



# **Call for Collaboration Go Cloud-Native**

**– Services to enable ICT SMEs  
with digital capabilities in Cloud-  
Native, Microservices & DevOps**

Public Document

| 03 Oct 2018 |

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## 1. INTRODUCTION

- 1.1. The development of new infocomm industry trends, emerging technologies and shift in industry practices present an opportunity to improve the productivity of Infocomm Technology (ICT) SMEs and micro-enterprises in the IT Services and Software sub-segments.
- 1.2. Being small in size, ICT SMEs may face the following barriers in acquiring new digital capabilities and technologies:
  - a. Senior executives and decision makers in the organisation may not be aware and may not fully understand the business value of new digital capabilities;
  - b. ICT SMEs has a very lean workforce and may not be able to invest as much time to send their team for training and product development as much as they would like to; and
  - c. ICT SMEs may not have the in-house experts in new capability areas. Even if they send their staff for classroom training, they may not be able to translate knowledge into actual practice without further coaching. It is costly and challenging for ICT SMEs to engage external experts for this purpose.
- 1.3. To address the challenges faced by ICT SMEs in acquiring new digital capabilities and technologies, IMDA is developing a series of initiatives to help ICT SMEs to leverage existing expertise, assistance and schemes for capability building. As part of this effort, IMDA has launched GoSECURE on 21 May 2018 in collaboration with Singapore Institute of Technology (SIT) to strengthen the cyber security capabilities of our local ICT SMEs. Today, as part of this Go Cloud-Native Call for Collaboration, we are looking into the second capability area to build up digital capabilities of ICT SMEs in Cloud-Native, Microservices and DevOps.

## 2. IMPORTANT NOTICES

- 2.1. For the avoidance of doubt, this Public Document for the GO CLOUD-NATIVE Call for Collaboration shall be read with and shall be subject to the Important Notices as set out in **Annex A**.

### 3. BACKGROUND

- 3.1. Over the years, many ICT SMEs have developed ICT solutions that are built on legacy monolithic software architecture, which are highly complex, limited in scalability and flexibility, and not modular. This impedes the ICT SMEs' ability to respond and adapt quickly to customer needs (i.e., long change/release cycle time, change only in fixed intervals) and lengthen the time to market. This also contributes to higher cost and long development cycle, and therefore become difficult to innovate and scale, making these companies unproductive in the long run.
- 3.2. The future of digital services and applications is shifting towards "XaaS" (Everything-as-a-Service) that is designed and delivered as cloud-native microservices. Cloud-Native is an approach to building and running applications that exploits the advantages of cloud computing. The approach develops and deploy services that is modular, scalable, adaptable and stable as compared to legacy applications. It is also closely associated with the concept of microservices, which is an architectural approach to developing an application as a collection of small services that are autonomous. This enables faster time to market and scalability, allowing ICT companies to cater to customer needs and changes flexibly.
- 3.3. Microservices will be a key component of both GovTech's Singapore Government Technology Stack (SGTS) as well as IMDA's vision of the future-ready architecture for delivering services. Therefore, our ICT SMEs must shift towards delivering their solutions and services as cloud-native microservices in order to participate in future opportunities in Digital Government, and to support a Digital Economy.
- 3.4. In this regard, IMDA is looking to help our ICT SMEs who are ready and willing to raise their digital capabilities, remain competitive, and to support Singapore's digitalisation efforts. This entails helping ICT SMEs move from traditional software development and architecture to applications deployed and delivered through the cloud as cloud-native apps using Microservices and to help them build up digital capabilities in Cloud-Native, Microservices and DevOps.
- 3.5. IMDA is issuing this Call for Collaboration (CFC) for Go Cloud-Native to pre-qualify and appoint a panel of Cloud SPs (SPs) to provide

professional technical consultancy services to help ICT SMEs build up digital capabilities in Cloud-Native, Microservices and DevOps.

- 3.6. It is envisaged that the Go Cloud-Native CFC will primarily focus on - though not limited to – Singapore-based IT Services and Software SMEs<sup>1</sup>.

