2020
Annual **INCOSE**
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Digital Engineering
Information Exchange

www.incose.org/IW2020

Digital Engineering Information Exchange

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INCOSE CONNECT ADDRESS

https://connect.incose.org/WorkingGroups/DigitalArtifacts/_layouts/15/touchapp.aspx?Mode=TeamSite&Page=ListOfApps&Path=

INCOSE WEB PAGE

https://www.incose.org/incose-member-resources/working-groups/transformational/digital-engineering-information-exchange

Charter Summary

WG PURPOSE/MISSION

The initial purpose of this working group (WG) is to fulfill the needs identified by the international representatives from the digital artifacts challenge team. The reason for the working group is to adopt previous and evolving knowledge regarding the exchange of digital engineering information between multiple disciplines, digital technologies, and throughout the systems? lifecycle. The WG will strive to ensure that the way we define, create, use, and exchange digital-artifacts is acceptable.

WG GOAL(S)

- Goal 1 - To Define a Finite Set of Digital Artifacts.
- Goal 2 - To Develop Constructs for assembling of Digital Artifacts.
- Goal 3 - To Build a Consensus-Based Standards Framework for Digital Artifacts Exchange:
- Goal 4 - To Adopt a Common Lexicon

WG SCOPE

- This working group?s efforts will span the systems engineering lifecycle as it relates to the digital artifacts for decision-making and its consumption by downstream engineering activities.
- It will also address the exchange of digital artifacts between various technical disciplines involved in the systems engineering lifecycle.
- Finally, it will cover the presentation of digital engineering information to classes of technical and non-technical stakeholders within Federal Government?s glo

IW Outcomes

IW Outcomes

- Completed a draft and community Vetted High Level Concept Document (HLCD) for digital engineering that explains concepts in the lexicon.
- Developed a concept SysML model for the Digital Artifact Exchange Concept.
- Developed a Digital Viewpoint Model that requestors can use to define what they want to see in the digital views.
- Developed the objectives and a plan to conduct a DEIX Challenge as a proof of concept for the Digital Viewpoint Model as a means to define and receive the digital views as defined.

Planned Work past IW

PLANNED ACTIVITIES

Conduct proof of concept challenge at the 2020 IS

Publish High Level Concept Model in the INCOSE Insight.

Get the Digital Engineering Primer through Impactful Products process before the IS 2020

Produce Draft article with addendum on reference DEIX standards Framework by June 2020.

Complete the Digital Ecosystem Reference Model for WG review by June 2020

Produce Draft Digital Viewpoint Model Methods and approach by end of IW 2021.

PLANNED WORK PRODUCTS

DEIX Primer

Digital Engineering Ecosystem Reference Model

DEIX Standards Framework

Digital Viewpoint Model Methods and Approach.