



香港中文大學
The Chinese University of Hong Kong



Information Session for TSSSU 2024-2025

6 October 2023



Content

1. Introduction of TSSSU Program
2. TSSSU HR related matters (inc. Q&A)
3. Technology Readiness Level
4. TSSSU Evaluation Criteria and Tips on Pitching
5. Q&A session

Venture Acceleration Team

For TSSSU Program

Dr. Victor Lau

Head of Venture Acceleration

Head of PI Centre

ORKTS

Ms. Joyce Mak

Assistant Manager

Venture Acceleration Team

ORKTS

Ms. Hannah Mak

Entrepreneurship Officer

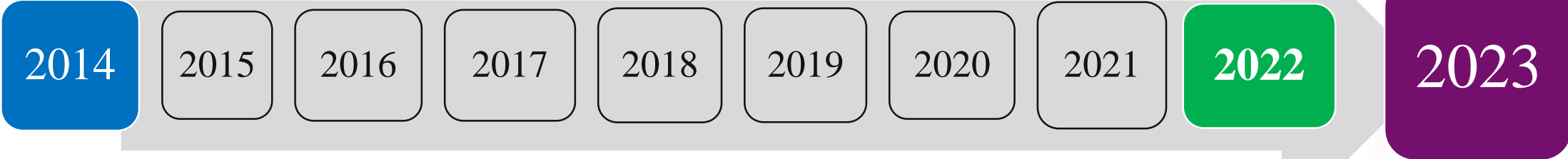
Venture Acceleration Team

ORKTS

TSSSU Objectives



Start of
TSSSU
Scheme



Introduction of new
TSSSU+ scheme

- **Objectives**

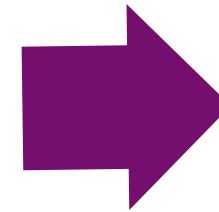
- 1) To support CUHK teams in starting technology businesses through commercialising their research and development (R&D) results for tangible economic and societal impact
- 2) To Support CUHK start-ups that have secured private sector investments

TSSSU Funding

HK\$ 8M Annual Funding ceiling
for each university

HK\$ 0.7M Annual Funding ceiling
for start-up

TSSSU-O
3 Years
At Max.



Funded 77
TSSSU Companies
since 2014-15

TSSSU 2024-25

HK\$ 16,000,000
Per Institution

TSSSU companies are **not owned by CUHK** but they facilitate the **applications of CUHK technologies** for **tangible economic and societal impact**.

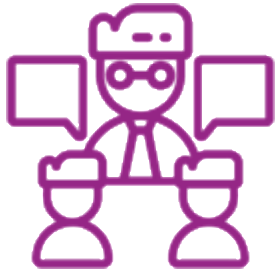
An enhancement measure starting from 2023-24

HK\$ 8 M Annual Funding ceiling
for each university

HK\$ 1.5 M Annual Funding ceiling
for start-up

TSSSU+
3 Years
At Max.

Benefits for TSSSU



Consultancy & Mentorship

with CUHK
Entrepreneurship consultant



Training & Workshops

By industry experts & practitioners
Online and Offline Resources



Fast Track

To startup Incubators & funding
preparation and Investors plus
media strategy and exposure



Funding Support

(TSSSU-O) Up to HK\$ 0.7M per year
with no more than 3 years
(TSSSU+) Up to HK\$ 1.5M per year
with no more than 3 years



Co-working Space



Networking Opportunities

Successful Entrepreneurs, business
partners & industry experts



CUHK Start-up Community

Member of our CUHK Start-up
community (> 200 companies)



Talent Pool

Summary of Eligibility



(For TSSSU-O & TSSSU+)

Person-in-Charge (PIC)

- Full-time Students (either UG or PG) or
- Full-time Professors or
- Alumni graduated within the last 36 months

