

INCOSE launches the ‘Smart Cities Initiative’



SAN DIEGO (September 2023) – The International Council on Systems Engineering (INCOSE) is pleased to announce the launch of the “Smart Cities Initiative”. The INCOSE Smart Cities Working Group has developed the INCOSE Tailored Unified System Framework (TUS) of a Smart City (which is outlined in this document) with the aim of helping city authorities to make decisions with the human needs in mind as well as the opportunities offered by advancing technologies.

As cities around the world are unevenly waking up after a pandemic coma, cities are seeking opportunities to continue evolving toward being ‘smart.’ Cities may wish to take a new approach to provide services that meet the goals of the city and needs of the residents in new and innovative ways. The implementation of such approaches will define the new “smart city.”

We propose a human-centric model to help city authorities to make decisions with human needs in mind. Such a human-centric model will help identify and classify technological investments with the greatest positive impact for their residents. This presentation will introduce this human-centric model, the INCOSE-TUS Smart Cities Reference Model.

The INCOSE Smart Cities Initiative draws upon the experience and knowledge of INCOSE members to support communities in developing their Smart Cities Concepts, Applications, Technology and Services (CATS) by leveraging systems engineering tools and principles.

The initiative has been prepared by a core team, led by Jennifer Russell, who stated *“We cannot underestimate how important taking a holistic and smart approach to the development of our cities going forward is. We hope that municipalities and public agencies will find the INCOSE Tailored Unified System Framework a useful aid helping them to secure our futures.”*

Olivier Dessoude, Technical Director of INCOSE, said *“The Team behind the Smart Cities Initiative are producing some very useful products and I know they are planning to develop more tools to assist with the development of Smart Cities, I would personally like to thank Jennifer Russell, EISE, CSEP, Jargalsaikhan Dugar, Bayartsengel Batsaikhan, Rael Kopace, CSEP, Marcel van de Ven, CSEP, MSc, Jon Mooney, PE, Dale Brown, P. Eng and TUSS LLC”.*

To get your copy of “Smart Cities Initiative,” visit the website: incose.org/smartcities

Suggested Social Media Posts

If you would like to share this news on your social media platforms, we encourage you to use the social media post below:



LinkedIn, Facebook, Instagram, and X (Twitter):

INCOSE has launched the Smart Cities Initiative which introduces *the INCOSE-TUS Smart Cities Framework*; a human-centric framework that aims to help city authorities to make decisions with the human needs in mind. Read it now at www.incose.org/smartcities

#INCOSE #SystemsEngineering

Notes to Editors:

About the International Council on Systems Engineering

The International Council on Systems Engineering (INCOSE) is a not-for-profit membership organization that promotes international collaboration in systems engineering practice, education, and research. INCOSE's mission is to "address complex societal and technical challenges by enabling, promoting and advancing systems engineering and systems approaches." Founded in 1990, INCOSE has more than 65 chapters and over 21,000 members and associates worldwide. For additional information about INCOSE visit www.incose.org.

About the INCOSE Smart Cities Initiative

The INCOSE Smart Cities Initiative draws upon the experience and knowledge of INCOSE members to support communities in developing their Smart Cities Concepts, Applications, Technology and Services (CATS) by leveraging systems engineering tools and principles.

This Initiative will support municipalities and public agencies in adopting Smart Cities technologies by applying systems engineering principles and tools. This Initiative will support a holistic perspective of development of Smart Cities infrastructure and CATS through an open framework that enables integration of new Smart Cities CATS as the resources evolve. This is not intended to provide information on funding Smart Cities CATS.

INCOSE will emphasize how Smart Cities is a specific application of System of Systems approach to using Systems Engineering. Our in-depth understanding of SoS assures that a fundamental foundational approach to establishing Smart City design, development, and operations can be clearly, completely, and concisely developed. This foundation understanding will then help future cities (large and small) benefit from a well-defined application that can be tailored to a city's specific needs.