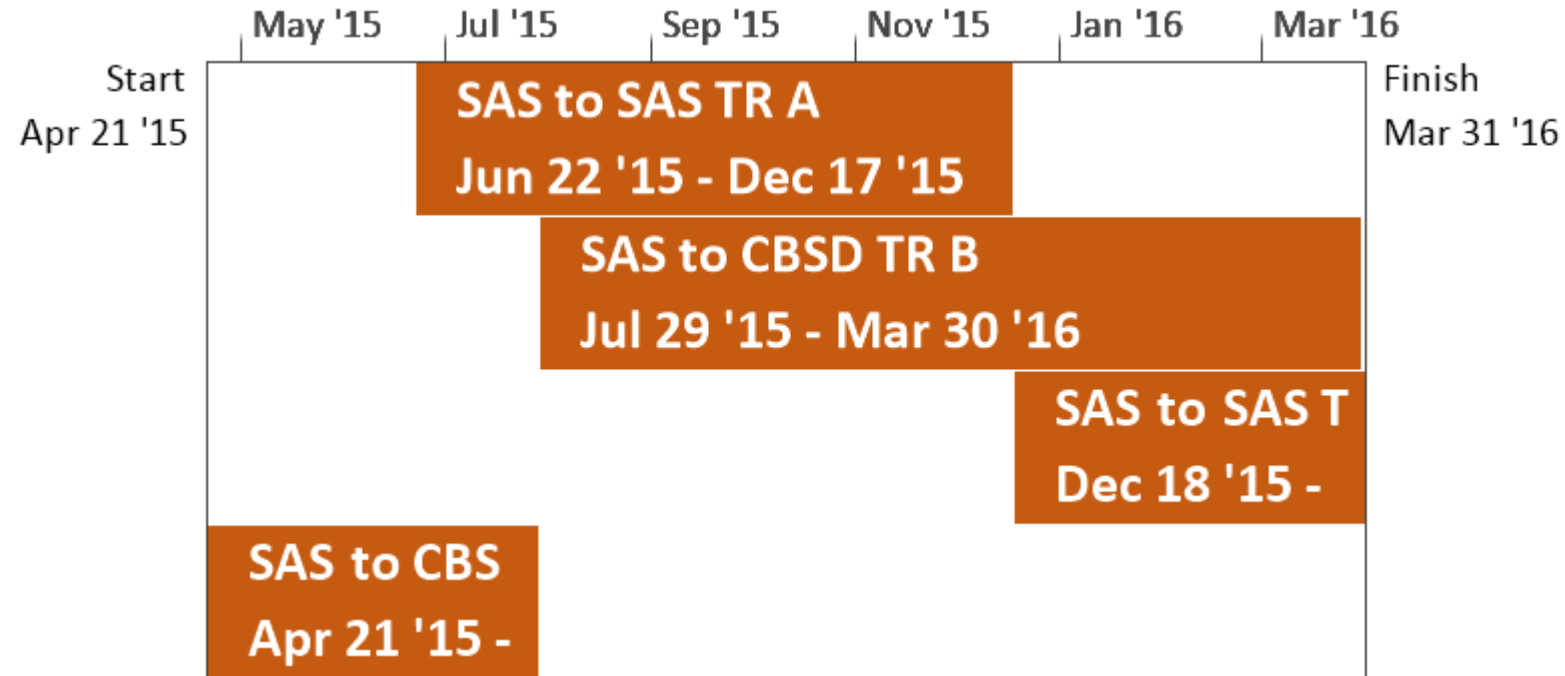


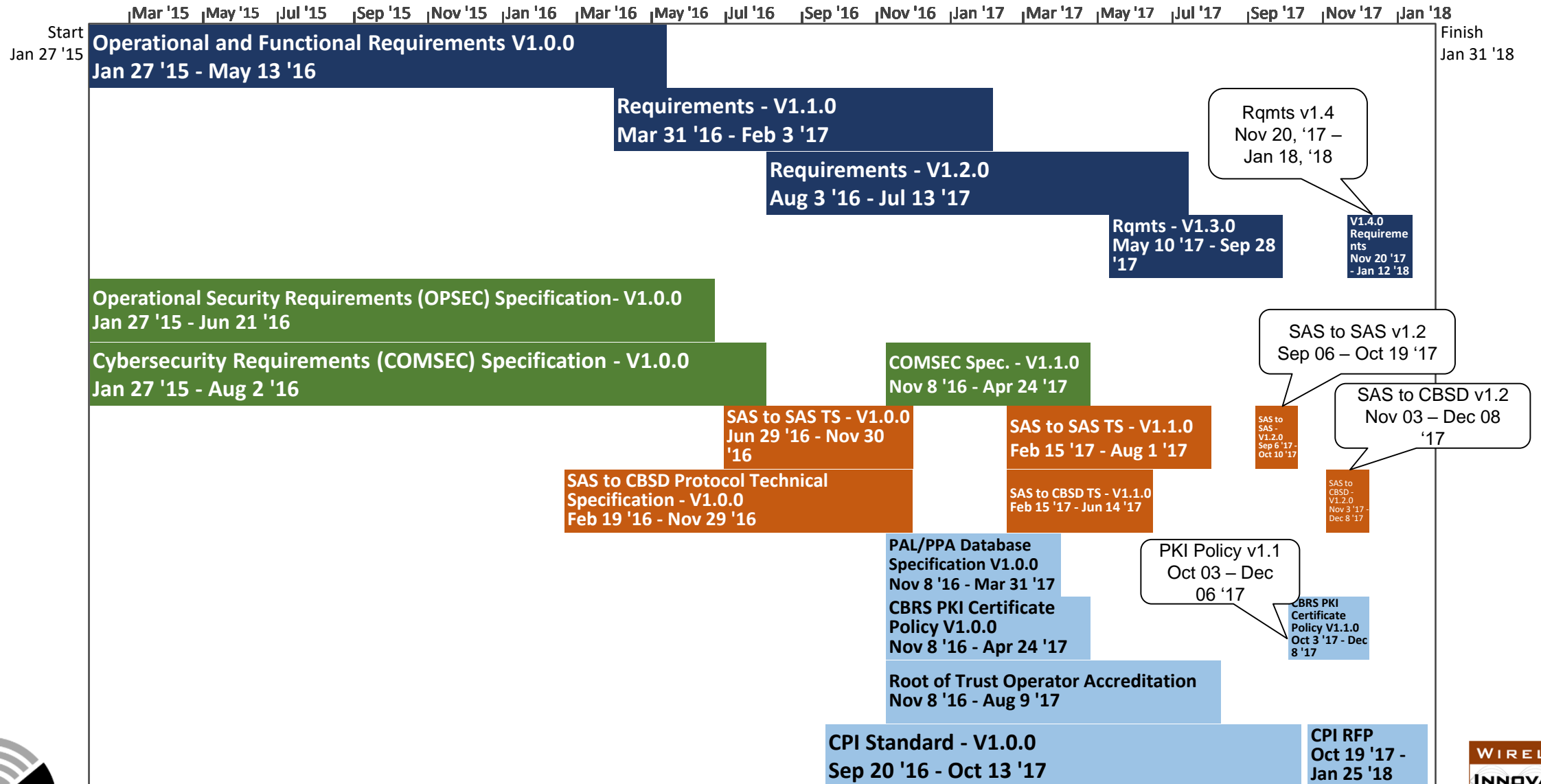
SPECTRUM SHARING COMMITTEE RELEASE SCHEDULE