Note : The PIC CANNOT join concurrently other active teams funded by TSSSU

Team Mix

- Number of team members (Include PIC) ≥ 2
 - ✓ PIC and Other Team Member(s)
- Team Members
 - ✓ Research Staff
 - ✓ Part-time student
 - ✓ Non-CUHK individuals
- **For TSSSU-O, the effective majority of shareholder(s) of the Company which holds more than 50% of the shares of the company**
- **For TSSSU+, the effective/influential shareholder(s) must be Active members of CUHK**



Summary of Eligibility



(For TSSSU-O & TSSSU+)

Intellectual Property (IP)

- For TSSSU-O & TSSSU+ applications, preference will be given to those using CUHK-related technology.
- If the technology has not yet filed IP under CUHK at the time of application, the applicant is highly recommended to submit an Invention Disclosure Form or a Copyright Disclosure Form and Assignment to ORKTS IP and Technology Licensing Team before the application deadline
- For enquiries related to the completion of Copyright Disclosure Form, please contact ORKTS IP and Technology Licensing Team (Ms. Fei Fei MIU at 3943 9398/ miufeifei@cuhk.edu.hk).
- CUHK reserves the final decision right on the eligibility requirement for TSSSU applicants

Technology Readiness Level (TRL)

- The technology involved in the application **MUST** reach the required TRL.

Physical Science and
Engineering Technology

MUST reach TRL 4 or above

HealthCare Technology

MUST reach TRL 3 or above

Summary of Eligibility



TSSSU-O

TSSSU +

Years of Establishment

Registered for
 ≤ 2 years

Registered for
 ≤ 7 years

❖ Earliest registration date: **1 Feb 2022**

❖ Earliest registration date: **1 Feb 2017**

The eligibility requirement does not apply to a start-up which is recommended for the TSSSU-O and TSSSU+ funding for the second or the third year

Note

- 1) **CANNOT** apply for TSSSU-O & TSSSU+ **simultaneously** during the same funding year
- 2) After successfully obtained funding under TSSSU+, **CANNOT** revert to apply for TSSSU-O
- 3) For the details of the terms for investment for TSSSU+, please consult our team for advice

TSSSU-O

TSSSU +

Secured Private Investment

Not required

Agreement/ Letter of
undertaking by private investor

Private Investment

- 1) From Independent third parties
→ NO connection with the start-up or team members
- 2) **CASH** contribution for investment in shares of the start-up
× Convertible bonds/ shares/ loans

Eligibility for Independent third-parties to invest for TSSSU+

- 1) Venture Capitalists
- 2) Angel investors
- 3) Private Individuals
- 4) Private companies

Notes for TSSSU Reimbursable Period



TSSSU-O (2024-25)

2024

2025



TSSSU-O Reimbursable Period

TSSSU+ (2024-25)

2023

2024



ITC recognised matching period for private investment

2024

2025



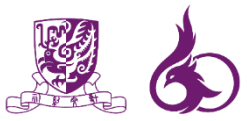
TSSSU+ Reimbursable Period

Notes for Milestones and Budget



- Set out the milestones to be achieved from 1/4/2024 to 31/3/2025
- Budget in categories of Manpower, Equipment and Other Direct Costs has to be matched with the milestones
- Maximum allowable manpower remuneration for **founding members**
 - **HK\$12,000**/month for a member without a Bachelor degree
 - **HK\$16,000**/month for a member with a Bachelor degree
 - **HK\$22,000**/month for a member with a Master degree or above
- Up to **50% of the Fund** can be incurred in **Mainland China and/or other countries**

Endorsement (CUHK student or alumni PIC)



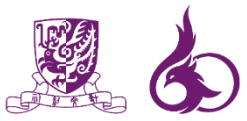
- **CUHK-student PIC or alumni PIC** should seek **Departmental endorsement** via Section E of Annex A
 - Copy of student ID card or graduation cert has to be provided for verification

SECTION E: Internal Signatures

For CUHK student/alumnus (PIC)

The PIC named _____ is an undergraduate student/ postgraduate student/
alumnus* of _____ programme. The year of graduation will be/is*
_____.

