



Harnessing Data for Value Creation

Call for Collaboration (CFC)

Public Document

31 May 2012

1. INTRODUCTION

- 1.1. The Infocomm Development Authority of Singapore (“IDA”) and the Ministry of Finance (“MOF”) are jointly issuing this Call-for-Collaboration (“CFC”) to invite companies to submit proposals (“Proposals”) on the development, deployment and adoption of applications that make use of government data.
- 1.2. This CFC is also a multi-agency effort in collaboration with the Department of Statistics (“DOS”), Energy Market Authority (“EMA”), Health Promotion Board (“HPB”), Land Transport Authority (“LTA”), National Environment Agency (“NEA”), National Library Board (“NLB”), National Parks Board (“NPARKS”) and the Singapore Land Authority (“SLA”).
- 1.3. Organisations shall apply as part of a consortium or as an individual organisation. The consortium shall minimally consist of:
 - i A lead organisation; and
 - ii Two (2) or more end-user organisations.
- 1.4. Individual organisations or Consortia submitting Proposals for this CFC shall be known as “Participants” in this Public Document.
- 1.5. Both textual and geospatial data shall be known as “Government data” in this Public Document.

2. IMPORTANT NOTICES

- 2.1. For the avoidance of doubt, this Public Document for the Harnessing Data for Value Creation CFC shall be read with and shall be subject to the Important Notices as set out in Annex A, and information provided in Annexes B and C.

3. BACKGROUND

- 3.1. Government data can be harnessed and used in innovative ways. By mashing up with private and people sector data sets, and leveraging on the appropriate technologies, government data can be a valuable resource for organisations and the general public.
- 3.2. Government data has been made available via two portals, data.gov.sg and OneMap. The two portals are part of an ongoing effort to encourage and catalyse the development of applications using Government data. data.gov.sg is the first stop portal to discover publicly-available government data and avails more than 7,000 publicly-available datasets from 57 public agencies. OneMap is an integrated map system for government agencies to deliver location-based services and information. To-date, OneMap hosts more than 51 themes of Application Programming Interfaces (“API”) which can be used by the private sector to create useful and value-added geospatial services.
- 3.3. This CFC is also part of an ongoing initiative to catalyse development of innovative services using government geospatial data through the Image of Singapore (“i-Singapore”) programme.
- 3.4. Businesses can use government data to develop solutions that optimise their processes and improve their decision-making. Similarly, public-focused applications have been known to use and present government data in effective forms that assist the general public in making informed decisions on a daily basis.

4. OBJECTIVES

- 4.1. The objective of this CFC to harness the value of government data by the people and private sectors to:
 - i. Empower the general public with information and the ability for informed decision-making; and

- ii. Enable business enterprises to improve productivity, enhance business planning and create new business value.

5. SCOPE

- 5.1. This CFC invites Participants to propose solutions using government geospatial and textual data based on any of the focus areas set out in Para 5.2 and shall be in the form of one of the solutions set out in Para 5.3.

