

**ICT Virtual Organization of ASEAN Institutes and NICT
ASEAN IVO Forum 2016
Call for Presentations**

Submission and Registration Form

Please enter the relevant information in the fields below, giving an appropriate explanation when necessary. You may add supplemental pages and supporting data. If necessary, you may be asked to provide additional documents.

I. Title—Title of presentation:
Presentation and Collaboration Management Platform

II. Author(s)—Full name (First name family name):
(If you are already planning a project, please include the names of all team members)

- 1) Khong Neng, Choong
- 2) Gin Xian, Kok
- 3) Danial Naghshbandi
- 4) Muhammad Hilmi Mohd Shariff
- 5) UTM Author (TBD)
- 6) NICT Author (TBD)
- 7) YRP Author (TBD)

III. Organization(s):
(If you are already planning a project, please include the institutions of all team members)

MIMOS BHD
Universiti Teknologi Malaysia (UTM)
National Institute of Information and Communications Technology (NICT)
Yokosuka Research Park (YRP)

IV. Topic selection:
(Select one from the topics listed in "Call for Presentations")
Smart Society: ICT applications for community and environment

- a) Smart City: Education, Smart Offices, Smart Conference
- b) Smart Village: Interconnecting services between Urban and Sub-urban areas

IV. Abstract:

(Describe the purpose, background, objectives, content, plans for connected projects, expected results/outcomes, etc.)

Increasing robustness, throughput and reach of radio technology along with innovative software applications are impacting how Wi-Fi platforms are used for collaboration and communication in the office, home, and public events such as seminar and training sessions, and also to provide hotspot support for neighborhood expansions of wireless footprints. In each of these areas the latest advances point to better ways of doing things such as replacing VGA cable with real-time wireless presentation technology, enabling concurrent and asynchronous content sharing, supporting wireless edge services on WiFi AP itself etc. in realizing ubiquitous computing and communications.

The objective of ubiquitous computing and communications is to enable users for accessing any service (such as voice, video or data) or sharing contents over the nearest and common network, from anywhere at any time using any device. Hence, it is expected that users would utilize different communication service/device based on their application and surrounding environment, as to suit their preferences at the present point of time. For example, there are times where ones are blocked from the common presentation screen in a crowded room, and hoping there is a way to replicate the presentation screen onto their individual mobile devices wirelessly. Another example is where teachers could easily left their teaching materials on the WiFi AP itself for students within the classroom to download at only one hop away. These are examples of how blending customizable application services onto WiFi-based platform can help transforming service delivery in an efficient and effective manner, enabling proximity multimedia-based collaboration and content sharing without relying much on the Internet backbone.

To enable ubiquitous collaboration for accessing services and sharing contents, it is important to have a smart collaboration platform/device to facilitate the rapid development of collaborative/communication services and solutions. Focus markets could be both corporate and education sectors with the following objectives:

- Extend the reachability of shared content to individual mobile devices
- To bridge "digital-divide" with the use of collaborative services across urban and sub-urban areas, especially in developing ASEAN countries
- Allow individual to participate and interact seamlessly in the collaborative session such as meeting/seminar
- Develop further services/solutions for the need/requirements of the ASEAN regions
- Identify other market opportunities and challenges for seamless collaboration in the ASEAN regions

Plans

No	Milestones/Subprojects	Timeline
1	<p>Concurrent and Asynchronous Content Sharing:</p> <p>a) To extend reachability of shared content over WiFi using the smart collaboration platform/device for</p> <ul style="list-style-type: none">• Meeting room scenario (20-30 receivers)• Seminar room scenario (80-100 receivers)• Auditorium scenario (150-200 receivers) <p>b) To develop/experiment new content distribution algorithm considering number of receivers, types of receiving device, wireless signal strength etc.</p>	Year 1-2
2	<p>Remote Casting of Presentation:</p> <p>a) To bridge collaborative session (live presentation and teaching session) across urban and sub-urban areas.</p> <ul style="list-style-type: none">• Teacher conducts a presentation at school in the city• Remote students can access and follow the session <p>b) To enable participants to interact with the presenter via chat messaging, posting of questions and also responding to vote/poll session prepared by the presenter</p>	Year 2-3

V. Speaker information:

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VI. Support for speaker—circle or underline any that you wish to request:

- Round trip fare at discount economy class
- Accommodation
- Daily allowance