

地理空間實驗室 Geospatial Lab

### 發展局 Development Bureau

營運機構 OPERATED BY





合作伙伴 COLLABORATING PARTNER





空間數據推動城市向前邁進 Propel Our City with Spatial Data

## **Agenda**

- 1. House rules
  - Overview
  - Phasing and Timeline
  - Submission Requirements (Phase 1)
  - Submission Requirements (Phase 2)
  - Submission and Enquiries
- 2. Brief Introduction of the CSDI Portal
- 3. Example Sharing

Q&A

# 01 House Rules

## Overview (1/3)



#### **Objectives**

- To promote CSDI and raise public's interest in spatial data
- To encourage students and individuals from the public to make creative use of spatial data available on the CSDI Portal to address challenges faced by the city

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#### **This Year's Theme for the Awards**

- "Environmental, Social and Governance" ("ESG")
  - E: allocating resources to initiatives that eliminate environmental impacts
  - S: improving the quality of life of residents
  - o G: relevant examples are information transparency and responding to needs of those in needs
- Incorporating ESG principles in the development process can propel our city and enhance its sustainability,
   resilience and diversity
- Key issues in ESG bear spatial dimensions and provide the opportunity for problem-solving using spatial data

## Overview (2/3)



As a contestant, you can:

- Learn from mentors and be inspired
- Stay in touch with the latest development in market
- Develop your technical knowledge in spatial data and related tools
- Showcase your creativity and talents
- Bring home rewards and priceless experience

## Mow should I participate?

- Contestants can participate as an individual or in a team of 2 to 6 people
- Each contestant may only participate in one team.

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## Overview (3/3)



Prizes	Category 4
Champion	60,000
1 <sup>st</sup> runner-up	50,000
2 <sup>nd</sup> runner-up	40,000
Merits (x5)	10,000
Shortlisting prize (x 8)	5,000
Other Awards	
Best use of spatial data award	2,000
Most creative idea award	2,000
Best presentation award	2,000
Best topic in ESG award (x3)	2,000

Note: Each figure refers to the dollar amount to be received by each team receiving the award

#### In addition to financial rewards:

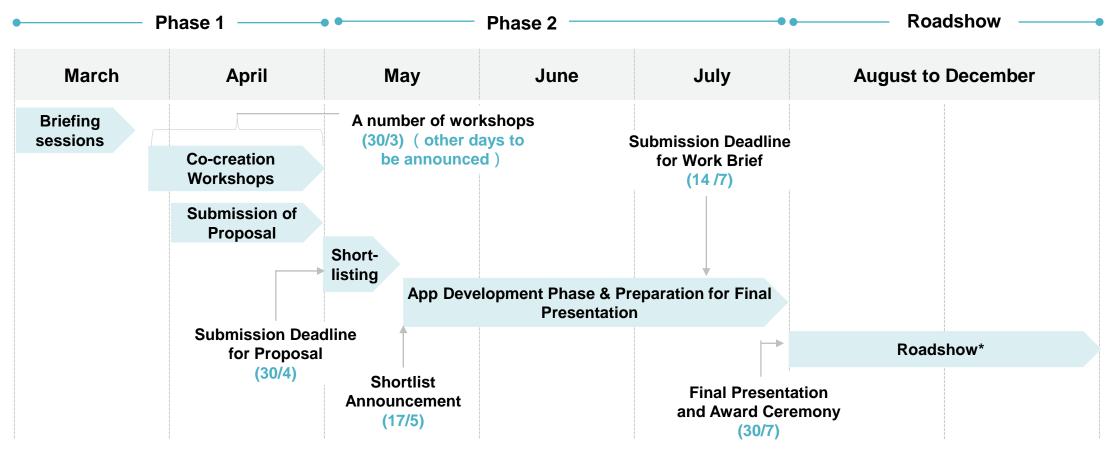
- Certificate of participation
- Media coverage
- Opportunities to showcase your winning deliverables to the industry

