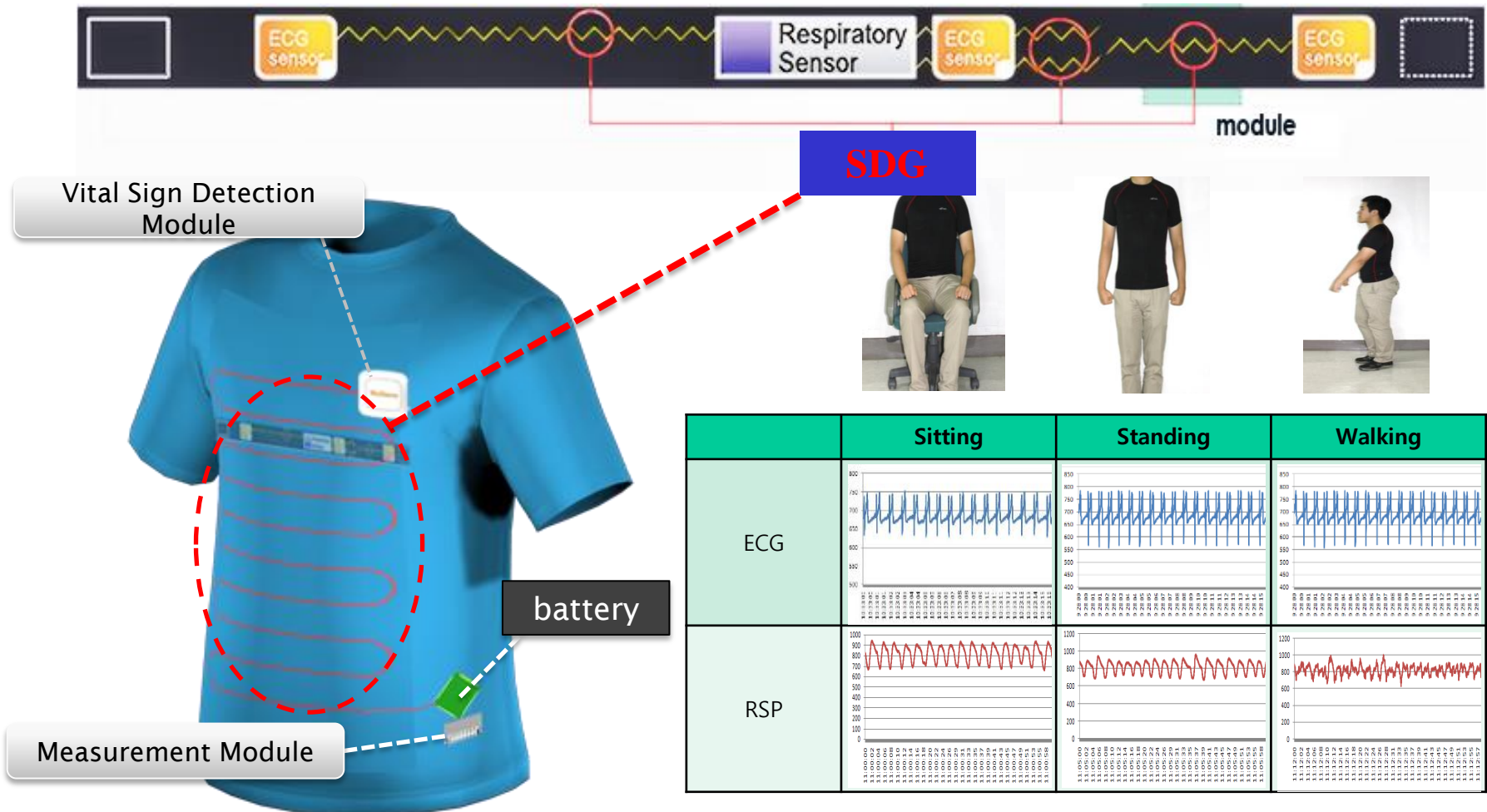


# Applications of Smart Digital Garment (SDG)



## Health Monitoring Wear for Seniors or Disabled People

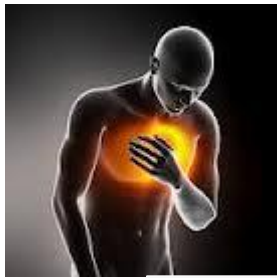
- Measuring vital signs such as heart rate (ECG) and respiration (RSP) etc.
- Transmitting the health status of individuals to caretakers.



