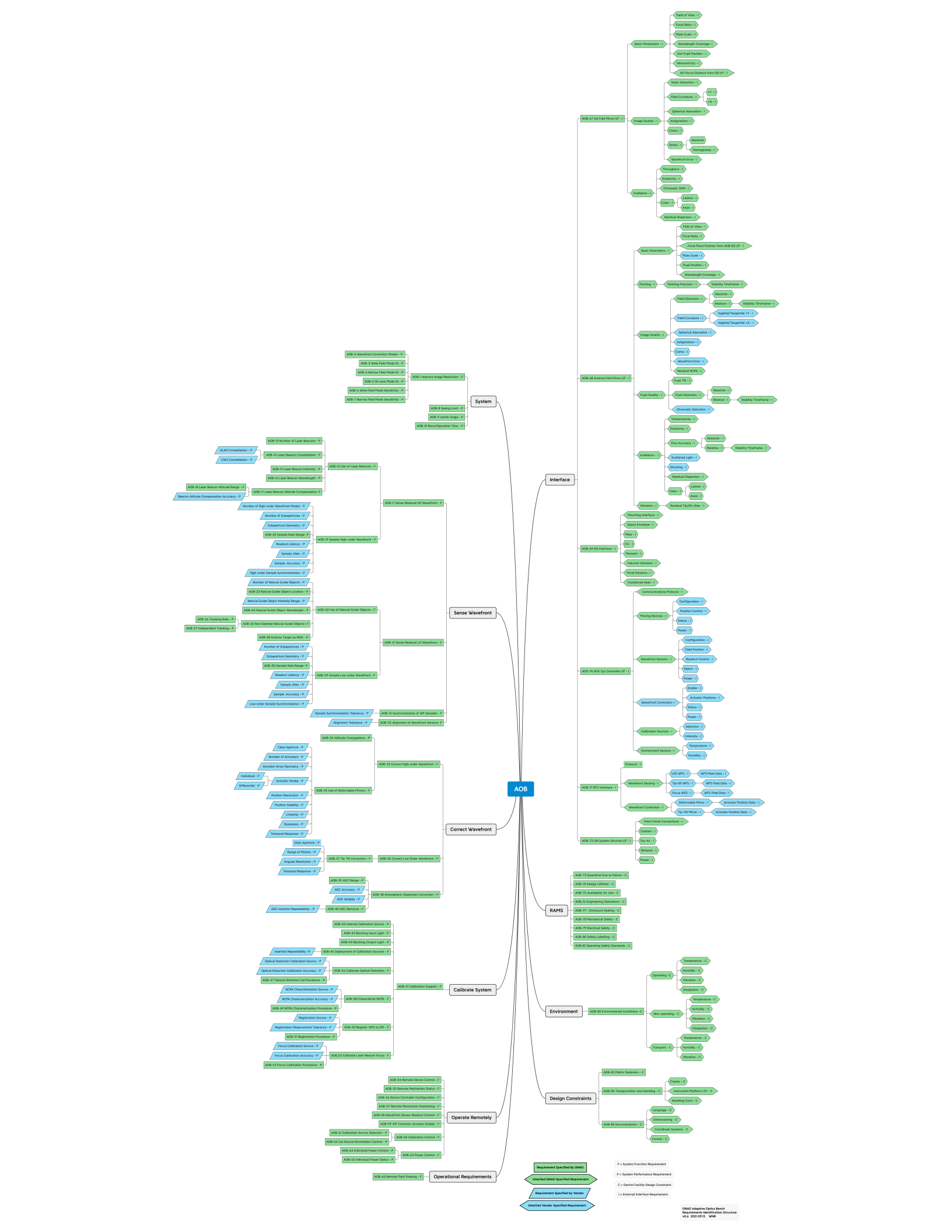
AOB
Interface
AOB-47 AO Field Mirror I/F - I
Basic Parameters - I
Field of View - I
Focal Ratio - I
Plate Scale - I
Wavelength Coverage - I
Exit Pupil Position - I
Telecentricity - I
AO Focus Distance from ISS I/F - I
Image Quality - I
Static Distortion - I
Field Curvature - I
kY - I
kX - I
Spherical Aberration - I
Astigmatism - I
Coma - I
Strehl - I
Absolute
Homogeneity - I
Wavefront Error - I
Irradiance - I
Throughput - I
Emissivity - I
Chromatic Shift - I
Color - I
Lateral - I
Axial - I
Residual Dispersion - I
AOB-48 Science Fold Mirror I/F - I
Basic Parameters - I
Field of View - I
Focal Ratio - I
Focal Plane Position from AOB ISS I/F - I
Plate Scale - I
Pupil Position - I
Wavelength Coverage - I
Pointing - I
Pointing Precision - I
Stability Timeframe - I
Image Quality - I
Field Distortion - I
Absolute - I
Relative - I
Stability Timeframe - I
Field Curvature - I
Sagittal/Tangential +Y - I
Sagittal/Tangential +X - I
Spherical Aberration - I
Astigmatism - I
Coma - I
Wavefront Error - I
Residual NCPA - I
Pupil Quality - I
Pupil TIS - I
Pupil Distortion - I
Absolute - I
Relative - I
Stability Timeframe - I
Chromatic Distortion - I
Irradiance - I
Transmissivity - I
Emissivity - I
Flux Accuracy - I
Absolute - I
Relative - I
Stability Timeframe - I
Scattered Light - I
Ghosting - I
Residual Dispersion - I
Color - I
Lateral - I
Axial - I
Vibration - I
Residual Tip/Tilt Jitter - I
AOB-49 ISS Interface - I
Mounting Interface - I
Space Envelope - I
Mass - I
CG - I
Moment - I
Induced Vibration - I
Focal Distance - I
Transferred Heat - I
AOS-70 AOS Sys Controller I/F - I
Communications Protocol - I
Moving Devices - I
Configuration - I
Position Control - I
Status - I
Power - I
Wavefront Sensors - I
Configuration - I
Field Position - I
Readout Control - I
Status - I
Power - I
Wavefront Correctors - I
Enable - I
Actuator Positions - I
Status - I
Power - I
Calibration Sources - I
Selection - I
Intensity - I
Environment Sensors - I
Temperature - I
Humidity - I
AOB-71 RTC Interface - I
Protocol - I
Wavefront Sensing - I
LGS WFS - I
WFS Pixel Data - I
Tip-tilt WFS - I
WFS Pixel Data - I
Focus WFS - I
WFS Pixel Data - I
Wavefront Correction - I
Deformable Mirror - I
Actuator Position Data - I
Tip-Tilt Mirror - I
Actuator Position Data - I
AOB-72 GN System Services I/F - I
Patch Panel Connections - I
Coolant - I
Dry Air - I
Network - I
Power - I
System