Endorsement (CUHK staff)



- **CUHK staff** (PIC and team members individually) should seek **Departmental & Faculty/Supervising Officer endorsement** via the Appendix to Annex A
- Our HR colleagues will brief you more HR related information about Outside Practice (OP) and Outside Business Activities (OBA)



香港中文大學

The Chinese University of Hong Kong



Technology Start-up Support Scheme for Universities (TSSSU)

HR related matters

Intro

- Regulations governing Outside Business Activity (OBA) and Outside Practice (OP)
- Dual capacities
- Conflict of interest
- Conflict of commitment
- Separation of roles



*Available at Human Resources Office's website:
Staff > Outside Activities > Links to Video Guides*

Time involvement

Teaching appointees:

- OBA that foster knowledge transfer of the University's research and innovation (KT-OBA) are qualified for taking OP time release for up to one day per week "within" the University's Usual Operating Hours (UOH)*.
- OP time involvement in such OBA which falls "outside" the University's UOH are not restricted by the one-day-per-week rule of the OP Regulations.
- Appointees must not allow such activities to distract them from their primary allegiance to the University.

**For the purpose of the OBA Regulations, "Usual Operating Hours" refer to 8:45 a.m. to 1:00 p.m. and 2:00 p.m. to 5:30 p.m. from Monday to Thursday and 8:45 a.m. to 1:00 p.m. and 2:00 p.m. to 5:45 p.m. on Friday in a normal working week, which are the usual hours of the day when the University operation is most active.*

Time involvement

Non-teaching appointees (including research appointees):

- Outside of the appointees' normal working hours and the University's UOH, or during their own accumulated leave.

Application Timeline and Procedures

- Submission deadline: 5:00 p.m., 17 November 2023, Friday.
- For person-in-charge and members who are CUHK full-time staff, please submit the **Appendix form** together with the application form (Annex A) & other required supporting documents
- Submit TSSSU-OBA undertaking form after receiving the Letter of Offer

Tips on filling in the Appendix

- Pay attention to the details in the guidelines
- Check if you have filled in all the required information
- Check if you have given clear information
- Check if you have all the required signatures

Contact

Have questions?

Colleagues in Human Resources Office (HRO) are ready to help.

Faculties/Units	Contact persons in HRO
Faculty of Arts	Mr. Oscar Lui (Tel.: 3943 5446; Email: oscarlui@cuhk.edu.hk)
Faculties of BA & Engineering	Ms. Claire Chan (Tel.:3943 5514; Email: claire.chan@cuhk.edu.hk)
Faculty of Medicine [excluding Department of Medicine and Therapeutics (M&T) and the Jockey Club School of Public Health and Primary Care (SPHPC)]	Ms. Kayan Ma (Tel.: 3943 9897; Email: kyma@cuhk.edu.hk)
Faculties of Education, Law, Medicine (M&T and SPHPC), Research Units & Others	Miss Kate Leung (Tel.: 3943 5501; Email: kateleungyw@cuhk.edu.hk)
Faculties of Science, Social Science & Administrative Units	Miss Daisy Liu (Tel.: 3943 9894; Email: daisyliu@cuhk.edu.hk)



Thank You

Q&A Session for HR related issues

3. Technology Readiness Level (TRL)

Technology Readiness Level

TRL



Technology Maturity (TRL) Assessment



1. Where is the beginning and end of the scale?
2. Are readiness level phases or milestones?
3. Identification of critical technology elements (modules/components)
 - The assessment focuses on each element individually
4. Categorization of each element into a TRL (1-9)
5. How do the maturity of system elements and the overall system relate?