# Digital Garment for Seniors or Disabled People

SDG embedded clothes transmits the health status of seniors or disabled people

outdoor



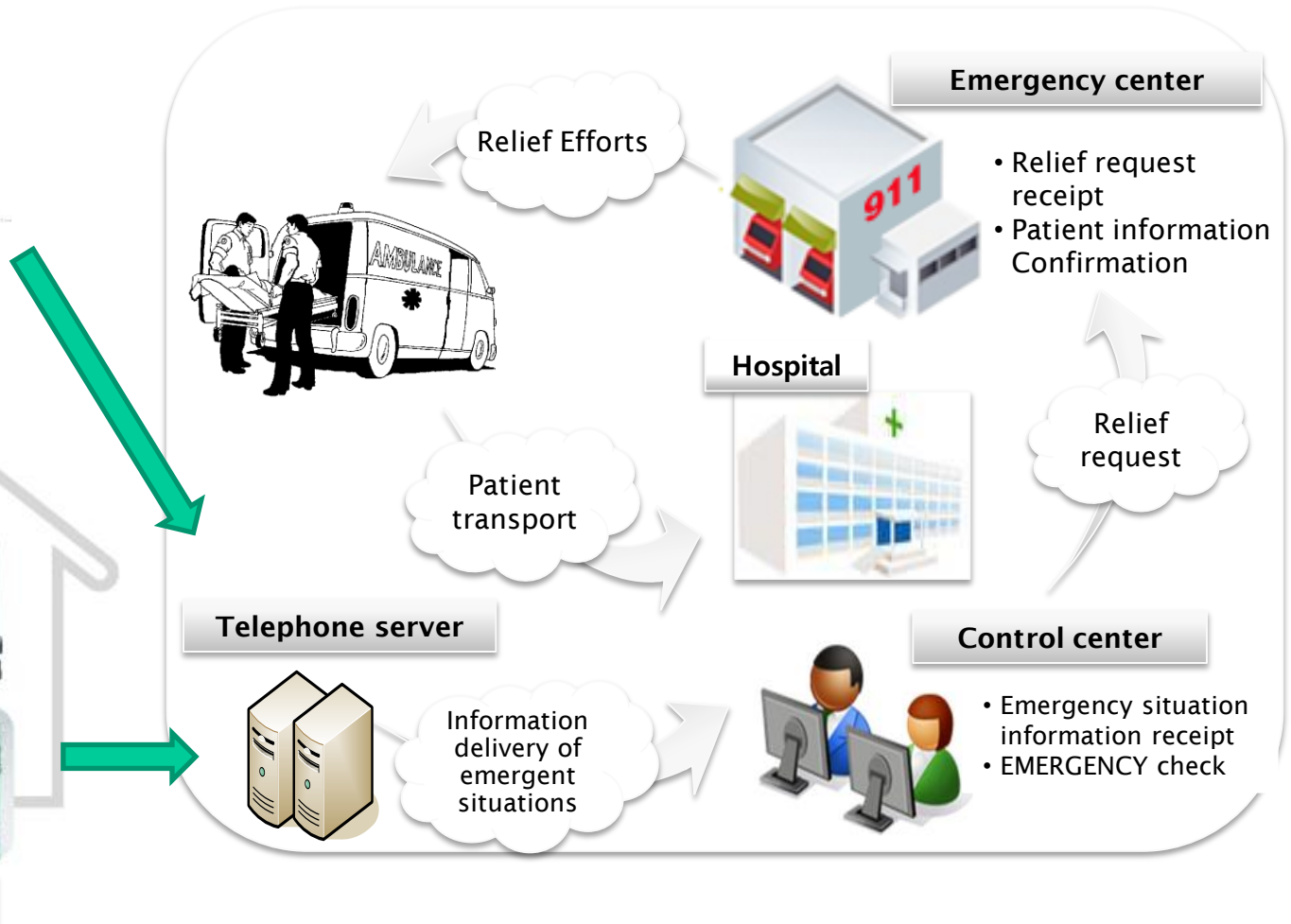
Cell phone transmission

indoor

Transmitter in house

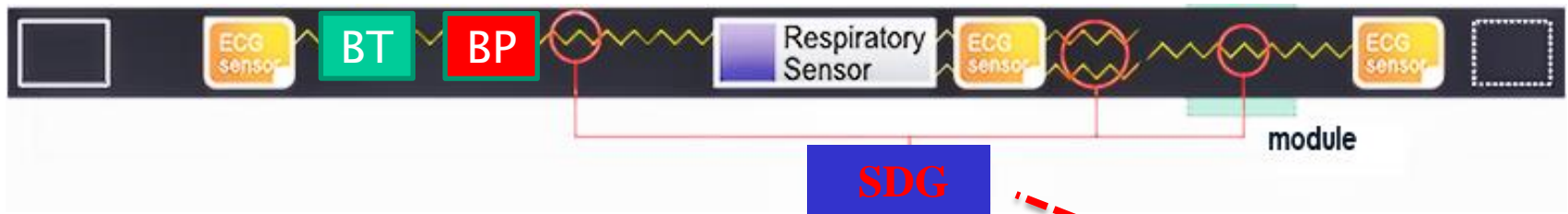


Motion/vital sensor



# Health Monitoring Patient Gown for SDG Patient Management System

Real time measurement of vitals (temperature (BT), ECG, RSP, blood pressure (BP) etc.)  
Real time transmission of patient's vitals to medical staffs.





# SDG Patient Management System

- Real-time wireless transmission of the patient's vital signs in emergency room, ICU(Intensive Care Unit), and wards
- Integrated management and analysis by monitoring the patient's health status
- The nurses can be liberated from simple and repetitive tasks and concentrate on high-value-added work

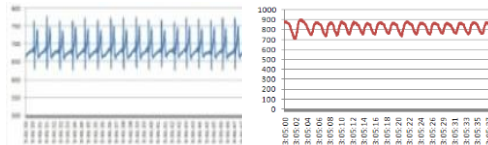
## Patients' Vital Signs



### Configuration and method of measurement



- Electrocardiogram(ECG)
- Pulse
- Respiration
- Body Temperature
- Blood Pressure