# Phasing and Timeline (1/2)

Phase	Requirements
Phase 1: Proposal Development	Prepare a proposal detailing a potential solution to address a challenge identified under the ESG theme
Phase 2:  Development of Deliverable	<ul> <li>Shortlisted contestants will be invited to turn their proposals into deliverables under the guidance of mentors</li> <li>The contestants will also have to submit a work brief for evaluation</li> <li>The contestants will have to present to the judges on the Presentation Day</li> </ul>

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## Phasing and Timeline (2/2)



<sup>\*</sup>Roadshows to key **industry players** will be arranged for winners of this category. The schedules of the roadshows are tentatively planned for **Q3 and Q4 of 2023**.

#### **Phase 1: Preparation of Proposal**

- A proposal prepared using Word or PowerPoint of no more than 20 pages (appendix included), in either English or Chinese
- Required content includes :
  - Team profile
  - Key challenge(s) to be addressed under the theme of ESG
  - o Proposed solution that addresses the challenge(s) (e.g., mobile application, web application, programme etc.)
  - Beneficiaries of the solution
  - Key spatial data to be used. Spatial data available at the CSDI Portal should be used where appropriate
  - Explanation of how spatial data will be used
  - Key technology / tools to be adopted (e.g., GIS, IoT, VR or others)
  - Expected benefits of the solution

Shortlisting criteria	Description
Content (30%)	<ul> <li>Alignment with and relevance to the theme</li> <li>Elicitation of clarity and completeness on the issues to be addressed</li> <li>Application of any suitable spatial measure and analyses such as buffer, clip and overlay analysis</li> <li>Demonstration of the excellent grasp of logic thinking when analysing identified issues</li> </ul>
Use of spatial data and technology / tools (30%)	<ul> <li>Provision of detailed explanations of the observed distribution pattern as shown on the maps</li> <li>Exploitation of geospatial technology (e.g., GIS, BIM, 3D, VR, AR, iOT) on spatial data to address issues related to ESG</li> <li>Use of spatial data to support the identification of challenge(s)</li> </ul>
Idea and creativity (30%)	<ul> <li>Identification of unmet demand / unserved policy purposes / new improvement opportunities</li> <li>Demonstration of novel and creative ideas</li> <li>Originality of the work or demonstration of inspiration from other cited resources</li> </ul>
Bonus Points (10%)	<ul><li>Citation of other research as evidence?</li><li>Overall storyline?</li><li>Description of future scalability?</li></ul>

### How to Prepare for the Proposal ? (1/2)



Identify a number of challenges under the ESG theme that you are interested in





Consider the spatial dimension of the identified challenges





Consider the necessity for resolving the challenges (and whether such challenges could be resolved via the use of spatial data)





Confirm the ESG challenge





Formulate the solution to the identified challenge





List out the anticipated beneficiary(ies), expected benefits / impacts, relevant spatial data and technology(ies)/ tool(s) to be adopted



## How to Prepare for the Proposal? (2/2)

#### Structuring a Proposal:

Area	Topic	How to resolve city challenge(s)	Examples of relevant spatial data available on the CSDI Portal	Beneficiaries and expected benefits
E	Recycling	Improve recycling of waste to alleviate reliance on landfill and nurture a more sustainable lifestyle	<ul> <li>Waste Management Facilities</li> <li>"Waste Less" - Recyclable Collection Points Data</li> </ul>	<ul> <li>Assist citizens to identify locations of recycling facilities easily and allow planning authority to identify suitable locations for recycling facilities</li> </ul>
S	Accessibility to healthcare services	Enhance accessibility of medical services to ensure residents are well covered by healthcare services	<ul> <li>Population by census statistics</li> <li>Clinics / Health Centres under the Department of Health</li> </ul>	<ul> <li>Encourage healthcare providers to expand services in areas with less accessible healthcare services</li> <li>Identify the types of needed healthcare services targeting at certain population profile</li> </ul>
G	Land management	Identify potential sites for beneficiary uses that are compatible with surrounding environment	<ul> <li>2021 Raster Grids on Land Utilization</li> <li>Vacant Government Sites Available for Application for Greening or GIC uses</li> </ul>	<ul> <li>Allow transparency in land resources and encourage participatory approach on land use planning</li> </ul>

