

LMC ANT team Wrap-up

SKA LMC Harmonisation - Madrid - 11-13 April



SQUARE KILOMETRE ARRAY

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What have we agreed

Highest priority topics defined:

1. **SKA Naming convention for devices** - Lize + AndreaCr (+ ? + email to all elements for inputs to start with) - **High**
2. **Element Logging & Central Logging** - Simone + Lize (+ MatteoDiC TM + Elizabetta CSP)- **High**
3. **Element Archiving & Central Archiving** - Simone + AndreaDeM + AndreaCr (+ ? + ?)
4. **Element Alarms Handling & Central Alarms Handling** - AndreaDeM + AndreaCr (+ ? DSH + Elizabetta CSP)
5. **SCM - SKA Control Model states and modes** - Sonja + (Francesco DSH + Carlo CSP + Vatsal TM)- **High**
6. **Long running/Timestamped commands** - AndreaDeM + Simone (+ Nick + Elizabetta CSP)
7. **Setting many parameters and role of LMC in configuration** - Sonja + AndreaDeM + AndreaCr (+ Nick + Carlo CSP) - **High**
8. **Define how to address Tango framework interactions in the ICDs** - Nick + AndreaCr + Lize + Sonja
9. **Rolled-up monitoring on logical level for Element and Capabilities** - Lize + Sonja- **High**
10. **CSP configuration/sequencing** (may be internal to CSP?) - Sonja + AndreaDeM (+ Carlo CSP) - ???
11. **Terminology / Glossary** - ANT team to discuss with SKAO
12. **HMI Guidelines** - Late addition - SKAO/ANT team to discuss with TM consortium

Can we agree on the names for the action teams right now?

PS Involvement from Nick/SKAO and Tango experts as appropriate

In principle agreements

- LMC :
 - is the point of control from TM and implements high level monitoring of Element and its capabilities for general **operational** control
 - interprets information from sub-elements to roll-up and report status, configuration and alarms
 - is not a **single** point of access/communications between TM and Element
 - TM can communicate directly to lower level devices for low-level manual/engineering control, drill-down monitoring, archiving
 - LMC does not have to implement anything in addition to what Tango provides for low level control and drill down monitoring/archiving
 - LMC has to intelligently
- SCM:
 - important to align with Tango ASAP
 - not required to implement lower than LMC
 - a lot of work from consortia already
- Base classes make sense:
 - SKA Tango device
 - SKA LMC Device server
 - May be others like SKA Element LogConsumer

In principle agreements (cont.)

- Element logging, archiving, alarms handling:
 - a lot of work from consortia
 - not too far apart in concepts
 - coordinate within the action team to draft solution
- LSR, LIG, SKA Tango Guidelines:
 - not the bible - can will be changed
 - align/annotate/reword to align with Tango and avoid confusion ASAP
 - may eventually be rolled up into a single "SKA Control Systems Guideline"

Can wrap-up quickly

- Addressing Tango framework in the LMC ICDs
- Rolled-up monitoring on logical level for Element and Capabilities

Further discussion needed

- Long running/Timestamped commands
- Setting many parameters and role of LMC in configuration
- CSP configuration/sequencing (may be internal to CSP?)
- Terminology/glossary
- The other issues in the "SKA Control System Guidelines"

Way forward

- Coordinating LMC ANT team member should:
 - confirm action team to conclude these topics
 - coordinate telecon discussions within action team
 - analyse and include work from consortia
 - involvement and direction from Nick as appropriate
 - discuss solution with Tango experts (as appropriate, subject to availability)
 - use Tango forum as appropriate
 - discuss solution within LMC ANT team for ratification
 - distribute for comments/inputs to LMC community
 - move on to the next topic

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Questions?