#### **4. OBJECTIVES AND OUTCOMES**

- 4.1. The objectives of this “Go Cloud-Native CFC” are
- a. Train and enable ICT SMEs with the development capabilities to build Cloud-Native applications/services that is more responsive, modular and scalable, thereby raising their productivity; and
  - b. Grow a culture of agile innovation in ICT SMEs through DevOps or similar methodology and foster an ecosystem of applications and services developed as microservices.
- 4.2. The programme aims to achieve the following outcomes:
- a. Generate greater awareness among CXOs of ICT SMEs about the implications of new industry practices and technology trends, and they are now able to drive better business outcomes by adopting these new development practices, build new products and business models based on Cloud-Native, Microservices and DevOps;
  - b. Equip ICT professionals with digital capabilities in Cloud-Native, Microservices and DevOps through effective training so that they have practical knowledge and skills to develop Cloud-Native solutions and services in their organisation; and
  - c. On-board ICT SMEs through project-based coaching to architect solutions/products on Cloud-Native and Microservices architecture, transform and transition monolithic solutions to cloud-native, or development of a green-field

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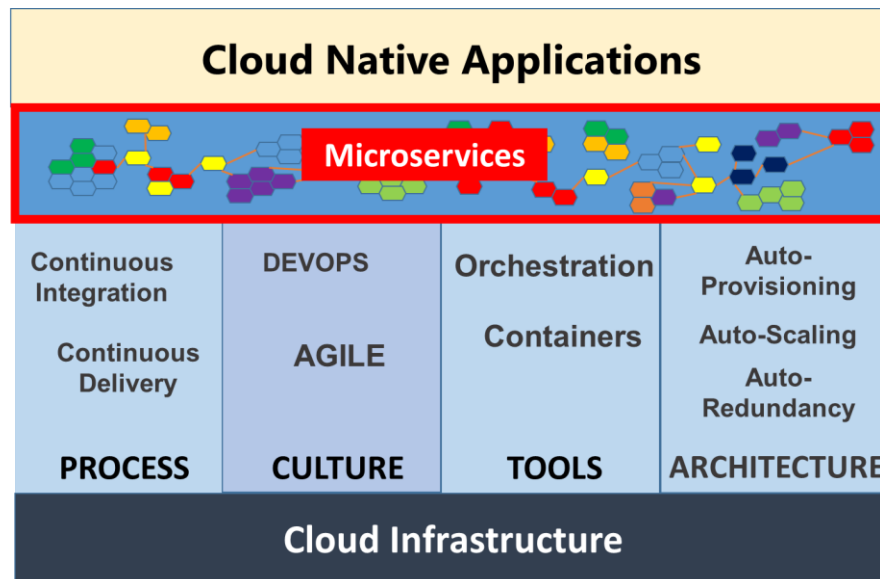
<sup>1</sup> A Singapore-based ICT SME is defined as a Singapore-registered company with minimum 30% local shareholding whose group annual sales turnover is less than SGD 100 million or group employment size is up to 200 employees and SSIC codes are ICT related.

cloud-native applications, and deploy changes to these applications / services quickly through DevOps practices.

## 5. SCOPE

- 5.1. Go Cloud-Native is not about simply migrating ICT SMEs from existing on-premise solutions to the cloud, as cloud adoption in itself would not result in the full extent of benefits of cloud-native computing.
- 5.2. Rather, IMDA is looking for Cloud SPs to equip ICT SMEs with holistic capabilities in a few areas: embed **DevOps methodology and culture** to enable rapid and agile development, help them re-architect existing or develop new solutions with **microservices architecture** for modularity and scalability, provide know-how to utilise **containers and automation tools** for easy deployment and continuous delivery, and **leverage cloud platforms and software** for delivery (see *Figure 1*).

*Figure 1: Approach to Cloud-Native employing DevOps, Microservices and Cloud*



- 5.3. Cloud SPs that are interested to participate are required to propose a programme to provide training and technical capability transfer to ICT SMEs that can build up the internal capabilities of ICT SMEs in the area of Cloud Native, Micro-services and DevOps. The design of the programme should be scalable to a large number of ICT SMEs,

**allow ICT SMEs to “self-serve” as much as possible, and should not need to rely on significant day-to-day programme management from IMDA.**

- 5.4. Interested Cloud SPs are required to propose a programme consisting of three (3) major components (refer to Figure 2 on Scope of Work for Cloud SP) that can be completed within four (4) to six (6) months by participating ICT SMEs to achieve the objectives and outcomes of this Cloud-Native CFC:

