

2020
Annual INCOSE
international workshop
Torrance, CA, USA
January 25 - 28, 2020

# **Smart Cities Initiative**

www.incose.org/IW2020

## **Smart Cities Initiative**





### **CHAIR**

Jennifer Russell (JLRussell@GarverUSA.com)

## **MEMBERS**

10 active and growing fast! Join the movement soon

### **CO-CHAIR**

Marcel van de Ven (mtfmvandeven@gmail.com)

## **INCOSE CONNECT ADDRESS**



https://connect.incose.org/Progr amsProjects/SmartCitiesInitiative /SitePages/Home.aspx

## **INCOSE WEB PAGE**



none yet... to come

## **Charter Summary**





#### WG PURPOSE/MISSION

The Smart City concept comprises Smart **Infrastructure**, Smart **Transportation**, Smart **Energy**, Smart **Healthcare**, and Smart **Technology**, and more. The Systems Engineering knowledge, experience, and skillset of INCOSE members is strategically positioned to support our global communities as they embark on supporting the multi-faceted Smart Cities CATS. By leveraging systems engineering, this initiative will support communities" Smart Cities:

- 1. Concepts
- 2. Applications
- 3. **Technology**
- 4. Services (CATS)

#### WG GOAL(S)

Leverage INCOSE knowledge and skills to create a model that illustrates the resources and opportunities of Smart Cities thereby enabling:

- ?interconnectivity
- reuse
- consistency

#### **WG SCOPE**

This Initiative will support municipalities and public agencies in adopting Smart Cities technologies by applying systems engineering principles and tools.

- support municipalities and public agencies
- holistic perspective / logical extensible open framework / enable integration
- specific application of System of Systems approach to using Systems Engineering
- design, development, and operations can be clearly, completely, and concisely developed
- well-defined application that can be tailored

## **IW Outcomes**





#### **IW Outcomes**

- Select specific Products and Actions to be successful over the next year.
- Review model
- Identify teams for portions of model or deliverables

## **Planned Work past IW**





#### **PLANNED ACTIVITIES**

Working Group engagement across INCOSE

#### **Potential Actions**

- INCOSE"s participation in external events? workshops, conferences, plenaries, etc.
- Emphasize INCOSE persons" presentations, panel participation, etc.
- Conduct separate paper and panel track at INCOSE symposiums
- Prepare articles and white papers that are published in external (outside of INCOSE) journals.

#### **PLANNED WORK PRODUCTS**

#### **Potential Products**

- Architecture template for Smart Cities, possibly MBSE model
- Context model
- Stakeholder model
- Stakeholder Management Plan
- Tailored Systems Engineering Management Plan (SEMP) for Smart Cities (gathers and helps drive all 30 of the processes specified in ISO/IEC 15288)
- Demonstrated interface template for Smart Cities CATS (N2 diagram)
- Smart Cities Concept of Operations Template
- Supporting public communication tools:
- Definition of why it?s important to use a systems approach to Smart City CATS, tailored for various audiences in the public sector (elected officials, planners, designers)
- Hand-out on considerations for future integration? Smart Cities step one.
- Executive Sales Kit Package
- Brief Presentation(s) aimed at? C-Suite, Mayors, Legislators, Executives to assist them in the understanding of the importance of a holistic view of all the new integrations that are likely to occur