

Trade and Industrial Organisation Support Fund (TSF)

Final Report on Approved Project

Grantee	:	Federation of Hong Kong Industries (FHKI)	
Implementation Agent(s) (if any)	:	Nil	
Project reference no.	:	T20 001 026	
Project title	:	Challenges & opportunities for Hong Kong electronics industry in the 5G era	
Period covered in this report (whole project duration)	:	From 15/04/2021 (dd/mm/yyyy)	to 14/01/2023 (dd/mm/yyyy)

1. Project Details

Project summary (in about 150 words)

Hong Kong's electronics industry is the territory's largest merchandise export earner, accounting for 72.6% of total exports in 2021.

Hong Kong has been making significant progress in digital transformation in recent years. Many industries – from vehicles to power utilities – are fast becoming components of information and communications technology (ICT), which is now undergoing a revolution, jumping from 4G to 5G. The development of digital infrastructure is speeding up, and many local businesses are looking to boost their competitiveness by 5G technology intelligence.

Given that Hong Kong is a leader in 5G applications and a first-mover advantage in the development of many essential parts and components. The 5G technology will enable the electronic manufacturing industry to work continuously in various scenarios, which will help the industry to enhance labor conditions, minimize manual intervention in production lines and greatly improve the controllability of the production process.

Hong Kong's upstream and downstream electronics players are using this first-mover advantage to try to develop quality, safe, reliable electronic components and intelligent products to maintain their key role in the development of 5G. The Electronics industry should seize the IoT-5G opportunity opportunities and the awareness of 5G technology and Internet of Things (IoT), leading various sectors to make good use of innovative technologies to grasp the unlimited opportunities of 5G on the design, production, and installation of such infrastructure.

Project objectives (in about 50 words)

Many manufacturers are seeking opportunities to accelerate their business through the adoption of digital technologies to enable the fourth industrial revolution (i4.0). The fifth generation (5G) of wireless technology promises lightning-fast speed, incredibly low latency, and the capacity to carry massive numbers of connections simultaneously. Its imminent arrival is creating immense potentials for the electronics industry with widespread adoptions.

This project aims to assist Hong Kong electronics industry players to tap into the full potential of 5G and cope with the challenges behind. An in-depth research study, high-level symposiums, and information sharing featuring 5G technology intelligence would be included in this project.

Collaborating Organisations (if any)

Hong Kong Electronics Industry Council

Hong Kong Electronics & Technologies Association Limited (HKETA)

The Hong Kong Electronic Industries Association Limited (HKEIA)

Hong Kong Science and Technology Parks Corporation (HKSTP)

Key personnel

	<u>Name</u>	<u>Post title and name of organisation</u>
Project Coordinator	: Ms Kathy Chan	Senior Manager, Federation of Hong Kong Industries
Deputy Project Coordinator	: _____	_____

Project duration

	<u>Commencement date</u> (dd/mm/yyyy)	<u>Completion date</u> (dd/mm/yyyy)	<u>Project duration</u> (no. of months)
As stated in the project agreement	<u>15/04/2021</u>	<u>14/01/2023</u>	<u>21 months</u>
Revised (if applicable)	<u></u>	<u></u>	<u></u>

2. Summary of Project Results

Governance

Please state the composition of the steering committee (or other committees) formed under the project.

1. Mr Steve Chuang (Executive Deputy Chairman, Federation of Hong Kong Industries & Chairman of Hong Kong Electronics Industry Council)
2. Mr Christopher Tse (Honorary Vice Chairman of Hong Kong Electronics Industry Council & Project Chairman)
3. Dr Alfred Ng (Vice Chairman of Hong Kong Electronics Industry Council)
4. Mr Eugene Chan (Executive Committee Member, Hong Kong Electronics Industry Council)
5. Mr Herbert Ng (Executive Committee Member, Hong Kong Electronics Industry Council)
6. Prof Andrew Young (Executive Committee Member, Hong Kong Electronics Industry Council)

The steering committee is responsible for devise the content and facilitate the implementation of all deliverables.