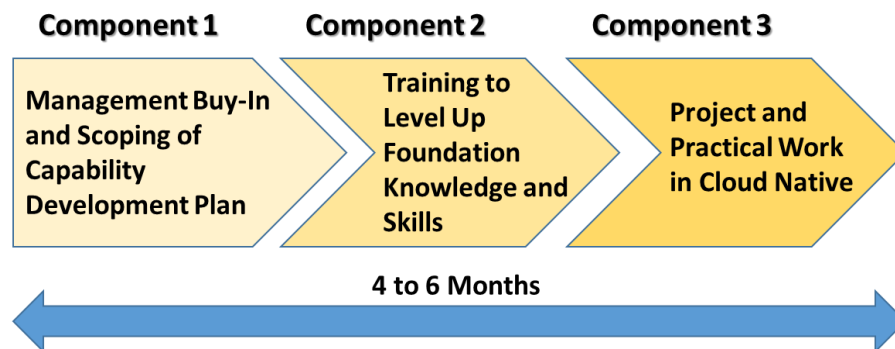


Figure 2 – Scope of Work for Cloud Service Providers

#### 5.4.1. **Component 1: Management Buy-In and Scoping of Capability Development Plan**

Get ICT SME management’s buy-in to build capabilities in Cloud-Native, Microservices and DevOps in their company, through training or/and scoping a project involving the application of cloud-native knowledge and skills that would undergo coaching from Cloud SPs (see *Figure 1*).

#### 5.4.2. **Component 2: Training to level up Development Team’s Foundation knowledge and Skills**

Offer training courses (preferably CITREP<sup>2</sup> endorsed) and conduct training to participants from ICT SMEs in the areas of Cloud-Native, Microservices and DevOps.

<sup>2</sup> CITREP supports local professionals in keeping pace with technology shifts through continuous and proactive training. Since April 2016, CITREP has been expanded to support entry-level professionals to build specialised ICT skills through broad-based training courses and certifications. Visit <https://www.imda.gov.sg/imentalent/training-and-courses>

### 5.4.3. Component 3: Project and Practical Work in Cloud Native

Provide coaches and technical resources to guide ICT SMEs in hands-on practice to translate classroom training to practice. This could be either the transition of monolithic solutions to cloud-native applications, or development of green-field cloud-native applications.

- 5.5. Cloud SPs may propose a consortium approach with Training Providers, Technology Software / Hardware Vendors, Cloud Platform Vendors and Consultants providing different aspects of the pre-packaged programme.
- 5.6. Cloud SPs will need to include in their proposal their proposed approach and cost for each of the Components 1 – 3 of the scope of work required in this proposal.
- 5.7. Cloud SPs will need to include in their proposal the capabilities and knowledge that will be developed by of the enabled ICT SMEs. The capability areas include but may not be limited to:
  - a. Choosing and deploying Cloud Models: Public Cloud (e.g. Amazon Web Services, Microsoft Azure, Google Cloud Platform, IBM BlueMix), Private Cloud (e.g. VMWare vSphere, OpenStack), Hybrid or Multi-Cloud (please state for which cloud platform);
  - b. Understand, design and implement Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS), Software-as-a-Service (SaaS), Container-as-a-Service (CaaS) (please state for which cloud platform, including Hybrid and Multi-Cloud if applicable)
  - c. Competency in DevOps Methodology and Practices such as Continuous Integration (CI) and Continuous Development (CD);
  - d. Understand container technology and deployments using containers; and
  - e. Proficiencies in developing Microservices including refactoring and decomposing monolith software into microservices, deploying microservices-based applications into production



environments, developing, managing and interacting with external APIs.

- 5.8. As part of operationalising the programme proposed, the proposal from the Cloud SPs will need to describe the proposed marketing plan for the programme to garner and solicit participation of ICT SMEs, and the target number of ICT SMEs that each Cloud SP would be able to on-board.
- 5.9. IMDA will co-fund and support the cost for ICT SMEs who are keen to put training into practice, and work with any of the pre-qualified Cloud SPs with projects to transform on-premise solutions or develop new products/solutions into Cloud-Native products/services (SaaS) or build greenfield Cloud-Native applications / services. The ICT SMEs must be able to commit development resources to be coached/trained by the Cloud SPs for capability transfer.