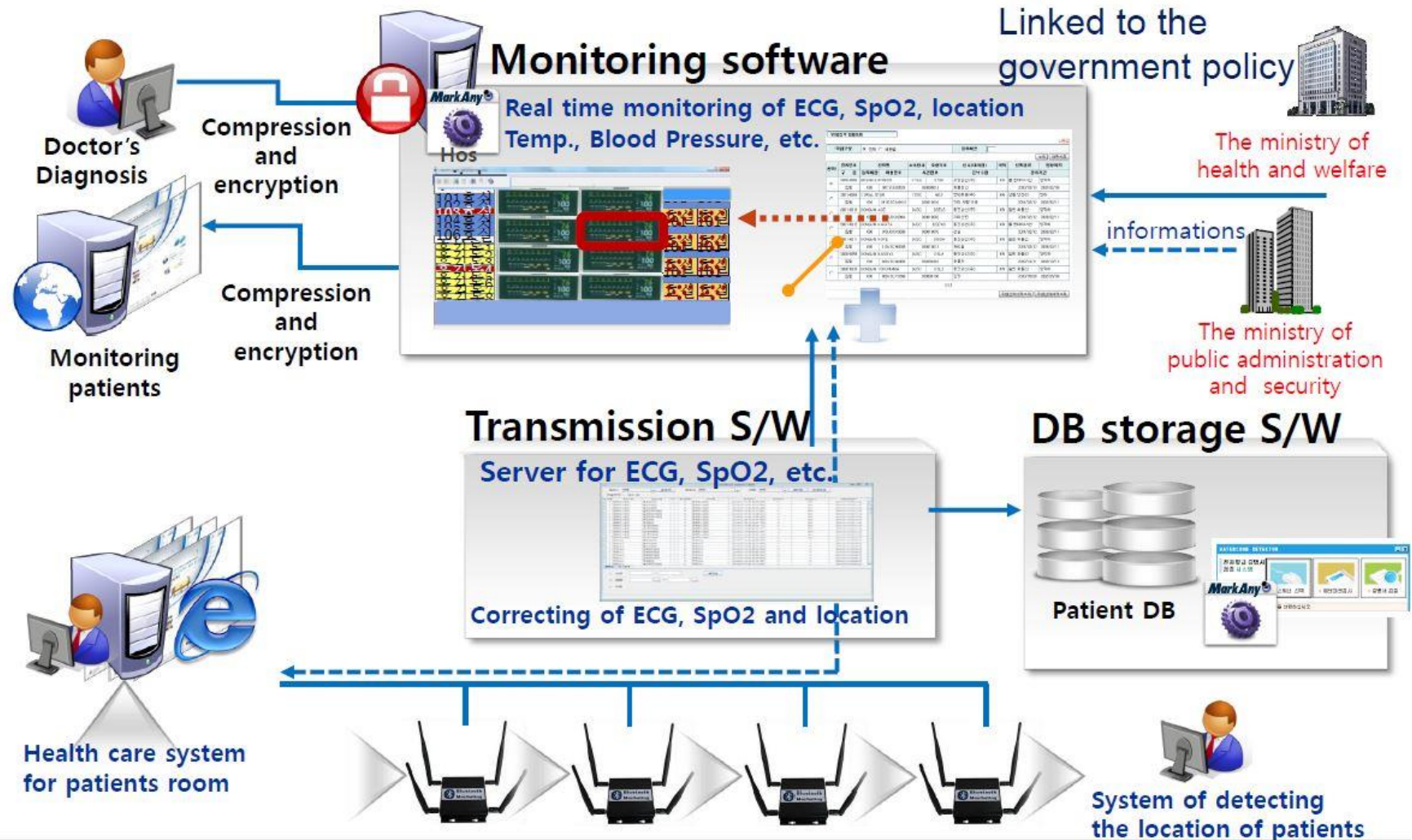


## Medical Signal Management Center



- Bio-signal management and analysis
- Rapid treatment of patient with abnormal sign

# SDG Patient Management System at a Glance



# Why SDG Patient Management System ?

1. Reduce the number of staffs on duty means the reduction of healthcare cost for caretakers, insurance company, government and patients.
2. Significantly increase hospital's revenue by sales and/or lease SDG patient gown.  
The use of current vital sign machines cannot be charged.  
Those machines are hospital's investment to be depreciated.
3. Immediate response to patients in life-threatening conditions.  
At least one-third of ER visits are not serious enough to stay in ICU.  
SDG patient management system helps medical staffs to do punctual response to patients with urgent medical needs.
4. SDG patient management system improves the quality of telemedicine.  
Patients can lease SDG clothes after discharge in order to be monitored continuously. Medical staffs can check the improvement of patient's condition at anytime.