Technology Readiness Level (TRL)



	Physical Sciences & Engineering	Healthcare (Pharmaceutical/ Drug Discovery)	Healthcare (MedTech)	Healthcare (Diagnostics)
TRL 1	Basic principles observed	Target Selection/ Hit Discovery	Basic Principles Observed	Basic Principles observed
TRL 2	Technology concept formulated	Lead Optimization	Technology Concept Formulated	Technology concept formulated
TRL 3	Experimental proof of concept	In Vitro Activity & Toxicity/ In Vitro Pharmacokinetics	Experimental Proof of Concept in Vitro and in Vivo Research Models	Experimental proof of concept in vitro
TRL 4	Technology validated in lab	Animal Models Demonstrated in Defined Laboratory/ Animal Models	Proof of Concept Demonstrated in Defined Laboratory/Animal Models	Analytical validation
TRL 5	Technology validated in relevant environment	Clinical Transition (followed by IND application) FDA/NMPA accredited Animal & Chemical Development (Pre-IND work)	Product Development Plan	
TRL 6	Technology demonstrated in relevant environment	Phase 1 Clinical Trials	Phase 1 Clinical Trials	
TRL 7	System prototype demonstration in operation environment	Phase 2 Clinical Trials	Clinical Safety and Effectiveness Trials in Operational Environment	Clinical validation in 1 site
TRL 8	System complete and qualified	Phase 3 Clinical Trials	Overall Risk-benefit Trials	
TRL 9	Actual system proven in operational environment	Pharmaceutical can be distributed or marketed (Approval by FDA/NMPA)	Medical Device can be Distributed or Marketed	Clinical validation in multi-site

4. TSSSU Evaluation Criteria and Tips on Pitching

Evaluation Criteria

The Vetting Panel will take the following into account during assessment of applications.

1. Innovation and technology content of the business [40%]

- Potential for knowledge transfer;
- Intellectual property position, including patents, copyrights, trademark, know-how, etc.;
- Stage of technology development and readiness for application (Technology Readiness Level);
- Preference given to the innovation and technology that has synergy with CUHK Strategic Areas (i.e. China: Tradition & Modernity; Innovative Biomedicine; Information & Automation Technology; Environment & Sustainability)

2. Commercial viability of the business [30%]

- Well-defined business and budget plan;
- Well thought-out market analysis (e.g. opportunities, entry barriers, competitions, etc.);
- Viable and realistic milestones and deliverables;
- Whether the Start-up has secured other sources of funding apart from the TSSSU;

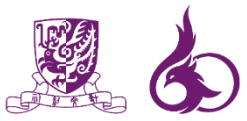
3. Team expertise and commitment [25%]

- R&D and management capabilities of the team;
- Drive and commitment of team members;
- Incentive in equity for core team members;

4. The social and/or community impact of the start-up's R&D project(s) [5%]

- Products and services that improve the quality of human life;
- Positive social impact to the society;

Tips on Pitching



1. **Problem** – What are the customers’ pain points?
2. **Solution** - What kind of product/service you provided to solve the pain points?
3. **Business model** – Who is your target customer and how do you make money?
4. **Marketing and sales** – What is your market segment? How to reach your customers?
5. **Competition** – How big is the market size? Who are the current players and potential new entrants?
Any barriers to entry?
6. **Technology** – Why is it unique and sustainable? Any IP protection?
7. **Management team** – What are your team’s relevant expertise and experience at this stage?
8. **Financial projections** – How do you calculate the cost and the revenue?
9. **Milestones and timeline** – How to plan the achievements in different major phase of work?