**Approved by the Spectrum Sharing Committee Steering Group
20 June 2018**

Early Release (Release 0) Publication Timeline

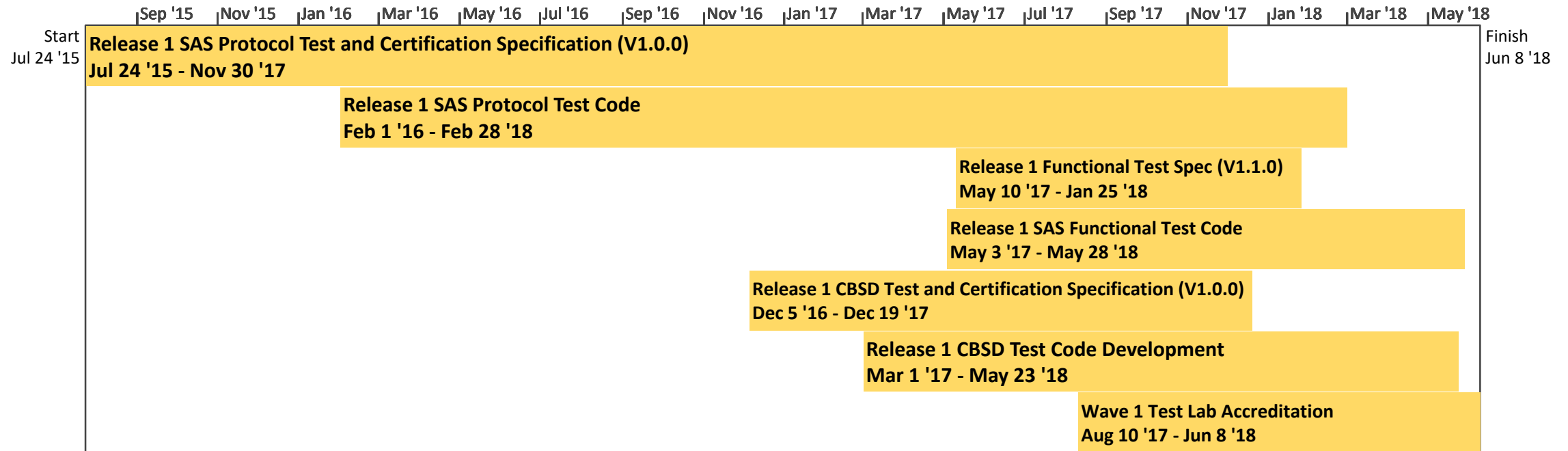


Baseline (Release 1) Standards Publication Timeline

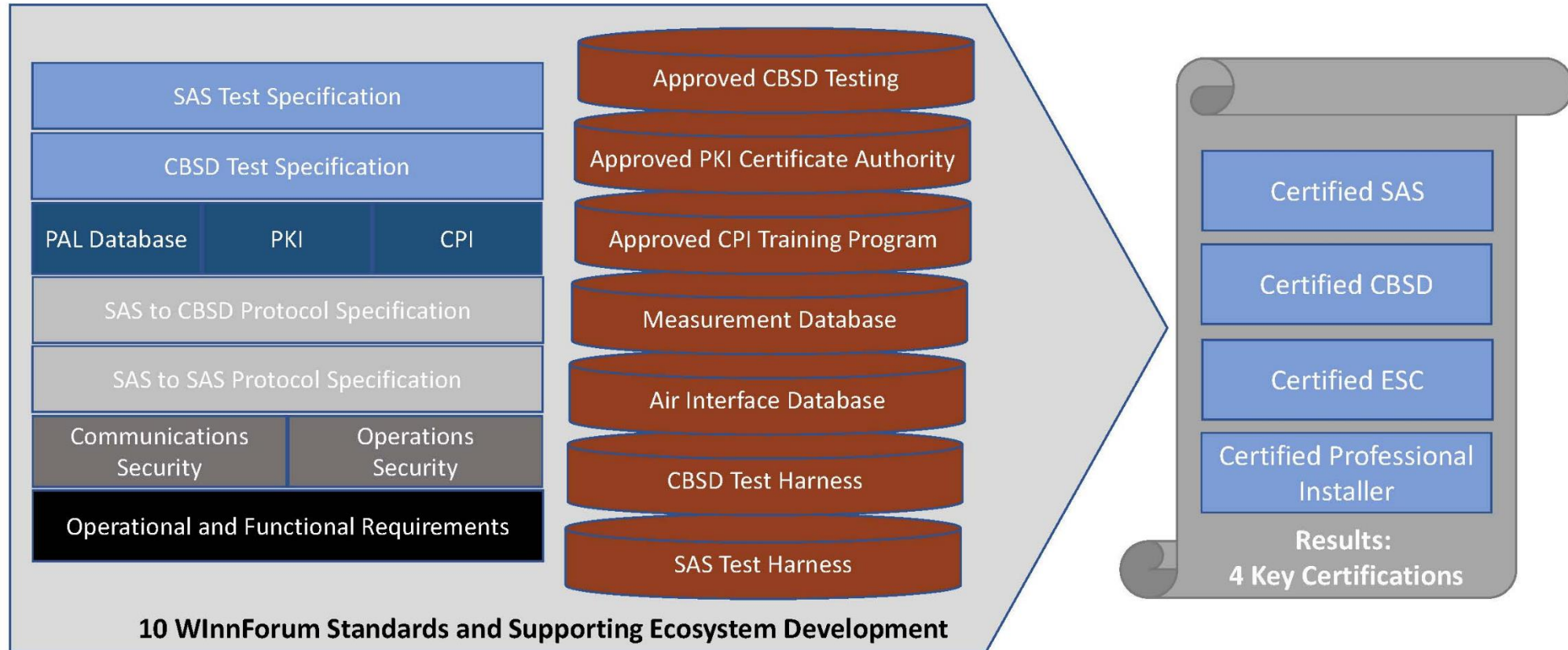


Slide 3

Baseline (Release 1) Test and Certification Timeline



Commercializing CBRS: Standards and Ecosystem Support



Standards That Currently Comprise Release 1

WINNF-TS-0112-V1.5.0 Operational and Functional Requirements

WINNF-TS-0065-V1.1.0 CBRS Communications Security Technical Specification

WINNF-TS-0071-V1.0.0 CBRS Operational Security Technical Specification

WINNF-TS-0016-V1.2.1 SAS to CBSD Protocol Specification

WINNF-TS-0096-V1.2.0 SAS to SAS Protocol Specification

WINNF-TS-0061-V1.2.0 SAS Test and Certification Specification

WINNF-TS-0122-V1.0.0 CBSD Test and Certification Specification

WINNF-TS-0245-V1.0.0 PAL Database Specification

WINNF-TS-0022-V1.1.2 CBRS PKI Certificate Policy

WINNF-TS-0247-V1.0.0 CPI Training Program Accreditation Standard

Note: This list includes technical changes that occurred post release as a part of normal standards maintenance

What is addressed in the Release 1 (1 of 3)

Border Area Management

- Requirements on Implementing international agreements to protect Canada and Mexico

CBSD Measurement Reporting

- Initial requirements for CBSD measurements of their local interference environment, and reporting those data back to the SAS.

CBSD Registration Processing

- The requirements for how a CBSD registers with a SAS, including owner registration, professional installer registration and CBSD registration.

Communications Security

- The communications security policies governing SAS and CBSD communications interfaces.

Certificate Authority Accreditation Standard

Certified Professional Installer Training Program Accreditation Standard

- Guidelines for adoption of uniform industry working standards and curriculum required to be consistent with the protection of spectrum, both licensed and GAA, for sharing in the 3550-3700 MHz band.

Note: Detailed feature list associated with each release is captured in the SSC CBRS Requirements Traceability Matrix (WINNF-17-SSC-0003)

What is addressed in the Release 1 (2 of 3)

Domain Proxy

- The baseline Operational and Functional Requirements of the CBRS Domain Proxy for initial testing and trials.

Dynamic Protection Zones

Environmental Sensing Capability (ESC)

