# China’s Implementing geospatial strategies: challenges and opportunities

Land Satellite Remote Sensing Application Center,
Ministry of Natural Resources of P.R.China
(LASAC,MNR)

Astana, Kazakhstan
15 September 2025

# CONTENTS



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# Progress during the "14th Five-Year Plan" period(2021-2025)

**Digital China** and the **development of digital economy** put forward strong demand： transformation and upgrading， more in-depth and extensive application of Geospatial Information

a.The **national surveying and mapping reference system** integrating land, ocean, and aerospace and "**National Network of Satellite Navigation and Positioning Reference Stations**" —centimeter-level

b.**3D China(Real Scene)**

- ReS3D high-quality spatio-temporal data set—**an important strategic data resource and digital infrastructure**
- satellite remote sensing images have been updated monthly and quarterly. 1:50,000 basic geographic information covers all land of territory, and 1:10,000 data covers more than 70% of land of the territory, and is dynamically updated

# Progress during the "14th Five-Year Plan" period(2021-2025)

c. **3D surveying and mapping system**

- technologies such as high-precision navigation and positioning, aerospace remote sensing, and intelligent data processing have continuously innovated and made breakthroughs.
- Satellite images have achieved independent guarantee, and the core surveying and mapping equipment is generally independent and controllable, and some equipment ranks among the world-class.

d.**The supply of abundant data elements** enables the application of surveying,mapping and geospatial information to be more in-depth and extensive.—National Data Administration

# Progress during the "14th Five-Year Plan" period(2021-2025)

e. **World Map**—Map services handle over 1 billion daily requests.

d**.Digital government**—Shanghai Quantum City, Digital Chongqing and Digital Hangzhou—supporting grid governance and various one-stop services

f.**Public service for people's well-being—**based on various maps, convenient services such as online car-hailing and take-out express

g.**Digital culture—**Beijing's central axis for World Heritage, Dunhuang Mogao Grottoes digitally reproduced, and virtual scenic spots and animation games

h.**Digital ecological civilization the** construction of **“one map” of natural resources** and land spatial planning has been accelerated, and the construction of a digital governance system for beautiful China has been promoted.

# Strategic Pathway 1
# Governance and Institutions

全國人民代表大会常委会举行会議

批准設立國家測繪總局

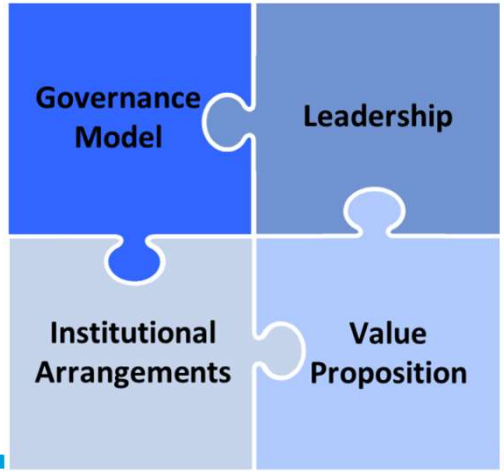
据 1955 年 12 月 22 日人民日報所載新華社 21 日訊:
中華人民共和國國务院全体会議第二十一次会議在 21 日下午举行。
会議通过了「國务院關於長期保護測量标誌的命令」,並且决定提請全國人民代表大会常务委員会批准設立國家測繪總局,作为國务院的一个直屬机構。
又据 1956 年 1 月 24 日人民日報所載新華社 23 日訊:
全國人民代表大会常务委員会第三十一次会議在 23 日下午举行。
会議在討論了中華人民共和國國务院總理周恩來的建議后,批准設立國家測繪總局,作为國务院的一个直屬机構。

1956, the establishment of the State Bureau of Surveying and Mapping(SBSM) was approved.
2011,National Administration of Surveying,Mapping and Geoinformation(NASG)


中华人民共和国自然资源部
Ministry of Natural Resources of the People's Republic of China

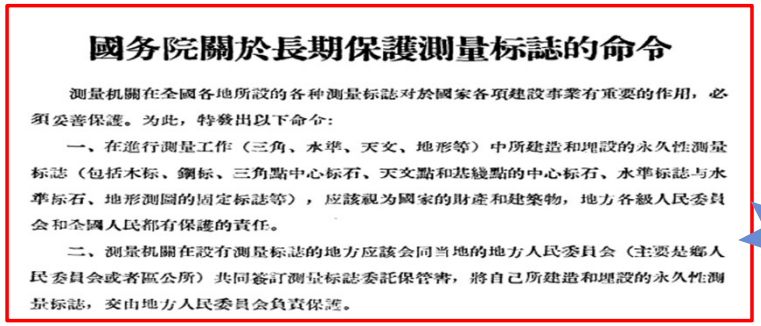
Ministry of Natural Resources of P.R.China(MNR),2018

