



International
Centre for
Radio
Astronomy
Research

SKA Regional Centres - Australian Investment Overview

Peter Quinn
Executive Director, ICRAR

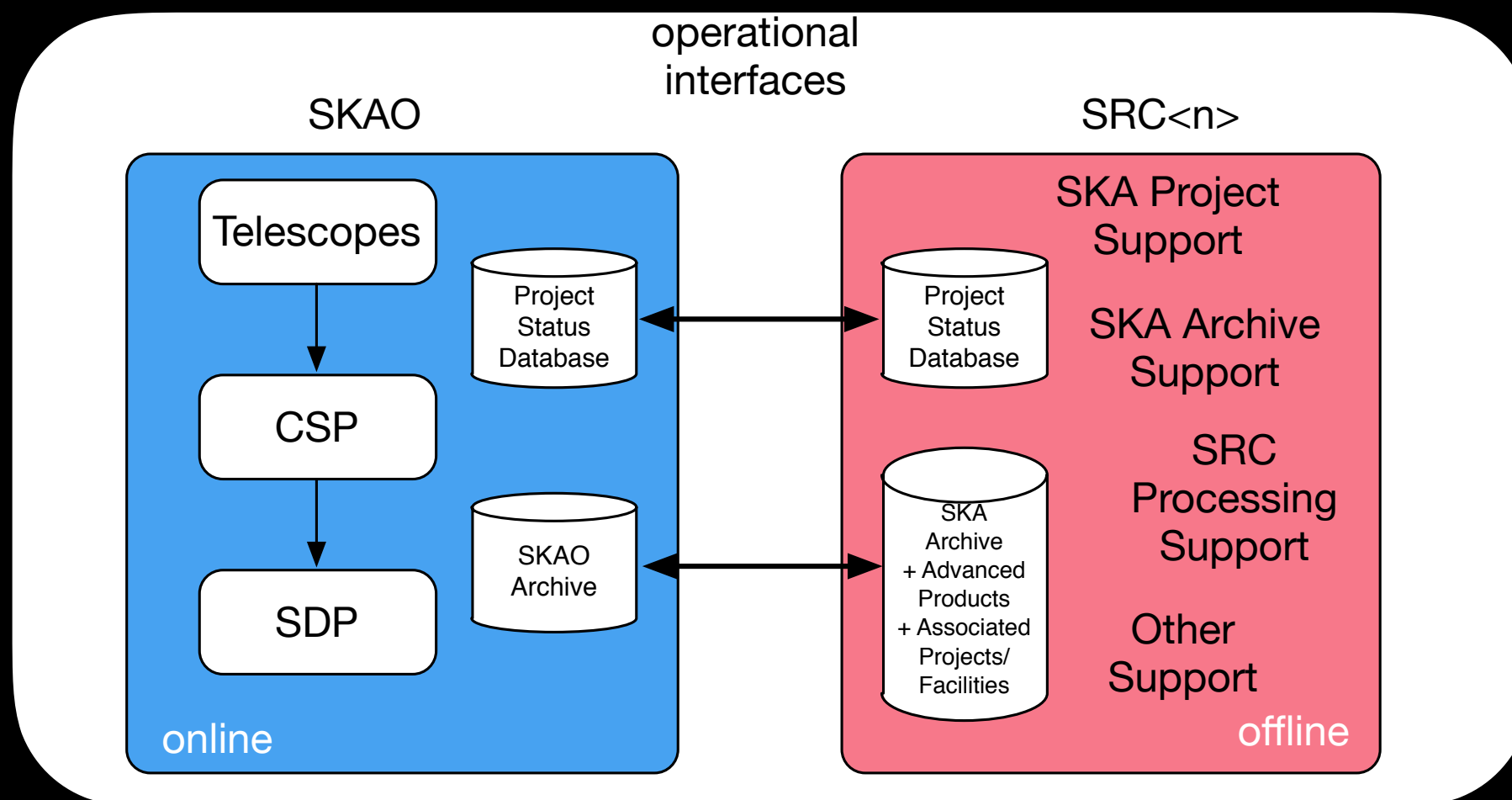


THE UNIVERSITY OF
WESTERN AUSTRALIA

SKA Regional Centres

BACKGROUND

- ★ 2016 - SKA Data Flow Advisory Panel identified the gap between the scope of SKAO construction funding and the needs of KSP teams plus the creation/curation of a long term science archive - community encouraged to begin SKA Regional Centres (SRC) initiatives





SKA Regional Centres

BACKGROUND

- ★ **2016 - SKA Regional Centre Coordination Group (SRCCG) formed (Gaudet (Canada), Connolly (LSST), Wise (NL), Bird (LHC), Deegan (SKAO), Quinn (Aus/NZ), Rees(SKAO), Yogesh(India), Yu (China), Verdes-Montenegro(Spain), Bolton(SKAO), Chrysostomou(SKAO)).**
- ★ **2016 - Australian New Zealand SKA Coordination Committee (ANZSCC) formed AusSRC Working Group to initiate community engagement**
- ★ **2017 - AENEAS (EU) and ERIDANUS (Aus/China) project started**
- ★ **2018 - ANZSCC formed AusSRC Management Committee to manage AusSRC development (ICRAR/CSIRO collaboration - Quinn (ICRAR), Pearce(CSIRO), Johnston-Hollitt(MWA), Guzman(ASKAP), Tingay (ICRAR), Wicenec(ICRAR), Varetto(Pawsey))**



Commonwealth Funding

- ★ 2017 CHINA-AUSTRALIA Fund: \$100,000
- ★ 2018 Industry Engagement Fund: \$100,000



ERIDANUS Workshops 1 and 2 - Shanghai, April 2017, April 2018



Exascale Research
Infrastructure
For Data In Asia-Pacific
Astronomy
Using The SKA

Commonwealth Funding

AusSRC Community Meeting on Science Requirements - November 2017



AusSRC Industry Engagement Workshops - Perth March 2018 Sydney April 2018





Commonwealth Funding

- ★ SKA Pre-construction extension program 2017-2018
 - ★ RIALTO project ICRAR/CSIRO - joining SKA SDP prototypes (execution framework DALiuGE) and ASKAPSoft - SRC data flow design
 - ★ \$1.7 Million
- ★ SKA Bridging funding 2018-2020
 - ★ SDP CDR closeout
 - ★ RIALTO ready for early array releases
 - ★ Incorporate SKA-low scale capabilities
 - ★ \$2.4 Million





Commonwealth Funding

- ★ AusSRC seed design study funding
 - ★ 2018-2020
 - ★ \$2 million (plus additional \$2 million CSIRO)
 - ★ Analysis of community generated requirements
 - ★ Define an initial technical architecture for an AusSRC
 - ★ Series of prototype implementations
 - ★ Assess Australian and international SKA1-LOW science team requirements for an AusSRC post 2022
 - ★ Define a production design, implementation plan, cost and business case for an at-SKA-scale AusSRC
 - ★ Business case submission 2020
- ★ Pawsey Refresh - 2018+
- ★ \$70 million
- ★ AusSRC design study connected via Pawsey Refresh Technical Reference Group and User Reference Group

