IOT AND SMART CITIES

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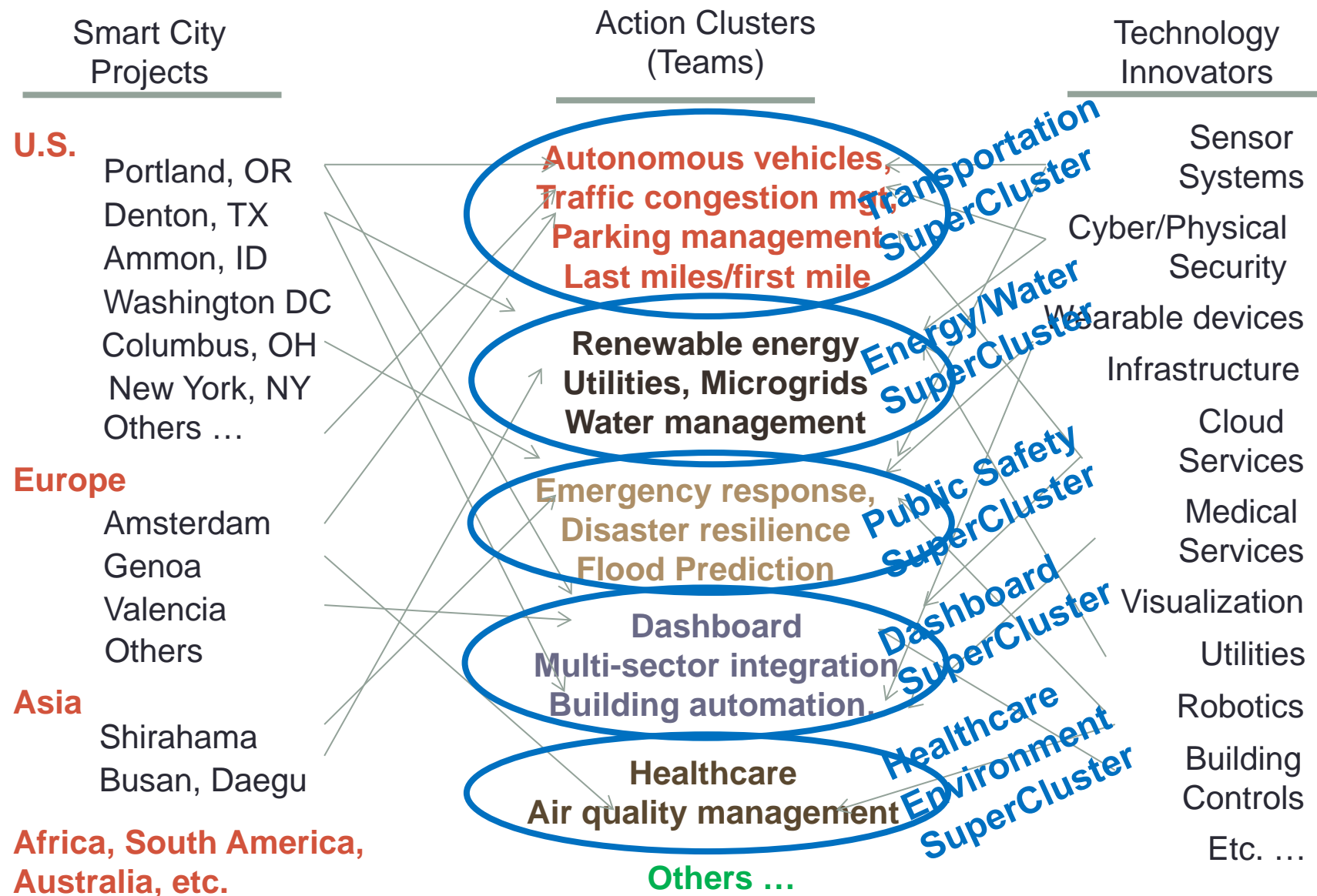
Global City Teams Challenge (GCTC)

- Establish and demonstrate <u>replicable, scalable and sustainable</u> models for collaborative incubation and deployment of interoperable, standard-based Internet of Things (IoT) solutions and demonstrate their <u>tangible and measurable</u> benefits in communities and cities

- Tackle the <u>cybersecurity, privacy, and trustworthiness</u> issues as the first order concern.

GCTC Approach "SuperClusters"

Smart City Projects

Action Clusters (Teams)

Technology Innovators

U.S.

Portland, OR
Denton, TX
Ammon, ID
Washington DC
Columbus, OH
New York, NY
Others …

Europe

Amsterdam
Genoa
Valencia
Others

Asia

Shirahama
Busan, Daegu

Africa, South America, Australia, etc.

Autonomous vehicles, Traffic congestion mgt, Parking management Last miles/first mile

Renewable energy Utilities, Microgrids Water management

Emergency response, Disaster resilience Flood Prediction

Dashboard Multi-sector integration Building automation.

Healthcare Air quality management

Others …

Transportation SuperCluster

Energy/Water SuperCluster

Public Safety SuperCluster

Dashboard SuperCluster

Healthcare Environment SuperCluster

Sensor Systems
Cyber/Physical Security
Wearable devices
Infrastructure
Cloud Services
Medical Services
Visualization
Utilities
Robotics
Building Controls
Etc. …

GCTC Clusters

- Over 200 Action Clusters since 2014
  - **160+ cities and communities, 400+ companies, universities, non-profits**
  - https://pages.nist.gov/GCTC/action-clusters/

- 7 SuperClusters
  - Transportation
  - Public Safety
  - Utility
  - Wireless
  - City Data Platform
  - **Data Governance/Exchange SuperCluster (New)**
  - **Agriculture and Rural area SuperCluster (New)**
  - https://pages.nist.gov/GCTC/super-clusters/

2018 GCTC-Smart and Secure Cities and Communities Challenge (SC3)

NIST-DHS S&T CSD Partnership

- Many cities and communities are aware of the cybersecurity, privacy, trustworthiness risks in their deployments, but not many of them have a clear vision and expertise to address them.

- Industry stakeholders are eager to address cybersecurity, privacy, and trustworthiness issues in smart cities/communities as well, but struggling to find a clear business and engagement model.

- 2018 GCTC, in partnership with US Department of Homeland Security Science and Technology Directorate (DHS S&T) will tackle these issues as the first order concern.

2018 GCTC-SC3 Concept

Smart Cities Partnership

NIST
GCTC Community

110 Project Teams
160 Cities
400 Companies, Universities

DHS S&T
Community

Companies
Universities
National Labs
Int'l Partners

Smart and Secure Cities and Communities Challenge

- Building on NIST's Global City Teams Challenge (GCTC) program, NIST and DHS S&T will run a 12 months program for teams of cities and innovators to demonstrate value and return on investment for designed-in trustworthiness for smart city deployments.

- A team building conference ("Kickoff") is planned for February 6-7, 2018 in Washington DC.

For More Information

- Contact
  - Sokwoo Rhee (sokwoo.rhee@nist.gov)

- 2018 GCTC-SC3 Kickoff Conference in Washington DC
  - https://pages.nist.gov/GCTC/event/gctc-kickoff-2018/

- GCTC web site:
  - https://pages.nist.gov/GCTC/
  - https://www.nist.gov/el/cyber-physical-systems/smart-americaglobal-cities

- To sign up for updates:
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