#### **Phase 2: Development of Deliverable**

- A deliverable whose functions and application of spatial data and technology tools (e.g., GIS, IoT, VR or others)
  are consistent with the proposal
- A work brief prepared using Word / PowerPoint with no more than 20 pages (appendix included) in either English or Chinese, detailing:
  - Introduction of the deliverable, including:
    - 1. Focused ESG challenge(s)
    - 2. Spatial data and application approach adopted
    - 3. Technologies or tools adopted (e.g., GIS, IoT, VR or others)
    - 4. Expected benefits of the deliverable
  - Functions of the deliverable

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Judging Criteria	<b>Description</b>	
<b>Development Process (20%)</b>	Ability in bringing proposal to reality	
(the development process will be assessed through interaction with mentors)	<ul> <li>Elaboration of ideas into functions</li> <li>Ability to translate user requirements into functions</li> <li>Additional work performed in defining the functions, purposes and user requirements</li> </ul>	
Functionality (40%)	<ul> <li>Ability to demonstrate the use of spatial data</li> <li>Ability to perform the required tasks or analysis</li> <li>Ability to address the key challenges / pain points identified in the proposal</li> <li>Demonstration of how technology tools / solutions are adopted</li> <li>Demonstration of potentials to become a POC (proof of concept) to prove its applicability and adaptability in real life application</li> </ul>	
Final Presentation (40%)	<ul> <li>Ability to present a compelling case for the deliverable</li> <li>Creativity in presentation / demonstration</li> <li>Demonstration of clear storyline</li> <li>Explanation of the benefits and impact of the deliverable to the target users</li> <li>Explanation of the scalability and long-term sustainability of the deliverable</li> </ul>	

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## **Submission and Enquiries**

### **Submission**

- Phase 1 Proposal and Phase 2 Work Brief to be sent to: <a href="mailto:csdiawards2023@csdigeolab.gov.hk">csdiawards2023@csdigeolab.gov.hk</a>
- Phase 1 Proposal: please specify "CSDI Awards 2023 Proposal" in the email subject
- Phase 2 Work Brief: please specify "CSDI Awards 2023 Work Brief" in the email subject

### **Enquiries**

- Hotline and WhatsApp: 6206 9226
- Email: csdiawards2023@csdigeolab.gov.hk

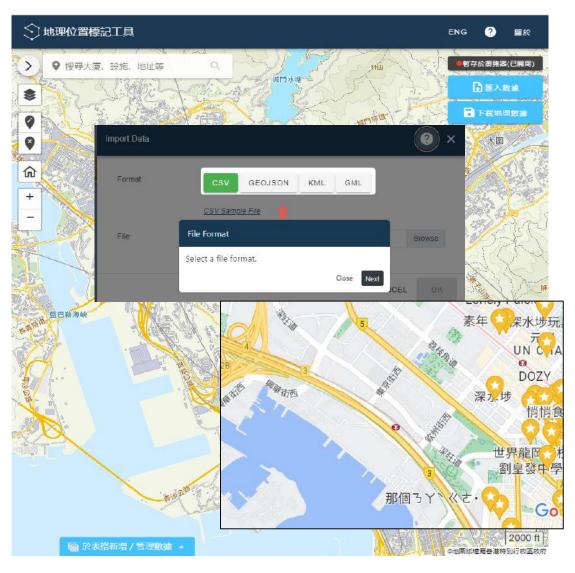
# 02 Brief Introduction of the CSDI Portal