Submission of Application

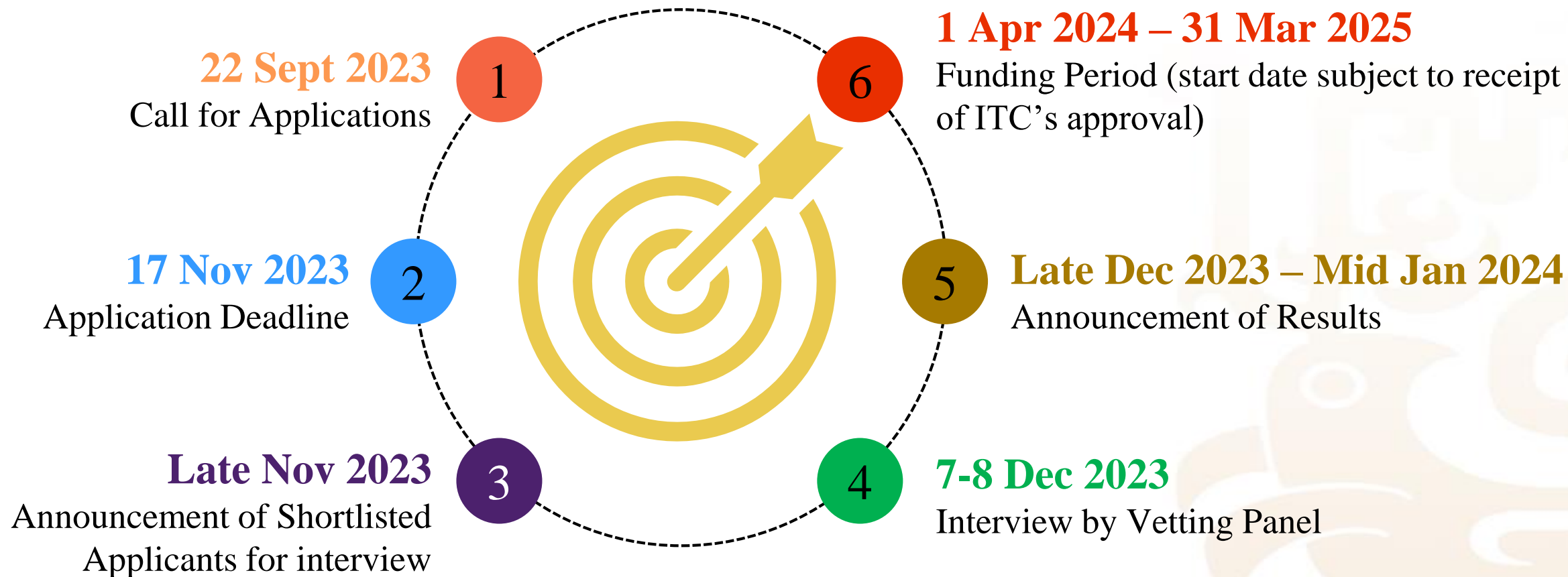


Checklist for Documents Submission	TSSSU-O	TSSSU+
Application Form (Annex A)	✓	✓
Business Proposal	✓	✓
Copy of CI and BR	✓	✓
CV of all team members (max. 4 pages each)	✓	✓
Agreement on royalties or IP rights with collaborating party (if any)	✓	✓ (if any)
Investment Agreement/ undertaking issued by the private investor(s) on details of the cash contribution		✓
Returns to Company Registry showing the latest shareholding position of the start-up		✓ (if any)
Proofs of cash injection (For TSSSU+)		✓ (if any)