AOB-1 Improve Image Resolution - F
AOB-2 Wavefront Correction Modes - P
AOB-3 Wide Field Mode IQ - P
AOB-4 Narrow Field Mode IQ - P
AOB-5 On-axis Mode IQ - P
AOB-6 Wide Field Mode Sensitivity - P
AOB-7 Narrow Field Mode Sensitivity - P
AOB-8 Seeing Limit - P
AOB-9 Zenith Angle - P
AOB-10 Reconfiguration Time - P
Sense Wavefront
AOB-11 Sense Residual HO Wavefront - F
AOB-12 Use of Laser Beacons - F
AOB-13 Number of Laser Beacons - P
AOB-14 Laser Beacon Constellation - F
GLAO Constellation - P
LTAO Constellation - P
AOB-15 Laser Beacon Intensity - P
AOB-16 Laser Beacon Wavelength - P
AOB-17 Laser Beacon Altitude Compensation- F
AOB-18 Laser Beacon Altitude Range - P
Beacon Altitude Compensation Accuracy - P
AOB-19 Sample High-order Wavefront - F
Number of High-order Wavefront Modes - P
Number of Subapertures - P
Subaperture Geometry - P
AOB-20 Sample Rate Range- P
Readout Latency - P
Sample Jitter -P
Sample Accuracy - P
High-order Sample Synchronization - P
AOB-21 Sense Residual LO Wavefront - F
AOB-22 Use of Natural Guide Objects - F
Number of Natural Guide Objects - P
AOB-23 Natural Guide Object Location - P
Natural Guide Object Intensity Range - P
AOB-24 Natural Guide Object Wavelength - P
AOB-24 Tracking Rate - P
AOB-25 Non Sidereal Natural Guide Objects- F
AOB-27 Independent Tracking - F
AOB-28 Science Target as NGO - P
AOB-29 Sample Low-order Wavefront - F
Number of Subapertures - P
Subaperture Geometry - P
AOB-30 Sample Rate Range- P
Readout Latency - P
Sample Jitter - P
Sample Accuracy - P
Low-order Sample Synchronization - P
AOB-31 Synchronization of WF Samples - F
Sample Synchronization Tolerance - P
AOB-32 Alignment of Wavefront Sensors- F
Alignment Tolerance - P
Correct Wavefront
AOB-33 Correct High-order Wavefront - F
AOB-34 Altitude Conjugations - P
AOB-35 Use of Deformable Mirrors - F
Clear Aperture - P
Number of Actuators - P
Actuator Array Geometry - P
Actuator Stroke - P
Individual - P
Differential - P
Position Resolution - P
Position Stability - P
Linearity - P
Hysteresis - P
Temporal Response - P
AOB-36 Correct Low Order Wavefront - F
AOB-37 Tip-Tilt Correction - F
Clear Aperture - P
Range of Motion - P
Angular Resolution - P
Temporal Response - P
AOB-38 Atmospheric Dispersion Correction - F
AOB-39 ADC Range - P
ADC Accuracy - P
ADC Wobble - P
ADC Insertion Repeatability - P
AOB-40 ADC Removal - F
Calibrate System
AOB-41 Calibration Support - F
AOB-42 Internal Calibration Source - F