### **CSDI Portal**

- It is a map-based digital infrastructure and one-stop platform to open and share the Government's spatial data
- It provides over 500 spatial datasets from various government departments for free searching, viewing and download
- Possibilities for application development will be opened, the digital economy boosted and quality of life improved

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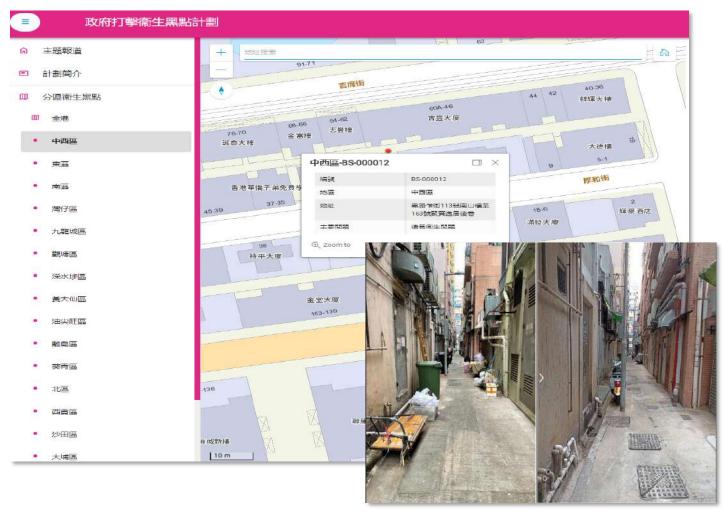
## **Geotagging Tool**

The Geo-tagging Tool is a web application that helps users to convert textual and non-spatial data (e.g. demographic data) into a form of spatial data for displaying on a digital map and further development of geospatial applications. The Tool supports users to:

- Import textual records for geo-tagging
- Geo-tag records on map interface
- Download geo-tagged data in open and machine-readable formats

# 03 Example Sharing

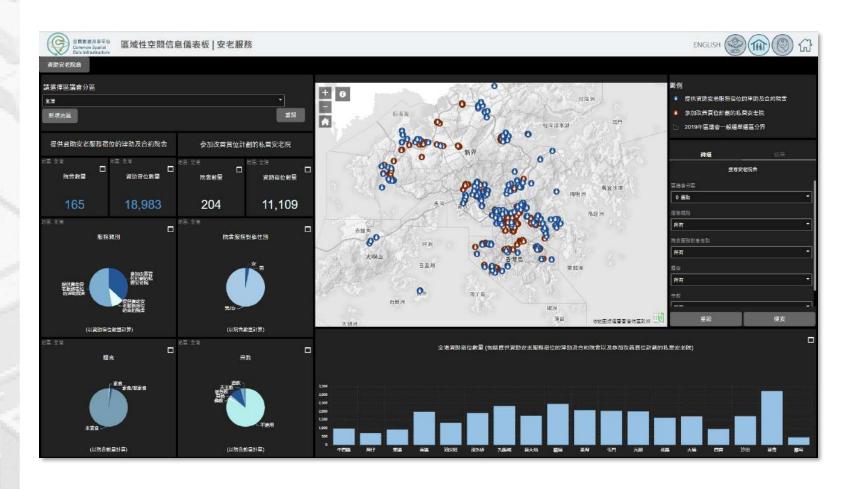
## Hygiene black spot website



Launched in early 2023 with a view to:

- Provide an overview of the distribution of hygiene black spots across Hong Kong
- Allows citizens to witness and monitor the effectiveness of the efforts made by Government
- Enhance the transparency of a public hygiene programme