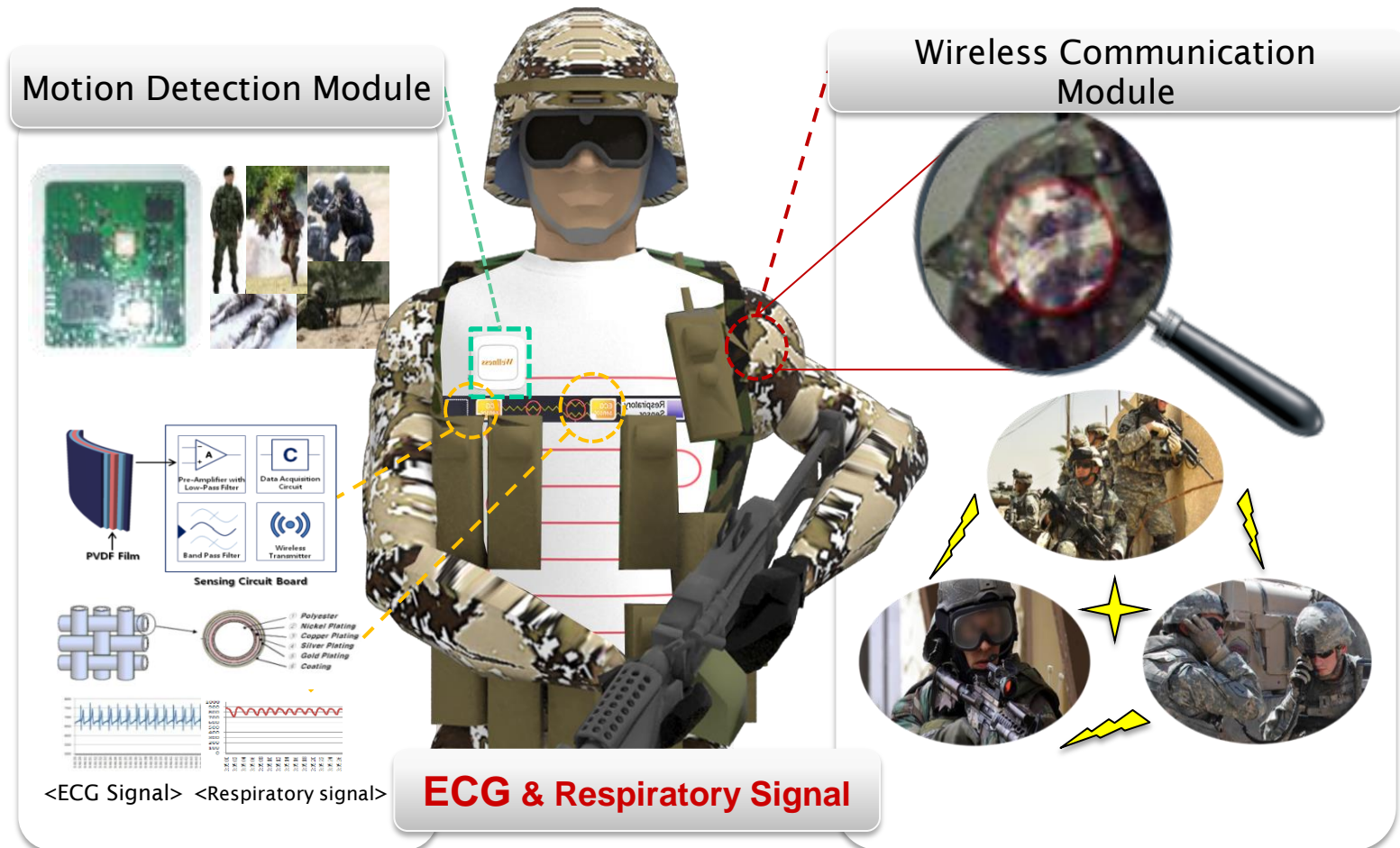
# SDG Patient Management System (S. Korea)





# Smart Military Combat Uniform

- Awareness of location, moving distance, and status of soldiers in operation field.
- Acquisition of vital signs of soldiers.
- Multi-directional communication of voice and data among soldiers and/or commanding center.



# Smart Military Combat Uniform System (Battle field)



Real-time Vital signs  
and Location Measurement



Data Transmission

Red-dead, yellow-wounded, Blue-normal



Headquarter

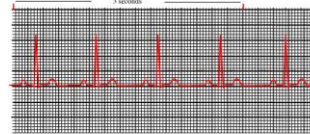
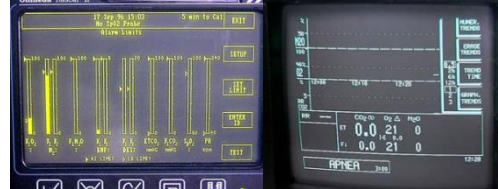
Monitoring vital signs  
of each soldiers

- Discriminate the wounded and dead.
- Save the wounded soldier on time.
- Relocate soldiers to the losing area.

# Smart Pilot Uniform Rescues Missing Pilots in Action (Navy / Air Force)



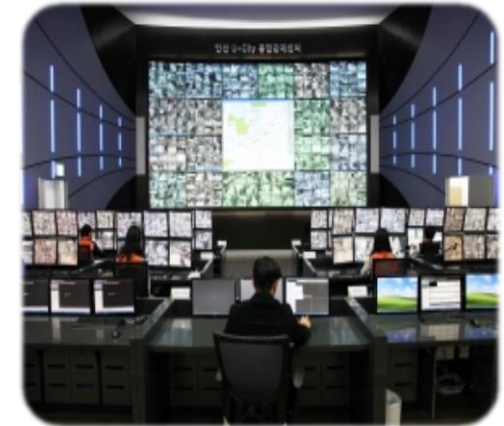
Missing Pilot in  
Operation



Real-time Vital-sign  
and Location Measurement



Signal Transmission



Monitoring vital-signals  
(Management of  
personnel and situation)