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. In-depth Research Report			
Publishing date: 14 June 2022 Topics covered: 5G IoT Applications Online survey of at least 100 enterprises Distribution channels: FHKI members, collaborating organisations and other companies from electrical products and electronics industries 400 copies of the research report will be printed. Soft copy will be available at FHKI's website.	Online survey of at least 100 enterprises Target no. of printed copies: 400	Actual number: 103 enterprises have completed the survey. 400 copies delivered to FHKI members, collaboration organisations at 2 nd 5G symposium Online version: https://www.industryhk.org/en/info/research-reports/20220614-research-report-on-5g-iot-applications/	NA
2. High-level Symposium (Two times)			
1st 5G Symposium Date: 26 November 2021 Time: 2:00pm – 6:00pm (4 hours) Venue: Charles K.Kao Auditorium, Hong Kong Science Park Topic: 5G Symposium: How 5G Reshape the Electronics Industries	Target no. of participants: 130 each Duration: 4 hours each	1st 5G Symposium Actual no. of participants: 132 Actual Duration: 4 hours	NA

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)
<p>Speakers:</p> <p>1) Mr Alfred Sit, JP</p> <p>Secretary for Innovation and Technology</p> <p>2) Prof Chan Chi Hou</p> <p>City University of Hong Kong</p> <p>Topic: From Antennas to Christmas</p> <p>3) Dr Eric K. C. Tsang</p> <p>Hong Kong Applied Science and Technology Research Institute</p> <p>Topic: 5G Ecosystem and Opportunities in Hong Kong</p> <p>4) Dr K. L. Fan</p> <p>Logistics and Supply Chain MultiTech R&D Centre</p> <p>Topic: Smart Warehouse Using 5G</p> <p>5) Mr George Li</p> <p>Huawei Hong Kong Representative Office</p> <p>Topic: 5G Inspires New Value to Accelerate Industry Digitalization</p> <p>6) Mr Sam Lam –</p> <p>China Mobile Hong Kong</p> <p>Topic: How 5G Technology Transforms SME</p> <p>Two panel discussions moderated by (i) Dr Alfred Ng, and (ii) Prof Andrew Young</p> <p><u>eDM sent by the collaborating organisations</u> Made request to Hong Kong Electronic Industries Association (HKEIA) and Hong Kong Electronics & Technologies Association (HKETA).</p> <p>HKETA circulated the eDM to their members. HKEIA promoted the symposium internally.</p>			

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)
<p>E-flyers promotion (via eDM): Date of publication: 1st round – 28 October 2021 2nd round – 4 November 2021 3rd round – 10 November 2021 4th round – 18 November 2021</p> <p>The e-programme booklet (https://fhki.s3.ap-east-1.amazonaws.com/assets/pages/5G%20Symposium%20eProgramme%20Booklet.pdf) was posted on the event webpage. On the event day, a QR code signage was set at the reception so that the participants could scan the e-programme booklet.</p> <p>Full version of video of the symposium has been uploaded on project webpages for public access (https://www.industryhk.org/en/past-events/tsffund-5g/ and https://youtu.be/h4GGh_y2YzQ).</p>			
<p><u>2nd 5G Symposium</u> Date: 29 July 2022 Time: 2:00pm – 6:00pm (4 hours) Venue: Charles K.Kao Auditorium, Hong Kong Science Park</p> <p>Topic: 5G Symposium: 5G's Role for Tomorrow's Smart City and Living</p> <p>Speakers:</p> <p>1) Ms Winnie Tam, SBS, SC, JP Chairman of Communications Authority</p> <p>2) Dr Lawrence Poon General Manager, Hong Kong Productivity Council (Smart City Division)</p> <p>Topic: The Real Power of 5G-IoT in PropTech Development</p> <p>3) Ir C.K. Lee Chief Engineer, Digitalisation and Technology Electrical and Mechanical Services Department Topic: Digitalisation Journey of Smart Operation & Maintenance with Augmented Reality</p>	<p>Target no. of participants: 130 each</p> <p>Duration: 4 hours each</p>	<p><u>2nd 5G Symposium</u> Actual no. of participants: 138</p> <p>Actual Duration: 4 hours</p>	NA

