

**2013-2022 SPACE COOPERATION PLAN
BETWEEN
BRAZILIAN SPACE AGENCY
AND
CHINA NATIONAL SPACE ADMINISTRATION**

Brazilian Space Agency (AEB) and China National Space Administration (CNSA), hereinafter referred as the Parties, are the leading agencies for the implementation of this Plan. The leading agencies will work according to the principles of equality, mutual benefit and common development, and implement international best practices on the peaceful uses of outer space. During the process of coordination, the leading agencies might invite other organizations in their respective countries to participate in and contribute to the implementation of this Plan.

The programs established in this Plan will be followed as the guidance for cooperation in the space field from 2013 to 2022. Detailed of referred programs are listed in the appendix.

The contents of the programs referred to in this Plan should be further negotiated and specified by the implementation entities and be executed after approval according to relevant procedures.

The contents of this Plan could be updated and new cooperation programs could be added as part of this Plan if discussed and agreed by the Parties. The contents of this Plan will be reviewed every year by the Parties to take into account any changes occurring during execution.

This plan will enter into force upon signature by the Parties and remain in force for ten years.

Done in Guangzhou, China on the 6th day of November, 2013 in duplicate in the Portuguese, English and Chinese Languages, all three texts being authentic. In case there is any divergence of interpretation of this Plan, the English language shall prevail.



For
Brazilian Space Agency



For
China National Space Administration

APPENDIX:

**2013-2022 SPACE COOPERATION PROGRAMS BETWEEN BRAZILIAN
SPACE AGENCY AND CHINA NATIONAL SPACE ADMINISTRATION**

No.	Cooperation area	Cooperation program	Cooperation content	Brazilian Organizations	Chinese Organizations	
1	Space Technology	1.1	CBERS Program	Cooperation on CBERS-3 and 4 for launch, operation and utilization.	AEB, INPE	CAST, CGWIC, CRESDA, CLTC
		1.2	Satellite's payload carrying	To provide spare capacity of satellite platform to carry satellite's payloads of the other side based on its requirement.	AEB, INPE	CASC
		1.3	Comprehensive remote sensing satellite program	To continue cooperation in the development of CBERS program based on satellites for comprehensive earth observation according to the principles of equality and mutual benefit.	AEB, INPE	CASC
		1.4	Meteorological satellite(s)	To undertake joint development of geostationary meteorological satellite(s).	AEB, INPE	CASC /SAST
2	Space Applications	2.1	Application and distribution of satellite data	To distribute satellite data, jointly develop applications and provide commercial services based on the CBERS data. One side may receive and distribute commercially high-resolution satellites data of the other side.	AEB, INPE	CNSA-EOSDC, CRESDA

No.	Cooperation area	Cooperation program		Cooperation content	Brazilian Organizations	Chinese Organizations
2	Space Applications	2.2	Cross Calibration of remote sensing satellites	Cooperation in cross calibration of remote sensing satellites utilizing the Calibration fields of both sides.	INPE	CRESDA
		2.3	Quality and standard product of CBERS	To jointly improve the CBERS image quality and develop the CBERS standard products.	INPE	CRESDA
		2.4	Cooperation on remote sensing data application	Cooperation on remote sensing data software development, data application on areas such as risk mitigation, land survey, and others.	INPE	CNSA-EOSDC, CRESDA
3	Space Sciences	3.1	Joint Lab for Space weather between China and Brazil	Based on the International space weather meridian cycle program, to jointly establish Space Weather. To jointly implement research on common scientific goals and cooperation programs on space science.	INPE	CAS-NSSC
4	Launch Services	4.1	Launch Services	To provide dedicated or piggyback launch services for jointly developed satellites or other systems based on requirements of each side.	AEB, INPE	CGWIC
5	TT&C Support	5.1	Cross-operation support for spacecraft	Cross-operation or TT&C Support for spacecraft with ground stations of each side.	INPE	CLTC
6	Units, Components and Ground Equipment	6.1	Satellite unit	To provide space-class satellite unit based on requirements of each side, including Gyro, Star Tracker and Satellite Payloads.	AEB, INPE	CASC/CGWIC
		6.2	Spacecraft's components and materials	To provide Spacecraft's components and materials based on requirements of each side.	AEB, INPE	CASC/CGWIC

No.	Cooperation area	Cooperation program		Cooperation content	Brazilian Organizations	Chinese Organizations
6	Units, Components and Ground Equipment	6.3	Ground support equipment for spacecraft AIT	To provide the ground support equipment and infrastructure for Spacecraft AIT based on requirements of each side.	AEB, INPE	CASC/CGWIC
		6.4	Ground application system of remote sensing and telecommunications satellites	To provide ground reception station for remote sensing satellites and ground application system of telecommunications satellites based on requirements of each side.	AEB, INPE	CASC/CGWIC
7	Personnel Training	7.1	Personnel and technology exchange	Personnel exchange and training based on concrete cooperation programs. Discussion on establishing a joint technology center in Brazil.	AEB	CNSA, CASC, CAS, BEIHANG

LIST of ACRONYMS

AEB	Brazilian Space Agency
BEIHANG	BEIHANG University
CNSA	China National Space Administration
CAS	China Academy of Science
CASC	China Aerospace Science and Technology Corporation
CAST	China Academy of Space Technology
CGWIC	China Great Wall Industry Corporation
CLTC	China Satellite Launch and Tracking Control General
CRESDA	China Center for Resources Satellites Data and Application
EOSDC	Earth Observation System and Data Center
INPE	National Institute for Space Research
NSSC	National Space Science Center
SAST	Shanghai Academy of Spaceflight Technology