

# Space Assigned Numbers Authority









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## Description



- Need to create protocol parameters registries for space telecommunications protocols.
- Space Assigned Numbers Authority (SANA)
  - Created by the CCSDS Yellow Book #313
  - Inspired from the Internet Assigned Numbers Authority (IANA, iana.org) but with CCSDS/Space/Agencies specifics.
  - Service to the space data systems standards community

# Why Registries?



- Single place for protocol parameters
- Managed assignations of protocol parameters
- Garantees uniqueness
- Enables multiple sources of assignation requests:
  - From one or multiple standards documents
  - From space agencies
  - From other organizations (if permitted)
- Assignation policy defined by the working group creating the registry

## Registry Examples



- Spacecraft ID
  - Created prior to SANA existence. Managed by WDC.
  - Each spacecraft has a unique ID
  - ID is used in protocol frames to reference the spacecraft.
  - Registry garantees uniqueness

## Registry Examples



#### XML Registry for CCSDS/Space

#### Namespaces:

- urn:ccsds
- Registered namespace garantees the tree is dedicated to CCSDS protocols.
- Sub-tree will be managed by SANA on behalf of CCSDS

#### • Schemas:

- Registry enables applications to get the latest version of the schema.
- Versioning in the registry enables applications to use a specific version of the schema when needed.

#### What's next?



- Need for an assignment or new registry for space data systems protocol parameters?
  - Go to http://sanaregistry.org
    - Verify if the registry exists
    - If yes, then read the registration policy and proceed as required
    - If no, then write a CCSDS document describing the need for a registry.
  - Ask help at mailto:info@sanaregistry.org