5.2. FOCUS AREAS

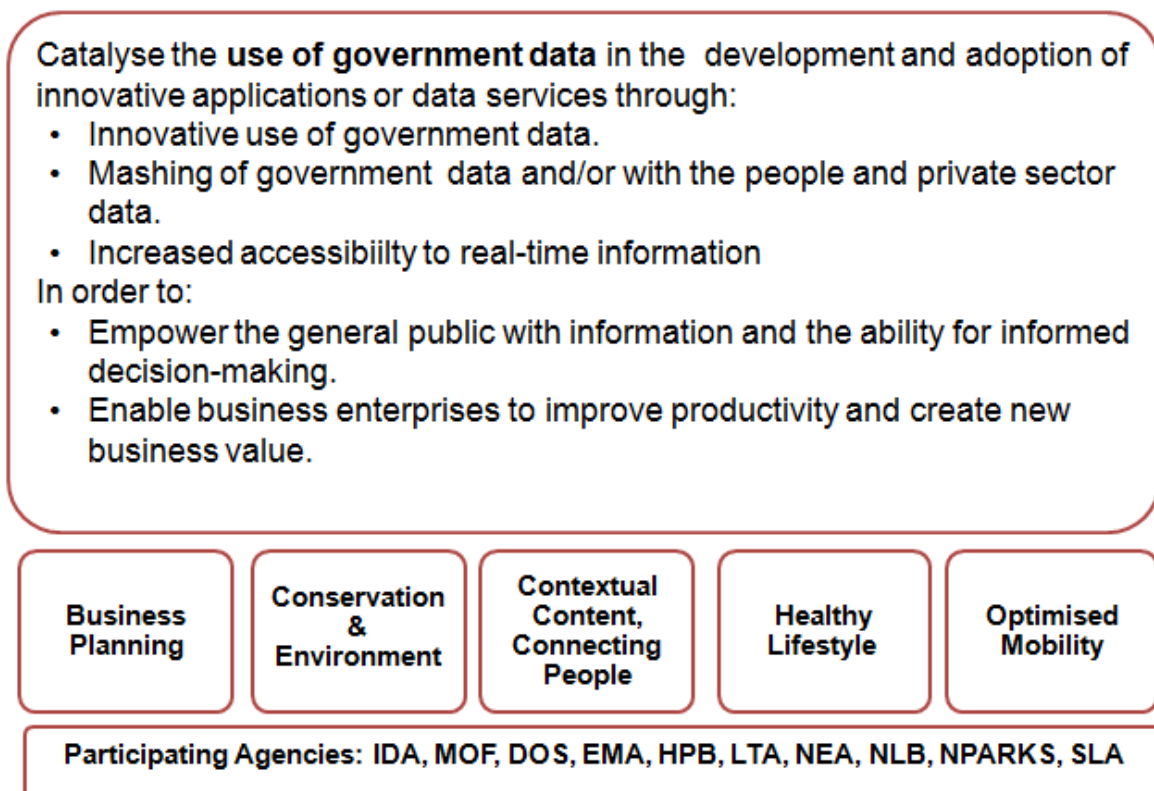


Figure 1: “Harnessing Data for Value Creation CFC” Theme and Focus Areas

- 5.2.1. Proposals shall be submitted under any of the following focus areas. (Examples of problem statements and government data for the focus areas are depicted in Annex B). However, additional focus areas can be considered.

5.2.2. Business Planning

With the incorporation of government data, develop solutions that provide strategic insights and information for the private sector to aid in business activities such as planning, strategy, customer relationship management, marketing campaigns and process optimisation.

5.2.3. Conservation & Environment [EMA, NEA, NPARKS]

Present and use pertinent information on conservation and environment in areas such as weather, conservation of electricity, flora and fauna in innovative manners that can allow informed decisions to be made on a daily basis.

5.2.4. Contextual Content, Connecting People [NLB]

Utilise the library's data to create multiple feedback and contribution channels that allow the library to create an information ecosystem for greater handling of information and better discovery experience for consumers, by connecting consumers with the libraries' growing content (e.g. digital content, AV materials, catalogues, etc.) and services (information search, curation, etc.).

5.2.5. Healthy Lifestyle [HPB, NEA]

Combine and present data in the areas of health such as nutritional foods, public health and healthcare facilities to enable individuals to make calculated choices.

5.2.6. Optimised Mobility [LTA]

Harness information on road and public transport networks for use by various target segments such as general commuters, the mobility-challenged and business enterprises, so that informed mobility decisions can be made even through unwarranted situations such as traffic incidents or adverse weather conditions.

5.3. Participants shall propose at least one (1) of the following solutions:

a. Applications

- i. Applications for use by the Private Sector: Web and/or mobile solutions that incorporate government data for businesses; or
- ii. Applications for use by the People Sector: Web and/or mobile solutions that incorporate government data for the general public.

b. Data Services

- i. APIs, web services, or any other forms of data in machine-readable formats that mash government data with data from other sources to create a derived dataset for sharing on a suitable platform.

5.3.1. Participants are encouraged to consider geospatial applications, if government geospatial data sets are used. Examples of possible geospatial business applications are depicted in Annex C.

5.4. REQUIREMENTS FOR “APPLICATIONS FOR USE BY THE PRIVATE SECTOR”

5.4.1. The application shall demonstrate any combination of the following benefits using government data:

- a) Create new products and services;
- b) Reduce business costs;
- c) Increase workforce productivity;
- d) Retain / Extend customer base; and
- e) Derive new information for better decision-making.

5.4.2. The application shall be developed based on the following industry specifications:

- a. generic to businesses functions across industries (e.g. HR and Finance functions),
- b. industries such as Land Transport, Logistics, Health & Wellness, Wholesale & Retail, and Food & Beverage,
- c. or catered to multiple user groups, e.g. employees, business partners and customers.

5.4.3. The application shall be accessed through web browsers and/or mobile platforms, and catered to the private sector.

5.4.4. For industry-wide sectoral platforms, the application shall address the needs of multiple enterprises and user groups within the selected industry sector.