### **Component 1: Management Buy-In and Scoping of Capability Development Plan**

- 5.10. The objective of this Component 1 of the programme is to garner the buy-in of executive management sponsor (CXO) of ICT SMEs to commit to capability development in the areas of Cloud-Native, Microservices and DevOps, and participation in staff training or/and project-based coaching with the Cloud SPs.
- 5.11. For ICT SMEs that have been engaged by Cloud SPs, the CXOs can assess and decide on two (2) options as a next step:
- a. Option A: They have decided that that are ready with a project and interested to embark on project coaching (in component 3 below); or
  - b. Option B: they are not ready or not keen to embark on project coaching but are interested to send their personnel to be trained to acquire the relevant knowledge and skills.
- 5.12. For ICT SMEs that have chosen Option A and interested to embark on project coaching, the Cloud SPs are required to conduct Deep Dive Workshops (or equivalent) with the management staff and project team members of the ICT SMEs, and guide the ICT SMEs to deliver a Project Plan covering the following:

- a. Project Scope – To scope out a project to undergo Cloud-Native, Microservices development and DevOps to achieve a cloud-native application/solution that can be deployed iteratively;
  - b. Desired outcomes and success metrics – To define outcomes and deliverables, including the skills/capabilities to be developed by ICT SMEs' staff as well as commit on the cloud-native application/solution to be developed; and
  - c. Commitment on Resources to complete a project (team members allocated and define project period).
- 5.13. For ICT SMEs that have chosen Option B, the Cloud SPs are required to facilitate the ICT SMEs to undergo training by either:
- a. Conducting the training to ICT Professionals in these ICT SMEs in the areas of Cloud-Native, Microservices and DevOps if the specific training courses are already being offered and conducted by the Cloud SPs or their training partners so that they can build up relevant knowledge and skills; or
  - b. Recommending a list of training courses conducted by themselves or other 3<sup>rd</sup> party training partners suitable for ICT SMEs in the areas of Cloud-Native, Microservices and DevOps for the personnel to attend.
- 5.14. For both Options, it is highly preferable that training courses are, or will be certified under CITREP, in order for participants to tap on CITREP support for this purpose.
- 5.15. For both Options, as part of the ICT SME's Capability Development Plan, Cloud SPs are required to provide a list of named personnel from ICT SMEs that will be undergoing training or have undergone training as part of progress reporting to IMDA.
- 5.16. **Deliverables of Component 1.** The expected deliverables for Component 1 are:
- a. For ICT SMEs that have chosen Option A, the Cloud SPs are required to facilitate a Project Plan signed off by Company

Management Level Project Sponsor. The Project Plan should include but not limited to:

- i. Scope of the Services to be delivered;
  - ii. Duration and Milestones (should not exceed more than four (4) calendar months); and
  - iii. Named personnel to be part of the project team, and those that has undergone training through the training courses.
- b. For ICT SMEs that have chosen Option B, the Cloud SPs are required only to obtain a commitment from the company, in writing, to send their staff for training. A list of relevant training courses and named personnel that will be undergoing / have undergone training should be included.

## **Component 2: Training to Level Up Development Team's Foundation Knowledge and Skills**

5.17. The objective of this Component 2 of the programme is to equip ICT SMEs' development teams with foundation knowledge and skills in Cloud-Native, Microservices and DevOps. Cloud SPs will offer a list of courses suitable for ICT SMEs in the identified areas.

5.18. The courses proposed should cover training and certification to meet minimum level criteria (foundation knowledge & Skills) to enable the participants to design, code and develop a Cloud-Native application/service. Some of the curriculum that it needs to minimally cover should include the following:

- a. Microservices – Understanding, Designing and Adopting Microservices based Architectures;
- b. Container and Docker Management- Docker, Kubernetes, Open Shift or equivalent;
- c. DevOps Training – DevOps and AGILE core concepts, Continuous Integration, Development, Delivery, Testing and Monitoring;