- The requirements for implementation of an Environment Sensing Capability, and protecting federal incumbents.

Exception Management

- The requirements for how trouble tickets or exceptions are managed, including from FCC input, reports from incumbents, and reports from PAL.

FSS Protection

Grandfathered Wireless Device Protection

Operations Security

- The overall system operational security requirements to include handling of incumbent data, obfuscation of spectrum data, and processes associated with auditing and governance of the SAS infrastructure.

What is addressed in the Release 1 (3 of 3)

PAL Protection Area Definition

- Requirements on how PALs reports their coverage area to the SAS for end-to-end use of the licenses. This includes how PAL licensees define PAL Protection Areas (PPAs), request to operate in a particular geographic area within their license boundary (PPA), how PPA credentials and IDs are defined, conveyed and managed, and how the SAS accomplishes such protections.

Protocol Support for Priority Access Licensing

Propagation Modeling

- Identify appropriate 3.5 GHz propagation models for Incumbent and PAL protection and PPA definition, determine relative benefits and limitations, develop agreement on baseline needs such as underlying data, and define standardized interference aggregation methodologies.

SAS to SAS Information Sharing

- Initial support for SAS-SAS Synchronization and Information exchange.

Spectrum Grant Request Processing

- The requirements for how a CBSD requests and relinquish grants, and how grants are reassigned or terminated.

Issue Management and Change Requests

Following the release of revision 1 specifications, change requests will be collected from the Forum's public issues management portal

Wireless Innovation Forum Issue Specification Issue Reporting Form

This form enables submission of issues identified in Specifications developed under policy WIFOR Policy 001 (2007) (http://www.wirelessinnovation.org/policies_and_guidelines). It supports the Forum's members and other stakeholders in providing constructive improvement to the Specifications issued.

Please feel free to comment on issues if appropriate, but do not combine issues that are unrelated. Instead, please submit a separate form for each.

Upon completing this form, you will be issued a unique Issue Number. Please reference that number in all future correspondence.

Submitted issues may be made public, however contact information on the submitted issue will not be disclosed.