5.5. REQUIREMENTS FOR "APPLICATIONS FOR USE BY THE PEOPLE SECTOR"

5.5.1. The application shall demonstrate any combination of the following benefits using government data:

- a) Create new products and services;
- b) Increase personal, group and community level productivity or convenience; and
- c) Derive new information for better decision-making.

5.5.2. The application shall be accessed through web browsers and/or mobile platforms, and catered to the general public.

5.6. REQUIREMENTS FOR DATA SERVICES

5.6.1. The data service shall demonstrate any of the following benefits using government data:

- a) Create new products and services; and
- b) Derive new information for better decision-making.

5.6.2. The data service shall serve out derived geospatial and/or textual data sets through web services, APIs and/or any other machine-readable formats for downloading.

5.7. DATA SOURCES AND MASHUPS

5.7.1. The Government data sources may be accessed as follows:

- i. Data accessed via the data.gov.sg portal; and
- ii. Base map and geospatial data using OneMap Web application programming interface ("API");

5.7.2. If the required data is not available at either source mentioned above, participants can request through ida_dgs_admin@ida.gov.sg for consideration.

5.7.3. Participants may also propose additional datasets (from private and people sectors) that are not found in government data sources. The data may be provided by Participants or acquired from the third party service providers. Participants are responsible for obtaining usage rights for such data.

5.7.4. Participants shall list all datasets required for the mashup. The information required in the list shall comprise, but is not limited to the following:

- i. Source of the dataset (i.e. the organisation that the dataset belongs to); and
- ii. Description of the dataset.

- 5.7.5. The access and use of Government data (including, but not limited to, data belonging to Statutory Boards available through the Government Sources at Para 5.7.1 above) shall be subjected to the terms of use of the respective Government data sources.
- 5.7.6. Participants shall describe the technology employed for the mashup of the Private, Public and/or People sector data for the application or data service.
- 5.7.7. OneMap is the preferred mapping environment (supports the SVY21 coordinate reference system) for the implementation of the geospatial business applications.
- 5.7.8. Participants may counter-propose other mapping environment that adopts the SVY21 coordinate reference system with justifications, for consideration.

6. PROJECT CONSIDERATIONS

- 6.1. Participants shall submit proposals as a Consortium or as an Individual Organisation.
- 6.2. CONSORTIUM
 - 6.2.1. Each Consortium shall consist of:
 - a. A lead organisation; and
 - b. Two (2) or more end-user organisations.
 - 6.2.2. Consortium with one (1) end-user organisation shall demonstrate that the proposed product or service has market potential for industry wide adoption.
 - 6.2.3. The participating companies shall not enter into any exclusive arrangements. This is to promote scalability of the solution for industry-wide adoption.

6.2.4. Each organisation can be a member of one or more Consortia offering the same or different services.

6.2.5. Each Consortium shall clearly identify a Consortium leader for the purpose of managing and coordinating the activities of the Consortium. The Consortium leader shall be responsible for submitting a Proposal on behalf of all its members. The roles and responsibilities of every Participant must be clearly articulated in the Proposal.

6.2.6. IDA reserves the right to disqualify or reject any Proposal in the event of a withdrawal of any Consortium member, or where any material representation with the Proposal is discovered to be inaccurate, misleading or false.

6.3. INDIVIDUAL ORGANISATION

6.3.1. Individual organisations shall demonstrate that the proposed product or service has market potential for industry wide adoption or for widespread use by the general public.

6.3.2. IDA reserves the right to disqualify or reject any Proposal in the event any material representation with the Proposal is discovered to be inaccurate, misleading or false.

6.4. PRE-REQUISITES FOR PARTICIPANT(S)

6.4.1. The pre-requisites for Participants in this CFC are as follows:

- a. For Consortia, at least the Consortium Leader shall be registered in Singapore with the Accounting & Corporate Regulatory Authority (“ACRA”);
- b. For Individual Organisations, the enterprise shall be registered in Singapore with ACRA.

- c. The following organisations are eligible to participate in this CFC and may form a Consortium without an ACRA-registered lead:
 - i. A trade association,
 - ii. An Institute of Higher Learning (“IHL”), or
 - iii. A non-profit organisation.
- d. The proposed service(s) must be developed in Singapore wholly or in part.

6.5. IMPLEMENTATION SCHEDULE

- 6.5.1. The application or data service shall be developed and deployed within six (6) calendar months from the CFC award. Participants may counter-propose any extensions with justifications, for consideration.
- 6.5.2. The application shall be deployed for use in Singapore.
- 6.5.3. The performance monitoring period shall last for a minimum of six (6) calendar months after the deployment of the business application to measure the achievement of the target set.