- d. Migration from Monolithic to a Microservices Architecture – Breaking up an Application, Interacting with APIs, Refactoring Applications; and
  - e. Cloud Architecture – Understanding Infrastructure-as-a-Service (IaaS), Platform-as-a-Service (PaaS) and Software-as-a-Service (SaaS) and Container-as-a-Service (CaaS).
- 5.19. The training proposed could come in the form of
- a. Self Service Online Learning Resource; or
  - b. Certified Training.
- 5.20. For ICT SMEs that have chosen Option A, Component 2 also serves as pre-requisite training so that SMEs have necessary foundation knowledge and skills before embarking on project-based coaching with Cloud SPs under Component 3.
- 5.21. For ICT SMEs that have chosen Option B, Component 2 is still relevant in achieving capability development under Go Cloud-Native programme. Cloud SPs that offer suitable training courses in the area of Cloud-Native, Microservices and DevOps can conduct the training for SMEs.
- 5.22. **It is highly preferable that these courses are or will be certified under CITREP**, in order for participants to tap on CITREP support for this purpose. For CITREP courses, participants may be eligible for CITREP funding capped at S\$3,000 per course. ICT SMEs will be expected to pay the balance beyond the \$3,000 capped per course. For pre-requisite courses that are not CITREP endorsed, participants will have to pay the full course fees.
- 5.23. For Cloud SPs or Training Providers who are proposing pre-requisite courses that are not CITREP-endorsed, they can submit relevant documents to have their courses CITREP endorsed<sup>3</sup> and would be subject to approval by Committee for CITREP.
- 5.24. For Cloud SPs who do not offer relevant Cloud-Native training courses, in your submission, you will still be required to indicate the pre-requisite courses and reference existing CITREP-endorsed

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<sup>3</sup> Visit <https://www.imda.gov.sg/imental/training-and-courses> on requirements and documents for CITREP's endorsement.

relevant courses that participants should undergo before they embark on the coaching sessions by the Cloud SPs under Component 3. Participants who are going through training courses that are CITREP-endorsed will be directed to sign up for these courses on the SG:D Talent portal.

- 5.25 Participants who have already attended similar training courses or are equipped with the foundation knowledge and skills may not need to attend such pre-requisite courses again. For such cases, Cloud SPs can assess and decide if these participants have the required knowledge and skills and able to start on coaching sessions under Component 3.
- 5.26 **Deliverables of Component 2.** The expected deliverables for Component 2 are:
- a. A list of staff who has completed the courses in line with the Capability Development Plan in Component 1. This will be in the form of the participants' certifications from the examinations from training or acknowledgements after they have completed training in these courses.
  - b. This deliverable need not apply to Cloud SPs working with ICT SMEs that chosen Option B (training only with no project), and do not conduct the training for the ICT SMEs themselves.

### **Component 3: Project and Practical Work in Cloud-Native**

- 5.27 The objective of this Component 3 of the programme is for Cloud SPs to provide expert coaches or consultants and technical resources to guide and mentor the participating ICT SMEs to implement a short-term project (based on scope and plan in Component 1) to translate classroom training (in Component 2) into practice.
- 5.28 The expert coaches or consultants can guide the ICT SMEs to transform a monolithic solution to a cloud-native application, or to develop a green-field cloud-native application. These ICT SMEs must be able to commit some development resources to be coached by SPs for capability transfer over a few months. These should be identified as part of the Project Plan in Component 1.

5.29 The scope of this coaching or training is to include but may not be limited to the following:

- a. An expert coach or consultant that will provide coaching/consulting hours for ICT SMEs that can be drawn down as part of services purchased to assist the company. The coaching sessions should include at least a few hours of face-to-face sessions combined with offsite consultation through emails or phone calls;
- b. Practical sessions of the coaching or training sessions to help ICT SME project team to develop the Cloud-Native applications/solutions/services to minimally cover the following:
  - i. Architect applications/services on Cloud-Native and Microservices architecture;
  - ii. (Where there is an existing monolith application to transform) Refactor a monolith application into a Microservice and deploying Microservices that interacts with one another;
  - iii. Develop an API Gateway and Managing APIs;
  - iv. Ability to implement concepts of the DevOps practice and principles such as CAMS culture, Continuous Integration/Continuous Deployment (CI/CD);
  - v. Create and deploy applications using Containers; and
  - vi. Provide technical resources (software, cloud credits, online helpdesk support, infrastructure access during development period).