Contact Information

Contact Name Organization Name
Email

Issue/Suggestion Details

Please select the specification from the following categories (select 1)

SDR Specifications (Click drop down to select from this category)
Other (Click drop down to select from this category)
Specification:

Page Section and Paragraph

Issue One Line Description

Issue Full Description (1000 Chars Max)

Issue Severity ☐ Critical
☐ Major
☐ Minor

Proposed Resolution (Optional, 1000 Chars Max)

If you need more space or wish to provide an attachment, please send to SCA-Standards@wirelessinnovation.org. Only attachments in PDF format will be accepted.

Future Releases

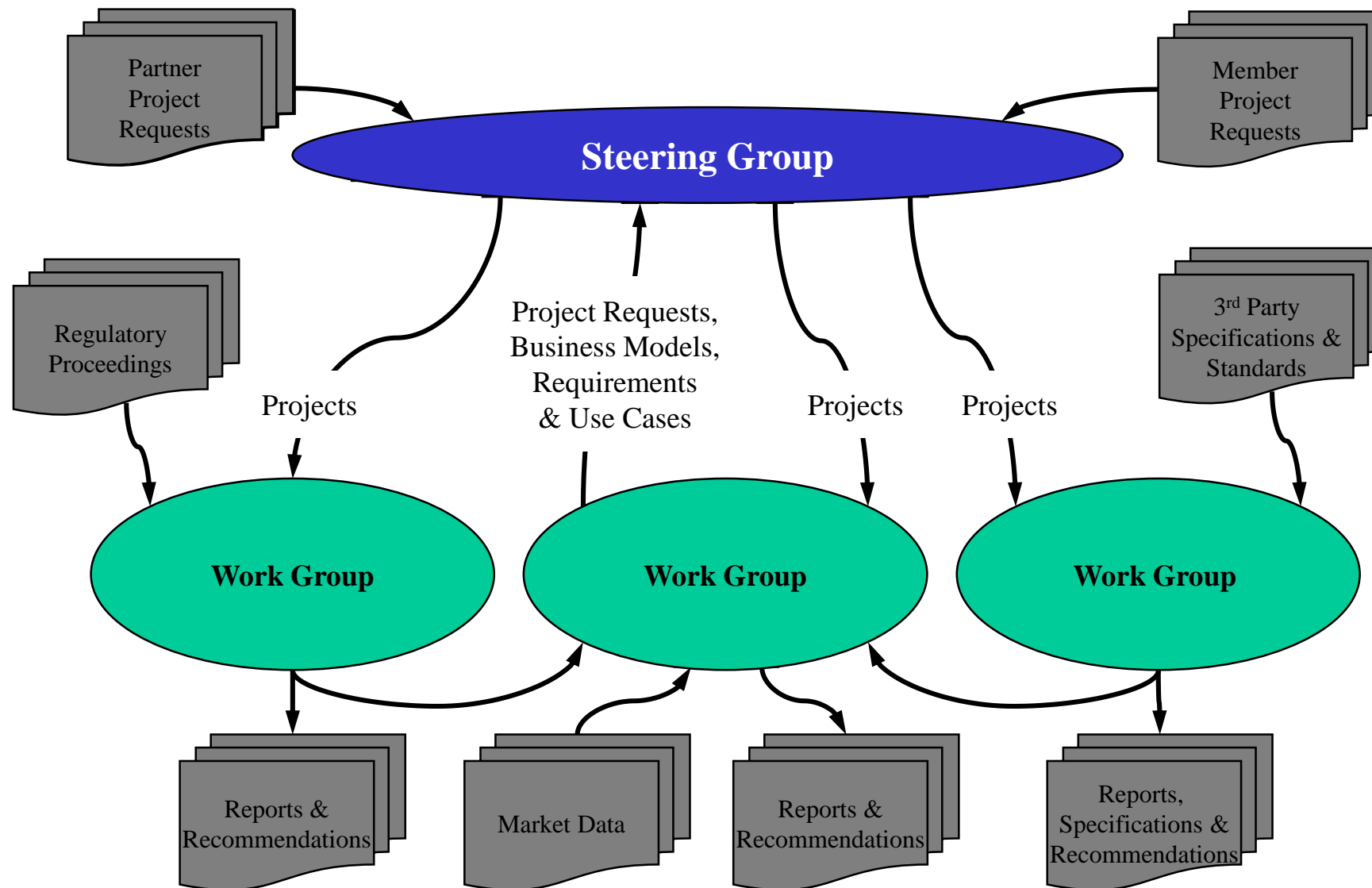
Assumptions

- Release 1 was announced in January 2018, testing will be completed by December 2018
- A framework for Release 2+ SAS certification will be adopted
- The new R&O will be out later this year, and changes for this should go into Release 2
- PAL Coexistence work should go into Release 2 to support a PAL auction in 2019

