APEC Smart City Innovation and Technology Cooperation Forum - Innovation Technology Dialogue

Purpose: Information
Submitted by: China
APEC Smart City Innovation & Technology Cooperation Forum
- Innovation Technology Dialogue

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Changzhou Ubitech Co., Ltd.

2014-04-01
1. Background

2. Previous Work

3. Forum Introduction

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Background—World Urbanization

- Asia and Africa: 93% of urban growth
- Global urban population:
  - 1950: 0.732 billion
  - 2005: 3.2 billion
  - 2030: 4.9 billion
  - 2050: over 6 billion
- In APEC, 1995 – 2025 urban population: from 965 million to over 1.75 billion.
Background—Smart City: Features

**INTERNET OF THINGS**
- Measure and sense the context awareness of things
  - Communicate and interact between people, systems and objects
  - Quickly accurately respond to changes
  - Predict and optimize for future events

**INTERCONNECTION**

**INTELLIGENCE**
- Communicate and interact between people, systems and objects

Various Aspects of Smart City

**Resident / community / healthcare**
- Stock, motorcade, monitor and control, navigate,
- Equipment, safety, energy saving

**Smart traffic**
- Logistics, Retail, Auto Service
- Dangerous situation, oil well, transportation, pipeline

**Communication and information**
- Public safety
- Industrial automation
- Text

**Commerce / government / emergency**
- Telemetry
- Pollution detection, alarm
- Logistics, Retail, Auto Service
- Environment interaction

**Low-carbon energy savings**
- Oil, gas, relief location
- Water quality, water, pollution, safety

**Water resources protection**
- Precipitation, flood control, remote equipment
- Electronic payment, real-time information
- Water resources protection
Smart City Challenges

- Healthcare challenge
  - Healthcare in USA: 20% of GDP
  - Healthcare in Canada: 50% of provincial tax revenues
  - Public security challenge

- Cost of traffic jam in USA 2005:
  - US$78 billion and lost 4.2 billion hours
  - Growing at 8% rate every year

- Providing secure and continuity energy challenge
  - Globally, almost one in three people lack access to electricity
  - In developed cities, it is difficult to provide stable energy

- Traffic challenge
  - Cost of traffic jam in USA 2005: US$78 billion and lost 4.2 billion hours
  - Growing at 8% rate every year

- Intelligent Traffic

- Resident/Community
  - Healthcare

- Lower Carbon and Energy Savings

- Water Resource Challenge
  - 2.8 billion people are facing water shortage problem
  - Trends: 4 billion people in 2030
  - Lose 3.6% annual economic growth

- Communication Challenge
  - Online population has grown by 350% since 2000
  - 5.1 billion people can’t be online
  - Various broadband speed:
    - 4.6 MB/s in Asia,
    - 1.1 MB/s in Africa
    - GB/s in Tokyo and Yokohama

- Communication and Information

- Business/Government/Emergence

- Administration Challenge
  - Less efficiency -> 6.8% GDP in some economies
  - 25% reduction in administrative overhead -> 1.5% GDP

- Water Resource Protection

- Smart City Challenges Cont.
Outline

1. Background

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Previous Work

APEC Smart City Industrial Technology Cooperation Forum

December 17-20, 2012  Changzhou Science & Education Town

Opening Ceremony & Keynote Speech  Summit Forum  Changzhou Declaration

APEC Sessions in IEEE International Conferences  Changzhou Research Institute for Smart City
Participants Statistics

- Number of total participants: around 400
- Number of participating economies:
  - 12 APEC member economies: Australia; Canada; China; Hong Kong, China; Japan; Korea; Philippines; Russia; Singapore; Chinese Taipei; Thailand; U.S.A.
  - 1 guest economy: Macau, China.