5.30 Cloud SPs will need to include in this proposal:

- a. The Curriculum Vitae (CV) of the coaches or consultants proposed to conduct the project-based coaching sessions and it should include their expertise and years of experience in conducting similar form of training or coaching to professionals or organisations;

- b. The format and approach in which the coaches or trainers will conduct the hands-on practical sessions with the project team members of the ICT SMEs; and
  - c. The expected frequency and number of man-days/hours of coaching for a ICT SME project, and the assumptions for the estimation on the effort required.
- 5.31 The project by each of the ICT SME through the proposed programme should be delivered within the stipulated time indicated in the Project Plan and should be of no more than four (4) to six (6) months. The project should complete within six (6) months of the signing of the Project Plan in Component 1.
- 5.32 **Deliverables of Component 3.** The expected deliverables for Component 3 should include the following:
- a. Product architecture diagram and screen shots of Cloud-Native application/services developed
  - b. The completed Cloud-Native application/ service developed by each ICT SME's project team that is based on Microservices architecture and development methods and DevOps practices
  - c. Feedback from the ICT SMEs on the effectiveness of capability transfer in the area of Cloud-Native and impact of the project on their productivity/ business (Note: A simple template will be provided).

## 6 PROJECT FUNDING

### 6.1 Mode of Funding

- a. IMDA will evaluate the proposals for this Cloud-Native CFC and shortlist potential Cloud SPs to be awarded. **Upon shortlisted, Cloud SPs will need to submit official grant application forms to IMDA where we will put up these grant applications through an internal process for approval.**

- b. Awarded Cloud SPs will be grantees that are pre-qualified and appointed to provide the service to enable ICT SMEs. The end-to-end service offerings for their programme and the cost along with what it covers will need to be published and made publicly accessible for ICT SMEs;
- c. For Components 1 and 3, IMDA will support 50% of the cost of services rendered by SPs to ICT SMEs, capped at \$15,000 for each ICT SME. Component 2 will not be funded through this CFC as participants are expected to tap on CITREP funding for CITREP-endorsed courses (reference Para 6.2).
- d. ICT SMEs can contact one or multiple SPs of choice and decide which one best suits their needs, issues Purchase Order (PO) or signs up for services with SP, and pay the SPs directly for the remaining cost of services net of IMDA's support. SPs will need to issue invoices to ICT SMEs. A copy of these invoices issued by the SPs to the ICT SMEs as receipt on payment will need to be submitted subsequently to IMDA as proof for charging by SPs and payment by ICT SMEs for work done and completed.
- e. SPs consolidates by bulk (e.g. 8-10 ICT SMEs assisted) for completion of work to the ICT SMEs (validation that these are ICT SMEs using ACRA business information) and submit invoices to ICT SMEs along with other supporting documents such as product architecture diagrams, application/solution screen shots and sign-offs for project completed with ICT SMEs) to IMDA as claim documents.
- f. IMDA validates and processes the grant claims to disburse grant monies to SPs.

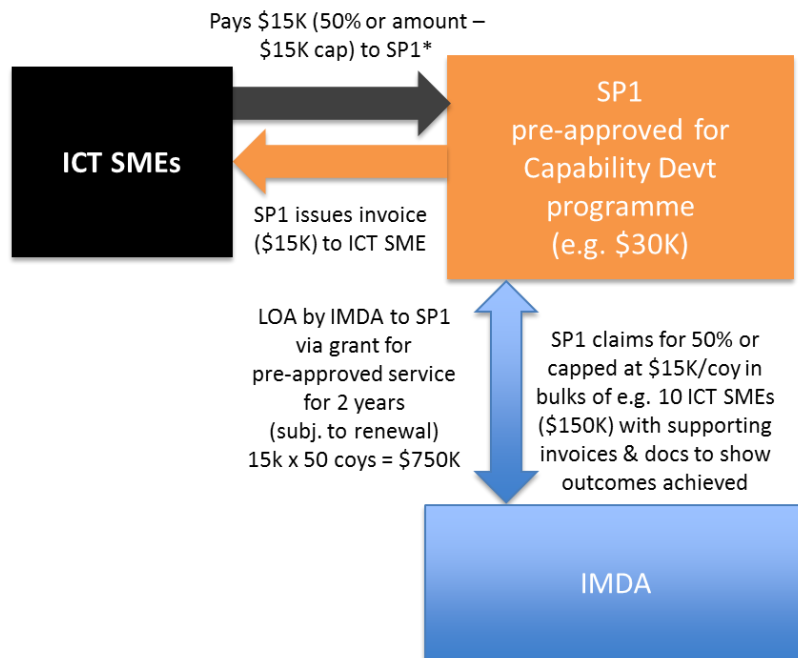
### For Training Course Fees (Component 2)

- 6.2 For training to acquire knowledge and skills for pre-requisite training before coaching sessions, ICT SMEs will send their project team members to attend relevant courses for Cloud-Native, Microservices and DevOps pre-determined by the Cloud SPs.