A complete management system covering the state, provinces, cities and counties has been basically established




overall planning, hierarchical implementation and resource sharing
property right registration, circulation and transaction, and security management
mechanism for coordination and sharing between departments

# Strategic Pathway 2
# Policy and Legal


國务院關於長期保護測量标誌的命令

测量机關在全國各地所設的各种测量标誌对於國家各項建設事業有重要的作用，必須妥善保護。为此，特發出以下命令：

一、在進行测量工作（三角、水準、天文、地形等）中所建造和埋設的永久性测量标誌（包括木标、鋼标、三角點中心标石、天文點和基綫點的中心标石、水準标誌与水準标石、地形测圖的固定标誌等），应該視为國家的財產和建築物，地方各級人民委員会和全國人民都有保護的責任。

二、测量机關在設有测量标誌的地方应該会同当地的地方人民委員会（主要是鄉人民委員会或者區公所）共同簽訂测量标誌委託保管書，將自己所建造和埋設的永久性测量标誌，交由地方人民委員会負責保護。

**The first regulation about surveying: 'Order on the Long-term Protection of surveying Mark', 1955**

**Legal system： Surveying and Mapping Law as the core, 4 administrative regulations, 6 departmental rules, 35 local regulations, and nearly 100 local government regulations as the main body.**


**Surveying and mapping Law**

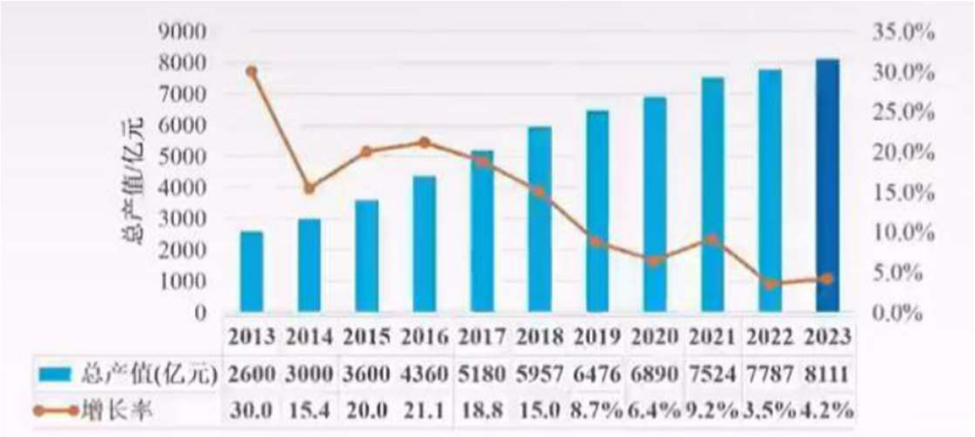

**Four administrative regulations**

Legal system is in place, but with new businesses and technologies like autonomous driving developing fast, needs updating to fit new tech demands

# Strategic Pathway 3
# Financial

‘2024 China Geospatial Information Industry Development Report’

- the total output value of Chinese geographic information industry is 114.2 billion USD in 2023.



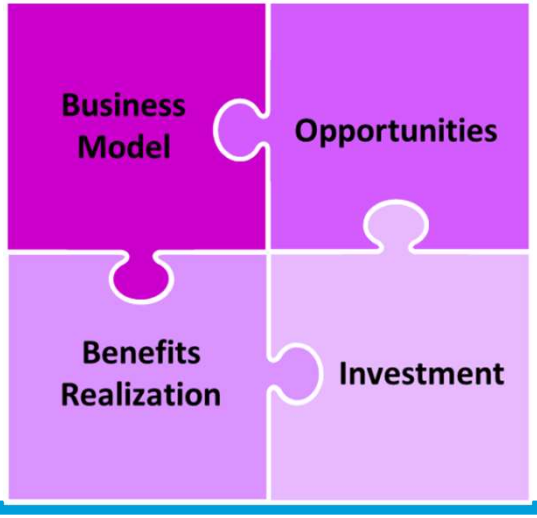

State Budget

Local Govt.Budget

Private investment

China has over 443 remote sensing satellites in orbit, forming a robust Earth observation system composed of land, meteorological, and ocean satellites.

- approximately 47,000 enterprises， 51 satellite operators, and around 800 R&D institutions
- China's satellite remote sensing and application industry reached 34.5 billion USD in 2023. The direct economic benefits amounted to 6.11billion USD.