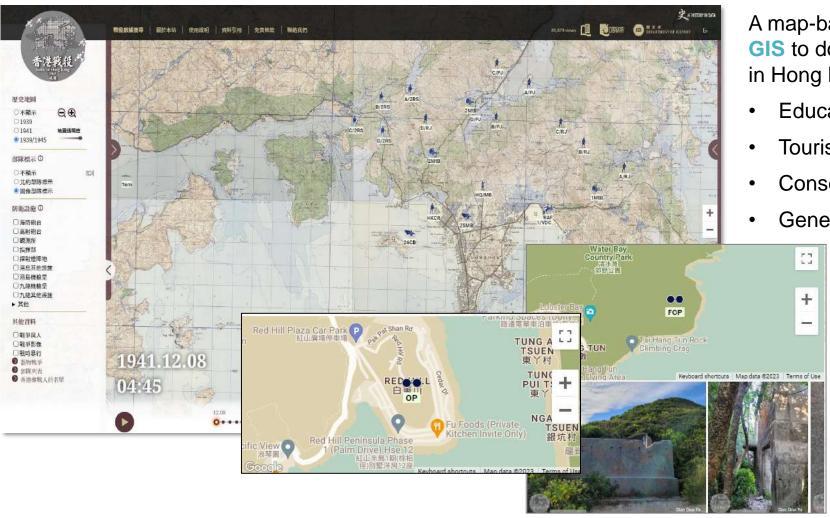
# District-based Spatial Information Dashboard - Elderly Services



Launched in 2021 with a view to:

- Provide an overview of elderly services available in each District
- Compare service availability visà-vis elderly population
- Offer details of the location of services

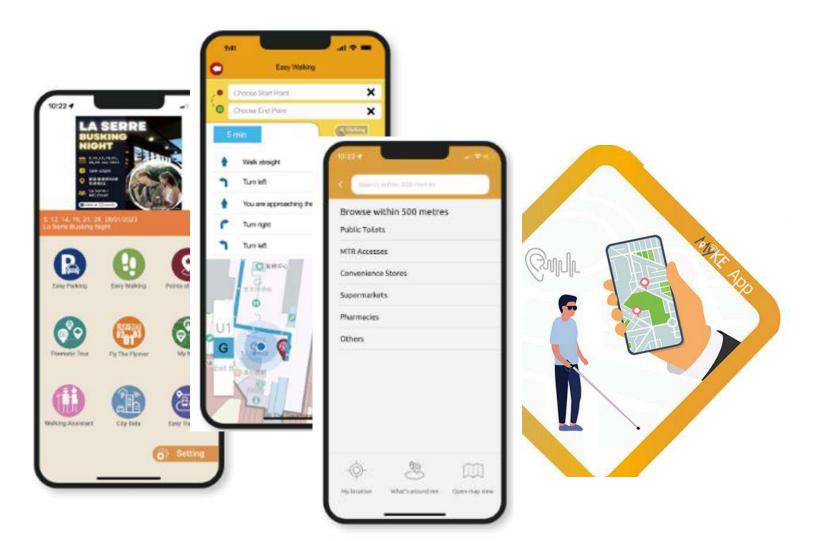
## The spatial history project "Hong Kong 1941"



A map-based storytelling website, using GIS to document British military installations in Hong Kong developed for:

- Educators
- **Tourists**
- Conservation professionals
- General public interested in the topic

## Walking Assistant for the visually impaired



Walking Assistant is a **Proof-of- Concept** developed for the visually impaired, focusing in Kowloon East, providing the visually impaired with indoor and outdoor positioning and seamless navigation through the use of:

- Indoor map and indoor positioning
- 3D digital street map

# Job Opportunity Dashboard (potential application)



A potential tool to provide one-stop, location-based search tool for part time / temporary jobs and skill-matching services to users. The purpose of the potential application are:

- Provide easy, map-based tool for job seekers
- Offer locational-based matching services
- Reduce "searching time"

# Tool for Food Support Services (potential application)



A potential dashboard with matching functions to assist food support related NGOs or service provider to identify:

- Location of food donors
- Location of supporting NGOs
- Areas under-served / without food support services
- Shortest routes to deliver hot meals to the needed

Q&A

## Thank You