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)
<p>4) Dr Leung Chiu</p> <p>Senior R&D Engineer Logistics and Supply Chain MultiTech R&D Centre</p> <p>Topic: 5G Tele-Control Technology for Warehouse Vehicles</p> <p>5) Mr Andy Lam</p> <p>Director, Mobile & IoT Platforms, Communications Technology Division</p> <p>Hong Kong Applied Science and Technology Research Institute</p> <p>Topic: Research Report on 5G IoT Applications</p> <p>6) Dr Henry Wong</p> <p>Head of Wireless Strategic Development HKT Limited</p> <p>Topic: Unleashing 5G potential for Smart City Applications</p> <p>7) Mr Nick Chan, MH, JP</p> <p>Honorary Legal Advisor, Federation of Hong Kong Industries</p> <p>Partner, Squire Patton Boggs</p> <p>Topic: Hidden Concerns of a 5G Smart City</p> <p>Networking Session</p> <p>Two panel discussions moderated by (i) Dr Alfred Ng , and (ii) Mr Herbert Ng</p> <p><u>eDM sent by the collaborating organisations</u></p> <p>Made request to Hong Kong Electronic Industries Association (HKEIA) and Hong Kong Electronics & Technologies Association (HKETA).</p> <p>HKETA circulated the eDM to their members. HKEIA promoted the symposium internally.</p> <p>E-flyers promotion (via eDM): Date of publication:</p>			

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)
<p>1st round – 14 June 2022 2nd round – 28 June 2022 3rd round – 5 July 2022 4th round – 12 July 2022</p> <p>The e-programme booklet (https://fhki.s3.ap-east-1.amazonaws.com/assets/pages/5G%20Symposium%20booklet.pdf) was posted on the event webpage. On the event day, a QR code signage was set at the reception so that the participants could scan the e-programme booklet.</p> <p>Full version of video of the symposium has been uploaded on project webpages for public access (https://www.industryhk.org/en/past-events/20220729-5g-symposium-5gs-role-for-tomorrows-smart-city-and-living and https://youtu.be/ik2LsIRFX8Y).</p>			
3a. Online media			
<p>(1) Hong Kong Economic Journal - Startup Beat</p> <p>Date of publication: 12 November 2021 to 25 November 2021 (2 weeks)</p> <p>Other details: Promoting the 1st 5G Symposium. Bilingual (Traditional Chinese & English)</p>	<p>Target duration of on-line advertisement: 2 weeks for each Symposium</p>	<p><u>1st 5G Symposium</u> Actual duration of on-line advertisement: 2 weeks</p>	NA
<p>(2) bMEDIA Limited - Unwire.hk</p> <p>Date of publication: 15 July 2022 to 28 July 2022 (2 weeks)</p> <p>Other details: Promoting the 2nd 5G Symposium. Bilingual (Traditional Chinese & English)</p>	<p>Target duration of on-line advertisement: 2 weeks for each Symposium</p>	<p><u>2nd 5G Symposium</u> Actual duration of on-line advertisement: 2 weeks</p>	NA
<p><u>1st 5G Symposium</u></p> <p>(3) Facebook Page – Hong Kong Federation of Hong Kong Industries</p> <p>Date of publication: 12 November 2021 to 25 November 2021 (2 weeks)</p> <p>Other details: Promoting the 1st 5G Symposium. Bilingual (Traditional Chinese & English)</p>	<p>Target duration of on-line advertisement: 2 weeks for each Symposium</p>	<p><u>1st 5G Symposium</u> Actual duration of on-line advertisement: 2 weeks</p>	NA