Participants Statistics

- Number of speakers:
  - >40 speakers;
  - 11 different member economies;
  - >50% from developing economies.
Participants Statistics

- Number of participating enterprises:
  - >60 enterprises
  - 7 different economies
  - >80% from developing economies

- Number of participating technical experts:
  - >100 technical experts
  - 13 economies’ representatives

Outputs

- **Changzhou Declaration** – “To-build Smart City Together”
  - In order to further promote cooperation among APEC member economies in building smart city and smart industry development.
  - It will give a forward-looking and strategic direction for building smart city, industrial innovation and technological cooperation.

- **Contractor Summary Report**
  - An urgent work for the market;
  - Work on applied technology;
  - Apply the research contributions from universities to companies;
  - Cooperation among government, private sector and academics;
  - A useful pilot site for whole APEC cooperation.
Outcomes

Changzhou Research Institute for Smart City

Changzhou Research Institute for Smart City is built during forum.

Outcomes

Website and hitting

Outcomes

- Only in Dec 2012, the total hits is **58497**
- >50% of them come from developing economies

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Outcomes

Media News

- The website of Ministry of Science and Technology of People’s Republic of China
- People’s Daily Website
- Changzhou Daily news
Outline

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Forum Introduction

Based on the project experience, All participants want to continue more activities in building smart city within APEC framework:

- STI priorities: Information Technology, Green Technology, ICT, Low-carbon Energy Revolution, Smart Use of Energy, ...
- Spread the activities in more APEC economies, specially developing economies.
- Exhibitions of industries products and improve the cooperation via free and open trade and investment.
### Place and Date

**APEC Smart City Innovation & Technology Cooperation Forum**

- **Date:** 2014.04.08—04.11
- **Topic:** Innovation Drive & Technology Cooperation
- **Place:** Shangri-La Hotel Changzhou, China

**Planned activities:**
1. APEC Smart City Innovation & Technology Cooperation Forum Opening Ceremony, Keynote Speech and Sub-Forums
2. APEC Smart City Industrial Innovation & Technology Product Exhibitions
3. APEC Research Institute for Smart City Initiative

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### Co-sponsors

**Co-sponsoring economies:**
- Brunei Darussalam; Hong Kong, China; Indonesia; Malaysia; Peru; Russia; Chinese Taipei; Thailand

**Other Economies:**
- Canada; New Zealand; Papua New Guinea; The United States
More than 80% economies would like to participate in the forum.

Speech given by:

14 official representatives of economy
3 unofficial representatives of economy
3 member economies
1 guest economy
participate in the forum actively

Opening Ceremony

Speech by the leader of People’s Government of Changzhou Municipality, China (5min)
Speech by the leader from Department of Science and Technology of Jiangsu Province, China (5min)
Linhao CHEN, Head of PPSTI Delegation, China (5min)
Amin SOEBANDRIO, the former chairman of PPSTI, Indonesia (5 min)
Maxim ROMANOV, ITD Speech by Head of PPSTI Delegation, Russia (5min)
Bryan SIVAK, CTO, Department of Health & Human Services, U.S.A (5min)
Daniel DUFOUR, Head of PPSTI Delegation, Canada (5min)
Sub Forum

- CEO Sub-Forum
- Academician Sub-Forum
- Smart Transportation Sub-Forum
- Smart Healthcare Sub-Forum
- PPSTI Connectivity Session
- Smart Logistics Sub-Forum
- Smart Home Sub-Forum
- Research Institute Sub-Forum

Outputs

- APEC Changzhou Research Institute for Smart City Initiative
- Changzhou Declaration 2014
- Official Website
- APEC Development Report of Smart City
Changzhou Declaration 2014:

- Enhance the cooperation among Business, Government and Academia under APEC framework
- Develop Smart Health, Smart Logistics, Smart Transportation, and Smart Home preferentially
- Build APEC Research Institute for Smart City Initiative
- Cooperation project for Smart City among APEC economies

Build APEC Research Institute for Smart City
Preparation

- Forum Agenda;
- Official Website;
- Guest Invited;
- Supplies Prepared;
- Conference Committee & Work Groups;
- Enterprises Invited.

Website

apec.czubitech.com;
Welcome to Changzhou!

Welcome to Changzhou!