WinnForum go to an 18 month Release cycle, with a much abbreviated test cycle

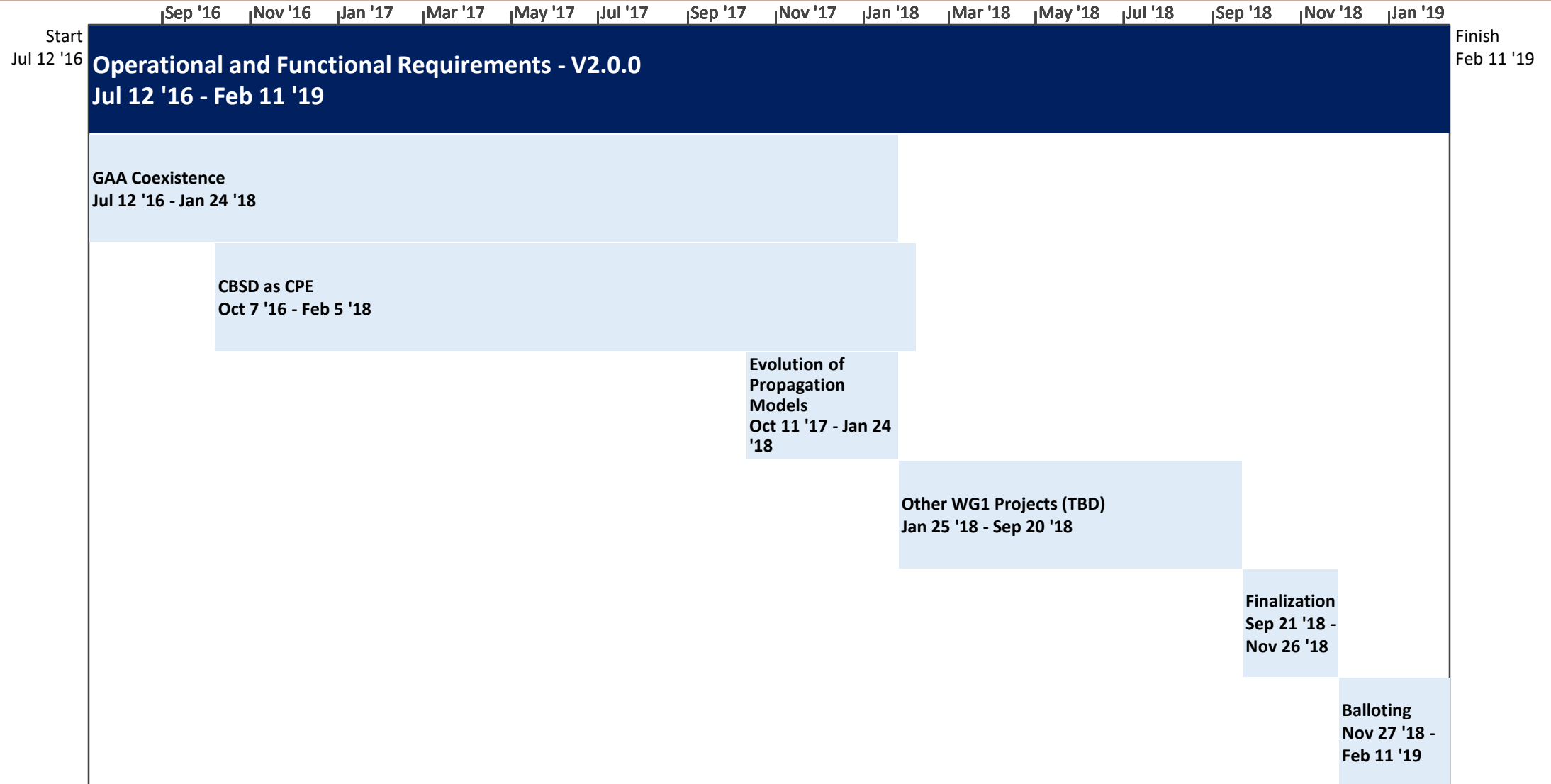
- Release 2 announced July 2019, testing completed December 2019, to include:
 - CBSD as CPE
 - Evolution of propagation models
 - GAA Coexistence
 - PAL Coexistence
 - Support for new rules
- Release 3 announced January 2021, testing completed July 2021
 - Features TBD