- a. These courses may be CITREP endorsed for these CITREP courses, it will be funded through CITREP (subject to criteria of CITREP support eligibility) with support of up to 70% of nett payable course fee, capped at \$3,000 per course.
- b. ICT SMEs will be expected to pay the balance of 30% and anything beyond the \$3,000 capped per course. For pre-requisite courses that are not-CITREP endorsed, companies or participants will have to pay fully for attending these courses.
- 6.3 The funding for selected project(s) by the Cloud SPs from the proposals received through this Cloud-Native CFC 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 Cloud SPs and IMDA.
- 6.4 Illustrated Funding Flow – refer to **Figure 3** below.

**Example for illustrative Purposes:**



## Grants and Claims

- 6.5 The expenditure from the project by the Cloud Service Provider is based on the Service Provider's (Grant Recipient) fees to the ICT SMEs. The supporting documents for the expenditure are the Grant Recipient's invoice to the ICT SMEs and the payment received from ICT SMEs, and any other supporting documents to show completion of work.
- 6.6 Claims are to be submitted by the grant recipient who is the Cloud Service Provider in this case. Upon successful validation of the claims submitted, the funds will be disbursed directly to the Cloud Service Provider.

## **7 ELIGIBILITY CRITERIA**

- 7.1 The **Cloud SPs** who are the fund recipients will need to satisfy the following criteria:
- a. Companies that are registered in Singapore
  - b. Have positive net equity based on the latest financial statement in the last financial year;
  - c. Established track records in the areas of Cloud-Native application development, DevOps methodologies and Microservices
- 7.2 The end-beneficiaries of Go Cloud-Native are **ICT SMEs** that shall meet the following criteria:
- a. Singapore-Owned or Singapore-Based Company and registered as a company in Singapore's Infocomm and Media (ICM) sector based on SSIC codes
  - b. Group annual sales turnover of S\$100m or less, or group employment of up to 200 employees
  - c. Have a minimum of 30% local shareholding
  - d. Have local technical resource or team to go through the capabilities upscaling with awarded Cloud SPs

- e. Owns the product/solution that they want to transform through project-coaching in Component 3
- f. Have positive net equity based on the latest financial statement in the last financial year\*.

*\*Optional criteria for start-up companies.*

## 8 SCHEDULE

### 8.1 Timeline of Events

| S/No. | Milestone                                     | Timeline*          |
|-------|---|--------------------|
| 1.    | Go Cloud-Native CFC Published on IMDA Website | 03 Oct 2018        |
| 2.    | Go Cloud-Native CFC Public Briefing           | 08 Oct 2018 (AM)   |
| 3.    | Pre-submission Clarifications                 | 10 – 17 Oct 2018   |
| 4.    | Closing date for Go Cloud-Native CFC          | 19 Oct 2018 12 p.m |
| 5.    | Evaluation & Proposals Clarification          | 22 – 31 Oct 2018   |
| 6.    | Award of Go Cloud-Native CFC                  | 28 Dec 2018        |
| 7.    | Launch of Go Cloud-Native Programme           | 02 Jan 2019        |

\* These dates are tentative subject to proposals received, clarifications and agreement on T&Cs between IMDA and grant awardees (selected SPs)

### 8.2 Public Briefing

8.2.1 The Go Cloud-Native CFC Industry Briefing is on **Monday, 08 October 2018, 9.30 AM** at:

Infocomm Media Development Authority of Singapore  
Level 5, Events Room 1 & 2  
10 Pasir Panjang Road  
Mapletree Business City  
Singapore 117438

8.2.2 Interested parties keen to attend are required to register their attendance at <https://www.eventbrite.sg/e/imda-call-for-collaboration-on-go-cloud-native-tickets-50587188643> and indicate the number of

people attending the briefing, name and designations, limited to maximum four (4) pax per company. Registration at the venue will commence at 09:00 AM.

