NESDIS Center for Satellite Applications and Research (STAR)

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for

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STAR Science Services

4.0	**Science**
4.1	**Science & Product Systems Development**
4.1.1	Scientific algorithm & product systems development
4.1.2	Calibration / validation systems development
4.1.3	Software and Algorithm Integration
4.1.4	Configuration control and change management
4.1.5	Quality Assurance
4.2	**Science and Product Services**
4.2.1	Requirements development and analysis
4.2.2	Scientific algorithm & applications research, prototype development, testing, and validation
4.2.3	Risk Reduction & Proving Grounds
4.2.4	User Readiness
4.2.5	Product Improvement

4.3	**Instrument & Product Calibration /Validation**
4.3.1	Development, coordination and execution of instrument and product Calibration / Validation techniques, technologies and activities;
4.3.2	Interagency and international cal / val program coordination activities
4.3.3	Cal/Val campaigns
4.4	**Science Project & Program Management**
4.4.1	Program and Project level mission science leadership and coordination
4.4.2	Science Team Management & Support
4.4.3	Organization and coordination of internal and / or external science community working groups, review boards, and advisory services
4.5	**Post Launch Science Maintenance**
4.5.1	Science algorithm and instrument performance monitoring
4.5.2	Satellite / instrument performance issues mitigation services
4.5.3	Calibration updates and algorithm changes necessary to ensure product quality or correct for unanticipated anomalies or artifacts
4.6	**Long Term Monitoring**
4.6.1	Product Monitoring and long term error assessment
4.6.2	Reprocessing of long term data to ensure highest quality

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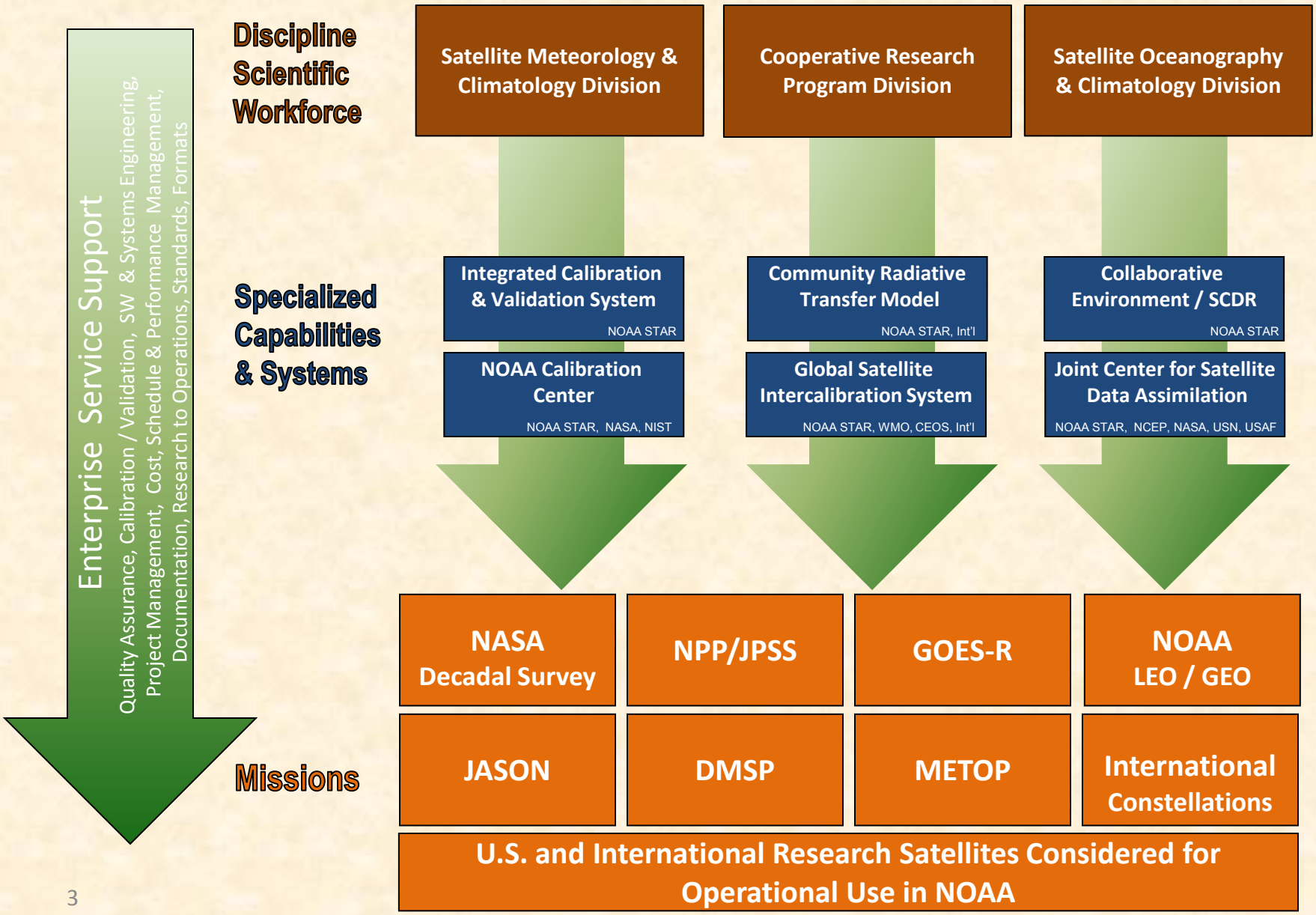

Satellite Strategies in Transition

PRESENT

PAST	FUTURE
Calibrate **individual instruments**	Inter-calibrate **multiple instruments globally**
Stovepipe Development of **algorithms** for GEO & LEO instruments	Develop **common algorithms and processing frameworks for GEO and LEO instruments**
Develop **individual products**	Develop **product suites and blended products**
Transfer algorithms to **NESDIS/OSPO**	Transfer algorithms to **NESDIS/OSPO & International and non-government partners**
Address **internal NOAA** requirements	Participate in **multiple US and international collaborations**
Study climate using **single instruments**	Study climate using **chains of instrument data**
Assimilate data from **individual satellites**	Assimilate data from **suites of satellites**
Manage projects for **Principal Investigators**	Manage algorithm deliveries to **entire acquisition programs**