AOB-43 Blocking Input Light - P
AOB-44 Blocking Output Light - P
AOB-45 Deployment of Calibration Sources - F
Insertion Repeatability -P
AOB-46 Calibrate Optical Distortion - F
Optical Distortion Calibration Source - P
Optical Distortion Calibration Accuracy - P
AOB-47 Optical Distortion Cal Procedure - P
AOB-48 Characterize NCPA - F
NCPA Characterization Source - P
NCPA Characterization Accuracy - P
AOB-49 NCPA Characterization Procedure - P
AOB-50 Register WFS to DM - F
Registration Source - P
Registration Measurement Tolerance - P
AOB-51 Registration Procedure - P
AOB_52 Calibrate Laser Beacon Focus - F
Focus Calibration Source - P
Focus Calibration Accuracy - P
AOB-53 Focus Calibration Procedure - P
Operate Remotely
AOB-54 Remote Device Control - F
AOB-55 Remote Mechanism Status - F
AOB-5x Device Controller Configuration - F
AOB-57 Remote Mechanism Positioning - F
AOB-58 Wavefront Sensor Readout Control - F
AOB-59 WF Corrector Actuator Enable - F
AOB-60 Calibration Control - F
AOB-61 Calibration Source Selection - P
AOB-62 Cal Source Illumination Control - P
AOB-63 Power Control - F
AOB-64 Individual Power Control - P
AOB-65 Individual Power Status - P
Operational Requirements
AOB-66 Remote Field Viewing - F
RAMS
AOB-73 Downtime Due to Failure - C
AOB-74 Design Lifetime - C
AOB-75 Availability for Use - C
AOB_76 Engineering Operations - C
AOB-77 - Enclosure Sealing - C
AOB-78 Mechanical Safety - C
AOB-79 Electrical Safety - C
AOB-80 Safety Labelling - C
AOB-81 Operating Safety Standards - C
Environment
AOB-82 Environmental Conditions -C
Operating -C
Temperature - C
Humidity - C
Vibration - C
Dissipation - C
Non-operating - C
Temperature - C
Humidity - C
Vibration - C
Dissipation - C
transport - C
Temperature - C
Humidity - C
Vibration - C
Design Constraints
AOB-83 Metric Fasteners - C
AOB-84 Transportation and Handling - C
Cranes - C
Instrument Platform Lift - C
Handling Carts - C
AOB-85 Documentation - C
Language - C
Dimensioning - C
Coordinate Systems - C
Format - C
Requirement Specified By GNAO
Inherited GNAO Specified Requirement
Requirement Specified by Vendor
Inherited Vendor Specified Requirement
F = System Function Requirement
P = System Performance Requirement
C = Gemini Facility Design Constraint
I = External Interface Requirement
GNAO Adaptive Optics Bench
Requirements Identification Structure
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