## 9 SELECTION PROCESS

### 9.1 Evaluation Process

9.1.1 All Proposals will be reviewed, short-listed and evaluated by an Evaluation Committee (EC) from IMDA. Where relevant and necessary, the EC may invite industry experts (e.g. IHLs, Educators) to provide their views and comments. Only short-listed Participants will be notified.

9.1.2 The evaluation criteria will include the following considerations:

| S/N | Evaluation Criteria                    | Description  |
|-----|--|--|
| 1.  | Competency of Participant / Consortium | <ul style="list-style-type: none"> <li>• Level of Technical Expertise Consulting, Educational Capability</li> <li>• Relevant and Related Experience</li> <li>• Financial Strength</li> <li>• Track Records in Similar Projects</li> <li>• Track Record of Coaches/Trainers Assigned</li> </ul>   |
| 2.  | Quality of Proposal                    | <ul style="list-style-type: none"> <li>• Ability to fully deliver the scope of work required as outlined in this CFC.</li> <li>• Demonstrate an understanding of the target sector including but not limited to:               <ul style="list-style-type: none"> <li>○ Challenges/pain points faced by the programme beneficiaries;</li> <li>○ Providing services to train/guide/coach them to overcome potential challenges and obstacles to complete the programme to achieve the intended outcomes</li> </ul> </li> <li>• Ability to implement viable approaches to attract, recruit and enable the ICT SMEs to participate in the programme to develop their capabilities</li> <li>• Commitment and plan to achieve key performance figures (KPIs), including target number of companies participating in the programme.</li> </ul> |

| S/N | Evaluation Criteria  | Description  |
|-----|----------------------|--|
| 3.  | Overall Cost         | The cost of the program including <ul style="list-style-type: none"> <li>• Various costs associated with each component (if any);</li> <li>• Total cost of enablement;</li> <li>• Associated / optional cost items including additional consultant man-hours, Cloud compute/storage/services credits, etc</li> <li>• Cost of training (such as CITREP+ funded courses) needed as pre-requisite training before they can enrol in the programme.</li> </ul> |
| 4.  | Value Added Services | Any other value-added services or items that the Service Provider can provide which contributes to the success of the programme.   |

## 9.2 Selection of Proposal(s) for Consideration for Award of Grant

9.2.1 Only fully completed Proposals will be evaluated by IMDA 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 IMDA's Evaluation Committee.

9.2.2 Without prejudice to paragraph 10, IMDA reserves the right to reject any or all Proposals submitted pursuant to this Public Document for the GO CLOUD-NATIVE Call for Collaboration. Where a Proposal is selected by IMDA for consideration for the award of a grant, the relevant Participant will be notified by IMDA. The terms of the project, project milestones, and co-funding terms will be separately negotiated and agreed to between the parties.

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

## 10. Disclaimer

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

## 11. SUBMISSIONS

### 11.1. Format of Submissions

Submissions should be made using the Proposal Form template that can be downloaded from the website

[www.imda.gov.sg/industry-development/call-for-proposals/call-for-collaboration-for-go-cloud-native](http://www.imda.gov.sg/industry-development/call-for-proposals/call-for-collaboration-for-go-cloud-native)

### 11.2. Place and Time of Submission

One (1) softcopy (in a CD-ROM or USB Thumbdrive) of the Proposal should reach IMDA no later than **Friday, 19 October 2018** at **1200hrs**. All Proposals must be clearly marked as “Go Cloud-Native Call-for-Collaboration”, and addressed to:

Mr Quek Tze Han  
Innovation & Capability Development Division  
10 Pasir Panjang Road  
#03-01 Mapletree Business City  
Singapore 117438

### 11.3. IMDA reserves the right not to accept late submissions.

Proposals may also be submitted in person at the IMDA reception desk on the 3rd floor of Mapletree Business City Tower 10.

### 11.4. Contact Details

Enquiries regarding this CFC should be addressed to:

Mr Quek Tze Han  
Tze\_Han\_Quек\_from.TP@imda.gov.sg  
Innovation & Capability Division, IMDA

and

Mr Ng Aik Hock  
[Ng\\_Aik\\_Hock@imda.gov.sg](mailto:Ng_Aik_Hock@imda.gov.sg)  
Innovation & Capability Division, IMDA

No further enquiries regarding this CFC will be entertained after **Wednesday, 17 October 2018**.