“Projects” are Initiated through the Committee Steering Group (SG)

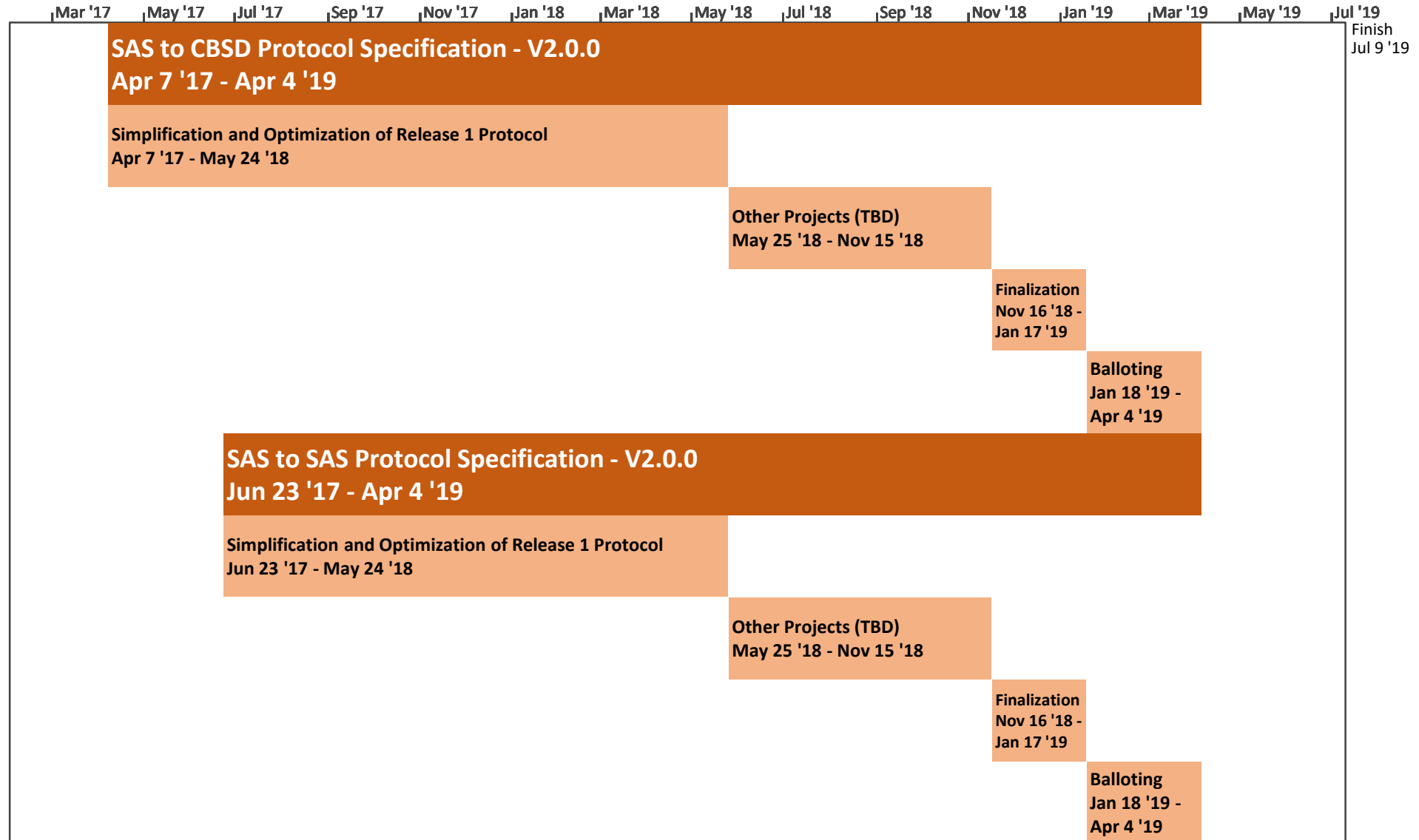


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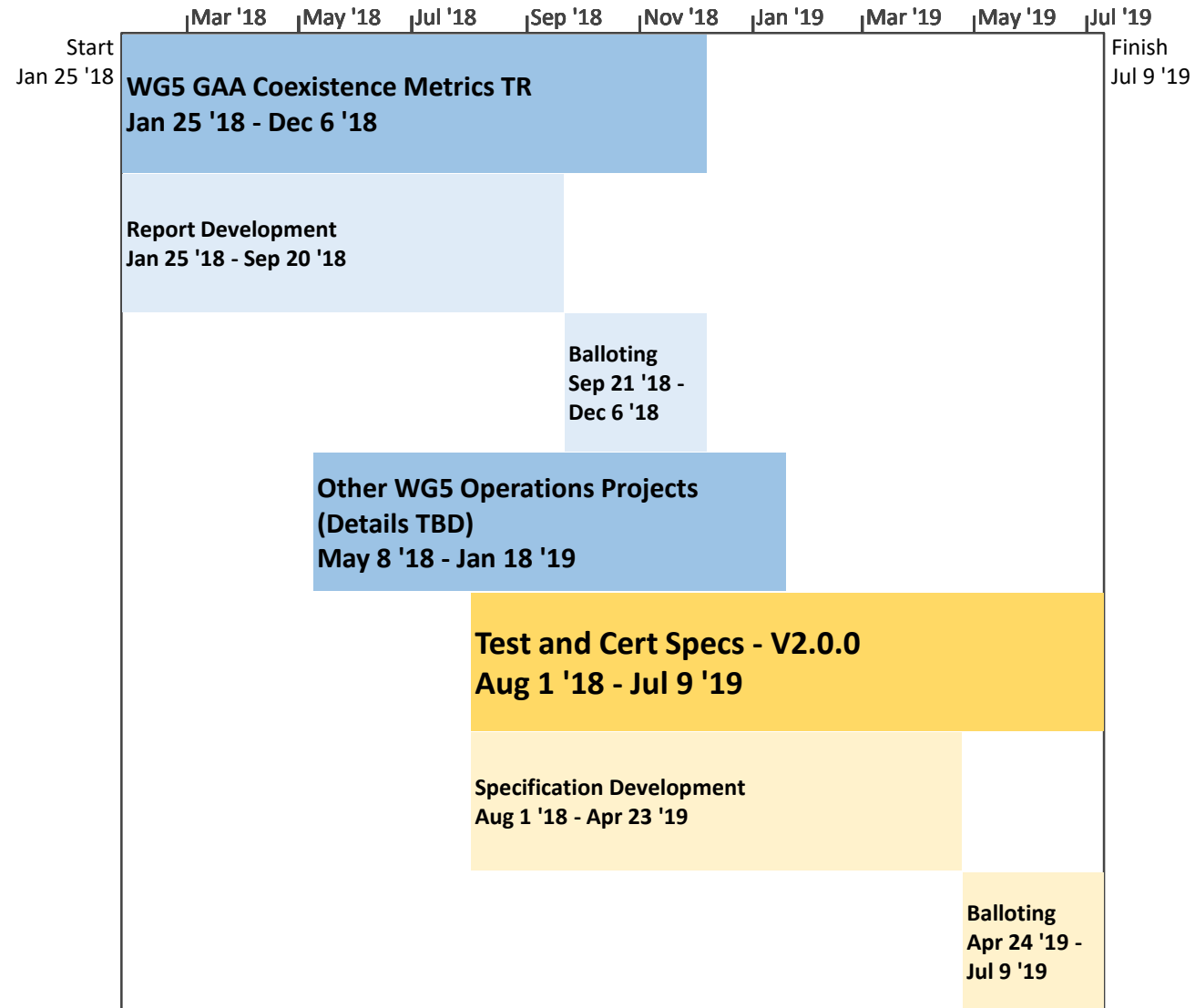
Release 2 Requirements Publication Timeline



Release 2 Protocols Publication Timeline



Release 2 Operations and Test Specifications Publication Timeline



Release 2 Feature Tracking

Backlog (Target WG)

- Leasing (WG1)
- Simplification and Optimization of Requirements from Release 1 (WG1)
- Support for Revised Rules as Required (WG1)
- Automated Exception Handling (WG1)
- Enhanced PAL Support (WG3)
- Registration Update (WG3)
- Enhanced Measurement Reporting (WG3)
- PAL Channel Assignment (WG5)
- PAL Coexistence (WG1)

In Progress

- Simplification and Optimization of Release 1 SAS to CBSD Protocol for Release 2 (WG3)
- Simplification and Optimization of Release 1 SAS to SAS Protocol for Release 2 (WG3)
- GAA Coexistence Metrics TR (WG5)

Complete

- CBSD as CPE for Release 2 (WG1)
- GAA Coexistence for Release 2 (WG1)
- Evolution of Propagation Models for Release 2 (WG1)