

## LOFAR: Supporting HDF5

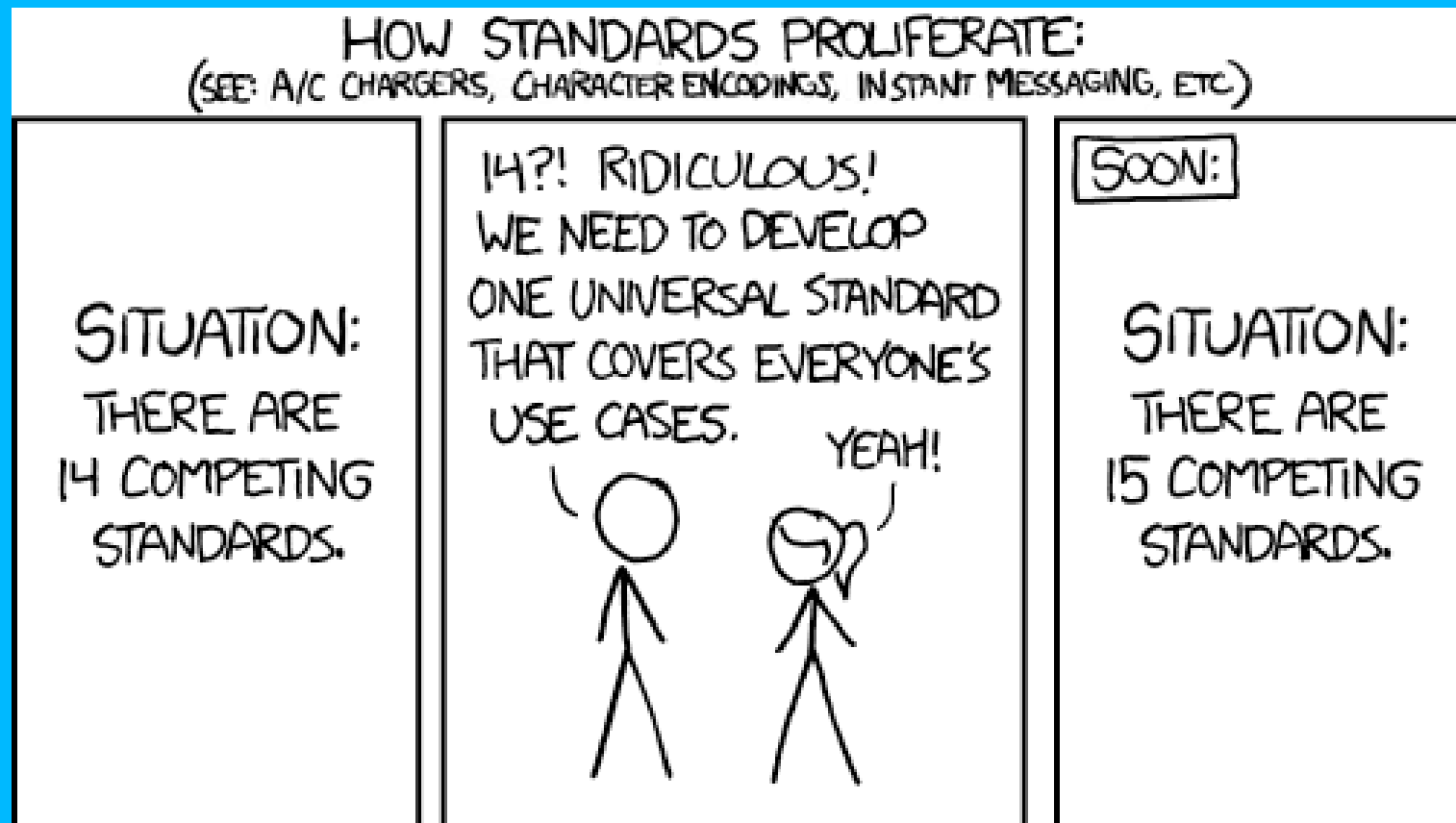
ADASS XXV, Sydney, 2015-10-26  
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- Output since 2011
  - Initially processed using format converters
  - Post-processing pipelines slow to adopt
- Why HDF5?
  - Describes ALL meta data
    - Self contained
    - Reduces programmer effort & errors
    - Aids automated processing



- Existing tooling:
  - Support old formats
  - Hard to adjust
- Converters seem sufficient, but:
  - Loses meta data
    - Ill-described data → custom extensions, errors
    - Hard to process automatically
  - Has cost
    - Read+write all data
    - Must stream data

- Upgrade tooling
  - Allows a cleaner tool chain → easier to extend
  - Allows cleaner formats → fewer errors
  - Can be hard (no resources, no internals knowledge)
- Extend old formats → “MS Word” approach
  - Within format
  - Wrap format (not backwards compatible)
  - Add extra file
- Do nothing
  - Everyone writes custom converters → more effort & errors
  - Tools can't use new meta data → less science



<http://xkcd.com/927>