

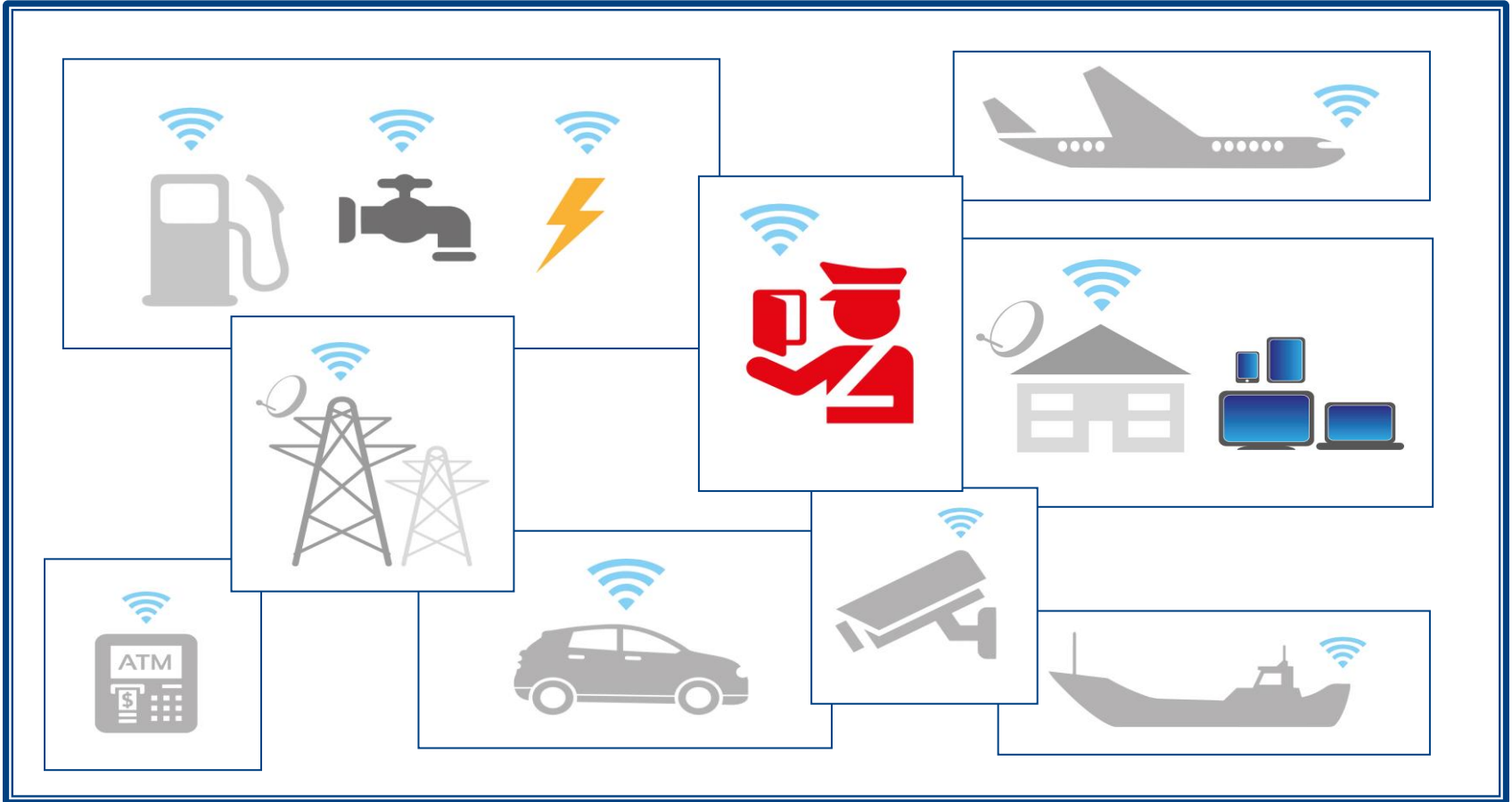


# Infrastructure Challenges for Digitalization

## 19<sup>th</sup> September 2016

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*“A Network of Networks” needs a mix of technologies*



*“A Continuum of Software, Industry & Networks”*



**In & around the home:** Connected things, Fixed Broadband, emergence of 4KTV

**In the car:** Safety services, infotainment, map updates, differential GPS & telematics



**In the air:** Flight safety & security, in-flight entertainment

**At sea:** Oil rigs, ships: Connectivity indispensable to smart grids, crew welfare, passenger connectivity



- ◆ **Global seamless end-to-end connectivity**
- ◆ **Very High Capacity Networks and open / interoperable Standards**
- ◆ **To address**
  - ❑ **Different geographies** around the world - white spots in all countries
  - ❑ **Vulnerability** as entry points into networks increases
  - ❑ **Congestion** as traffic increases impacting users' experience
  - ❑ **Risk of Digital Chasm** as operators focus on urban/ densely populated areas
  - ❑ **Sustainability issues** - many operators still monetizing 3G/4G investments to ensure enhanced connectivity services everywhere

**Ubiquity & Resilience - essential requirements to ensure “success”:  
global, inclusive, sustainable, reliable**