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)
<u>2nd 5G Symposium</u> (4) Facebook Page – Hong Kong Federation of Hong Kong Industries Date of publication: 15 July 2022 to 28 July 2022 (2 weeks) Other details: Promoting the 2 nd 5G Symposium. Bilingual (Traditional Chinese & English)	Target duration of on-line advertisement: 2 weeks for each Symposium	<u>2nd 5G Symposium</u> Actual duration of on-line advertisement: 2 weeks	NA
3b. Website banner on FHKI website			
First e-banner to promote the 1 st 5G Symposium Total: 1.5 months (i) 3 November 2021 to 26 November 2021 (for promoting the symposium) (ii) 15 December 2021 to 4 January 2022 (for post-event highlight)	Target duration of the e-banner promotion: (1) First e-banner to promote the 1 st 5G Symposium – 1.5 months	First e-banner to promote the 1 st 5G Symposium Actual duration of the e-banner promotion: 1.5 months	NA
Second e-banner to promote the 2 nd 5G Symposium Total: 1.5 months (iii) 6 June 2022 to 28 July 2022 (for promoting the symposium) (iv) 12 August 2022 to 2 September 2022 (for post-event highlight)	Target duration of the e-banner promotion: (2) Second e-banner to promote the 2 nd 5G Symposium – 1.5 months	Second e-banner to promote the 2 nd 5G Symposium Actual duration of the e-banner promotion: 1.5 months	
Third e-banner to promote In-depth Research Report Total: 3 months (v) 14 June 2022 to 14 September 2022 (for promoting the research report) Full version of research report has been uploaded on project webpages for public access (https://www.industryhk.org/en/info/research-reports/20220614-research-report-on-5g-iot-applications/)	Target duration of the e-banner promotion: (3) Third e-banner to promote the research report – 3 months	Third e-banner to promote the research report Actual duration of the e-banner promotion: 3 months	
3c. eDM			
Distribution channels: Via FHKI database (1) First round for promoting the 1 st 5G Symposium 1 st issue – 28 October 2021 2 nd issue – 4 November 2021 3 rd issue – 10 November 2021 4 th issue – 18 November 2021	Target no. of promotion: 4 rounds of eDMs	Actual no. of promotion: 4 rounds of eDMs	NA

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)
<p>(2) Second round for recruiting survey participants:</p> <p>1st issue – 11 January 2022 2nd issue – 18 January 2022 3rd issue – 26 January 2022 4th issue – 7 February 2022</p> <p>3) Third round for promoting the 2nd 5G Symposium</p> <p>1st round – 14 June 2022 2nd round – 28 June 2022 3rd round – 5 July 2022 4th round – 12 July 2022</p>			
3d. Project webpages on FHKI website			
<p>1) Launching date: 28 Oct 2021</p> <p>Web address: https://www.industryhk.org/en/past-events/tsffund-5g/</p> <p>2) Launching date: 14 June 2022</p> <p>Web address: https://www.industryhk.org/en/past-events/20220729-5g-symposium-5gs-role-for-tomorrows-smart-city-and-living/</p> <p>3) Launching date: 12 August 2022</p> <p>Web address: https://www.industryhk.org/en/past-events/20211126-to-20220729-challenges-opportunities-for-hong-kong-electronics-industry-in-the-5g-era/</p>	Target no.: 3 set of webpages	Actual no.: 3 set of webpages	NA

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.

<u>Project deliverable</u> (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
Formation of project committee and (a) working team	15/04/2021 – 14/05/2021		C	

¹ As stated in the approved project proposal.

	Conducting the in-depth Research and compiling the Research Report	15/05/2021 – 14/07/2022		C	
(b)	Promotion of in-depth Research Report	15/01/2022 – 14/09/2022		C	
(c)	Preparation and promotion of the 1 st half-day symposium via online media, FHKI website and eDMs	15/08/2021 – 14/12/2021		C	
(d)	Organisation of the 1 st half-day symposium	15/11/2021 – 14/12/2021	26/11/2021	C	
(e)	Preparation and promotion of the 2 nd half-day symposium via online media, FHKI website and eDMs	15/02/2022 – 14/09/2022		C	
(f)	Organisation of the 2 nd half-day symposium	15/05/2022 – 14/09/2022	29/07/2022	C	
(g)	Preparation and promotion of the 1st factory visit	14/01/2022	14/12/2022	NA	Note (ii)
(h)	Organisation of the 1st factory visit	14/01/2022	14/12/2022	NA	Note (ii)
(i)	Preparation and promotion of the 2nd factory visit	14/07/2022	14/01/2023	NA	Note (ii)
(j)	Organisation of the 2nd factory visit	14/07/2022	14/01/2023	NA	Note (ii)
(k)					

Note:

(ii) Change request for cancelling the two one-day visits (around 6 hours) to mainland factories in Shenzhen was approved on 23 December 2022.