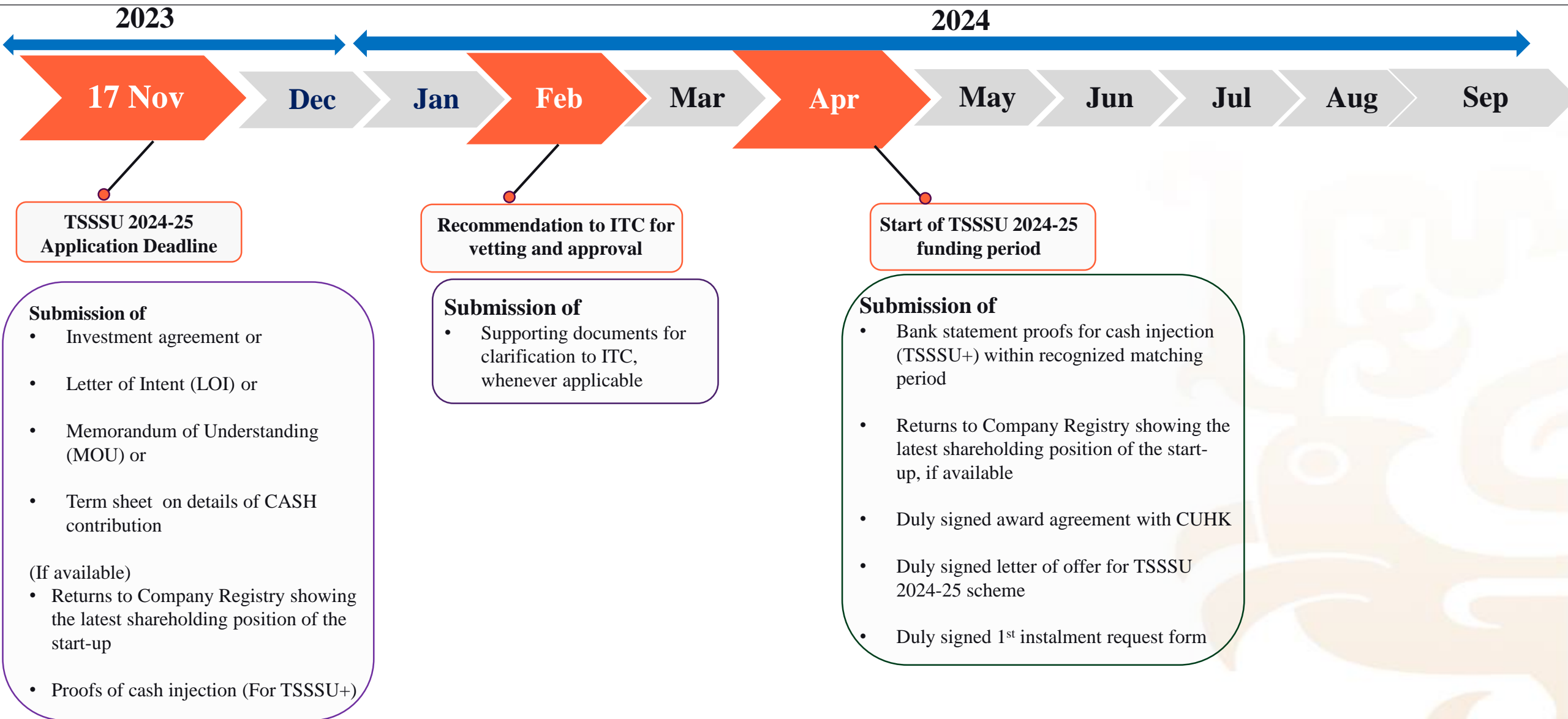
Hard Copies Submission IN PERSON to ORKTS & Online Submission by 17 Nov, 2023 (Fri) 5pm

Unit 1A, InnoPort, The Inter-University Hall, CUHK, Sha Tin, New Territories

Important Dates for TSSSU 2024-25



Timeline for TSSSU+ scheme



Feedback form



Please scan the QR Code on the left or enter the following link to complete the feedback form:

<http://bit.ly/3rzP7f5>

The presentation slides will be sent to audience after the info session.

Contact	Tel
Ms. Joyce MAK	3943 0812
Ms. Hannah MAK	3943 0431

For more information,
please follow our social media platforms



 [cuhk.picentre](https://www.instagram.com/cuhk.picentre)
 [CUHK PI CENTRE](https://www.facebook.com/CUHKPICENTRE)
 [CUHK PI CENTRE](https://www.linkedin.com/company/CUHK-PI-CENTRE)
 picentre@cuhk.edu.hk



Thank you for joining TSSSU 2024-25 Information session