6.6. PROJECT FUNDING

- 6.6.1. The funding for selected project(s) will be determined upon assessment of the impact and scope of the project. All terms and conditions of any such approved funding shall be agreed between selected Participants and the Government.
- 6.6.2. Any funding support will be performance based to encourage the completion of the development of the business application.

7. SCHEDULE

7.1. TIMELINE OF EVENTS

Date	Event
31 May 2012	Issuance of CFC
13 Jun 2012	CFC Briefing and Networking Session
23 to 27 Jul 2012	Pre-Submission Presentation by Participants
31 Aug 2012	Deadline for Proposal Submission
Dec 2012	Announcement of Award

7.2. CFC BRIEFING & NETWORKING SESSION

Date: 13 Jun 2012

Time: 9am to 1pm

7.2.1. Apart from the networking segment, the Session will provide a briefing on the details of the CFC including the events leading to the final award of project(s) along with presentations by participating agencies and interested companies.

7.2.2. Registration for the CFC Briefing and Networking Session are as follows:

Registration Item	Deadline for registration
Companies who are interested to present on their capabilities, products and services are to register with ida_dgs_admin@ida.gov.sg	8 Jun 2012
All interested participants are invited to attend the Session. Please register with ida_dgs_admin@ida.gov.sg , and include the following details: • Subject: Registration for Networking Session • Company Name & Brief Description (less than 50 words) • Details of Attendees (Name, Designation, Departments, Telephone Number, Email address)	11 Jun 2012

7.3. PRE-SUBMISSION PRESENTATION BY PARTICIPANTS

Participants are invited to sign up for the pre-submission presentation sessions where participants can share their intended submissions for feedback on how submissions could be strengthened.

8. **SELECTION PROCESS**

8.1. SELECTION OF PROPOSAL(S) FOR CONSIDERATION FOR AWARD OF GRANT

8.1.1. Only complete Proposals will be evaluated by IDA, MOF & participating agencies for consideration for the award of a grant. Short-listed applicants may be required to make a presentation of their Proposal(s) (at their own cost and expense) and answer questions on the project in response to this CFC's Evaluation Committee.

8.1.2. Without prejudice to paragraph 8.2., IDA reserves the right to reject any or all Proposals submitted pursuant to this Public Document for the Harnessing Data for Value Creation CFC. Where a Proposal is selected for the award of a grant, the relevant Participants will be notified by IDA. The terms of the project, project milestones, and co-funding terms will be separately negotiated and agreed to between the parties.

8.1.3. For the avoidance of doubt, the selection of any Proposal by IDA may not necessarily lead to the award of a grant.

8.2. EVALUATION CRITERIA

In assessing the short-listed Proposal, the evaluation criteria shall include, but are not limited, to the following:

8.2.1. Innovativeness of the solution

- a. Creative use of government data
- b. Effective mash up of government data with data from other sources

8.2.2. Impact of the solution

- a. Better decision-making
- b. Cost savings
- c. Convenience/Improved lifestyle
- d. Extent of business process optimisation and productivity

8.2.3. Sustainability and Scalability

- a. Potential for widespread use by consumers
- b. Number of new products and services
- c. Creation of new lines of businesses and revenue models

9. **DISCLAIMER**

- 9.1. IDA shall have the absolute discretion to accept or reject any Proposal submitted to IDA without being liable to give any reason thereof. IDA reserves the right to retain the Proposals submitted by all parties without liability for the costs of such documents.

10. SUBMISSIONS

10.1. FORMAT OF SUBMISSIONS

10.1.1. Submissions should be made using the Proposal template that can be downloaded from IDA's website <http://www.ida.gov.sg>. Participants shall furnish all necessary information and documents as required in the template. All assumptions used should be stated clearly in the Proposal.

10.2. PLACE AND TIME OF SUBMISSION

10.2.1. Two (2) hardcopy and one (1) softcopy (in a CD-ROM) of the Proposal should reach IDA no later than **31 August 2012** at **1700hrs**.

10.2.2. All Proposals must be clearly marked and addressed to the following:

"Harnessing Data for Value Creation CFC"
Info-communications Development Authority of Singapore
10 Pasir Panjang Road,
#10-01 Mapletree Business City,
Singapore 117438

10.2.3. IDA reserves the right not to accept late submissions.

10.2.4. Proposals may also be submitted in person at the IDA reception desk at the above address.

10.3. CONTACT DETAILS

10.3.1. No further enquiries regarding this CFC will be entertained after **31 August 2012**.

10.3.2. Enquiries regarding this CFC should be addressed to
IDA_DGS_Admin@ida.gov.sg.