

# ECSS SpaceWire

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## 4 Standards published in the E-50 branch (communications)

- **E-ST-50-12C “SpaceWire Links, nodes, routers and networks”**  
(31 July 2008) [“Benchmarking Cleaning” of E-50-12A, 24 Jan 2003]  
SpW basic set of requirements covering physical level up to network level
- **E-ST-50-51C “ SpaceWire Protocol identification”**(5 February 2010)  
It specifies protocol identification scheme to allow different protocols to operate concurrently over a spacewire network without interferences
- **E-ST-50-52C “SpaceWire Remote Memory Access Protocol (RMAP)”** (5 February 2010)  
To configure a SpW network, to control SpW units and to gather data & status information from these units
- **E-ST-50-53C “SpaceWire CCSDS packet transfer protocol”**  
(5 February 2010)  
To transfer CCSDS packets across a SpW network

- ❑ **These ECSS SpW standards have taken full advantage of the SpW WG inputs, expertise and products**
  - e.g.: E-ST-50-51: based on “SpaceWire protocol ID Draft B (Jan 2005)
  - E-ST-50-52: based on “SpaceWire RMAP Protocol Draft F (4 Dec 2006) developed by the SpW WG.
  
- ❑ **The protocol standards were originally intended to be published as single doc (E-ST-50-11)**
  
- ❑ **ECSS decided:**
  - **to publish them as 3 separate documents** (to easy future introduction of additional protocols with minor impact on the maintenance/update/use of the standards)
  - **To dedicate to SpW the numeration code E-ST-50-5x and to number according the 3 protocol standards just issued**  
(E-ST-50-12 is intended to be renumbered as E-ST-50-5x doc at next issue )
  
- ❑ **No ECSS SpW handbook today envisaged**

# Use/Maintenance of ECSS SpW documents



- **ECSS community is committed to use these ECSS standards**
- **ECSS policy is to promote widest use of ECSS standards**
  - ➔ **Doc are available and downloadable free of charge**
  - ➔ **International Space community is encouraged to:**
    - ➔ **use the ECSS SpW standards**
    - ➔ **...and provide feedback to ECSS**  
**for the maintenance of the published standards**  
**for the production of what needed and still missing.**

**So to achieve wide use of a single set of SpW standards (with avoidance of duplication by concentrating efforts rather than disseminating them in different, potentially diverging, initiatives).**

# Use/Maintenance of ECSS-E-ST-50-12C



- **E-ST-50-12C updating not yet in the ECSS Work-plan**

**➔ This WG is encouraged to:**

- take the initiative to assess if this is necessary,
  - and if so, to provide ECSS with rational, proposal and inputs for its updating
- **If major changes are necessary, a new version can be considered**

Note: few CRs just received (2 from Nec Toshiba; 1 from Cea Saclay)