is completed according to schedule (C), completed but delayed (D) or not achieved (N).   If it is delayed or not achieved, please indicate the actual completion date (if applicable) and provide the reasons.

	Project deliverable (all deliverables as set out in the approved project proposal)	Original target completion date [1]	Actual completion date (if applicable)	Status (C/D/N)	Reasons for not meeting the original target completion date
(a)	• To form a steering committee • Revamp the webpage of last project (T18 004 002) • Design and send out the 1st eDM to promote kick-off seminar • Conduct the kick-off Seminar • Design and publish the 1st full-page advertisement on HKLA's newsletter for post-event highlights of	31/03/2023		C	
(b)	kick-off seminar • Technology framework development • Conduct desktop research • Develop the draft of the "Guidelines for Application of Emerging Technologies in	31/05/2023		C	
(c)	Cold Chain Logistics"	31/07/2023		C	

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[1] As stated in the approved project proposal.

(d)	• Conduct five focus group consultations	31/08/2023		C	
(e)	• Revise and finalise the Guidelines based on feedback collected from the industry during the focus group consultations • Arrange printing of the Guidelines • Design and send out the 2nd eDM to promote the publication of the Guidelines	29/02/2024		C	
(f)	• Design and send out the 3rd eDM to promote the 1st workshop • Conduct the 1st workshop • Design and publish the 2nd full-page advertisement on HKLA's newsletter for post-event highlights of the 1st workshop • Design and send out the 4th eDM to promote the 2nd workshop • Conduct the 2nd workshop	30/04/2024		C	
(g)	• Design and send out the 5th eDM to promote the 3rd workshop • Conduct the 3rd workshop • Design and send out the 6th eDM to promote the 4th workshop • Conduct the 4th workshop	30/06/2024		C	
(h)	• Arrange distribution of the printed Guidelines • Design and send out the 7th eDM to promote the experience sharing seminar • Conduct Experience Sharing Seminar • Design and publish a full-page advertisement on HKQAA's e-newsletter for post-event highlights of the experience sharing seminar and promote the Guidelines • Design and publish a full-page advertisement on GS1HK's e-magazine for post-event highlights of the experience sharing seminar and promote the Guideline	31/08/2024	30/09/2024 Note (i)		

Note:
(i) To allow time for publishing the post-event highlights of the experience sharing seminar, approval was granted on 27 August 2024 for extending the project duration for one month until 30 September 2024.
(ii)