# Strategic Pathway 4
# Data


comprehensive, detailed, and interpretable Real Scene 3D，
supports natural resource management, government decision-making, serves the daily lives of the people, and fosters the development of a digital ecological civilization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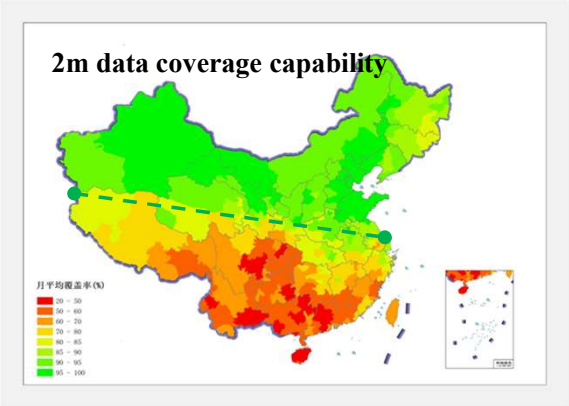
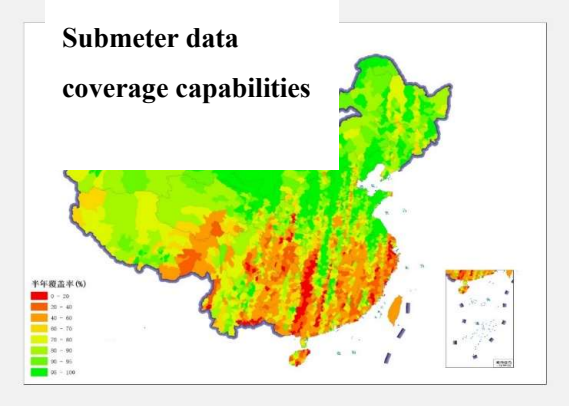
# Strategic Pathway 4
# Data

- **High-frequency observation**

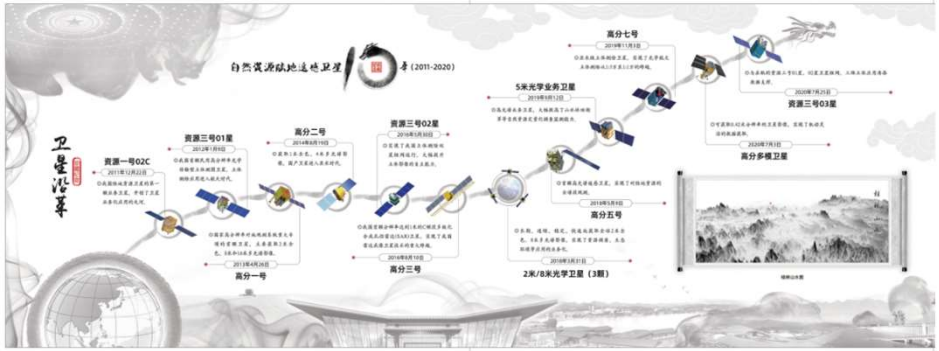
- In the area north of the Qinling-Huaihe River line, monthly coverage of 2-meter images and semi-annual coverage of sub-meter images can basically be achieved;
- In most areas south of the Qinling-Huaihe River line, bimonthly coverage of 2-meter images and annual coverage of sub-meter images can be achieved;
- In the southwest areas difficult to obtain, quarterly coverage of 2 meters of images can be shaped.




- **Long time series tracing**

- Medium resolution (10 m to 100 m level) can be traced back to about 50 years;
- High resolution (2 meters to sub-meters level) can be traced back for about 10 years;

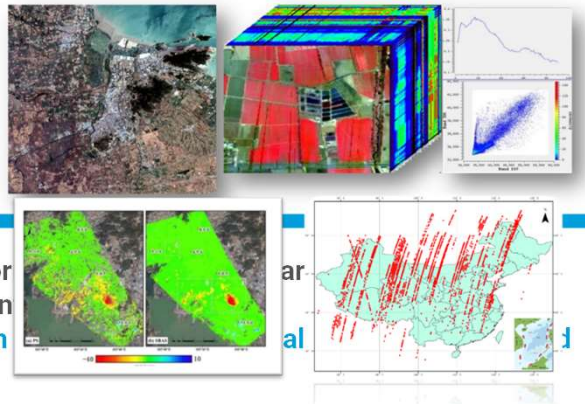


- **High spatial resolution**

- 10-meter
- 2-meter
- Sub-meter


- **Multi-type payloads**

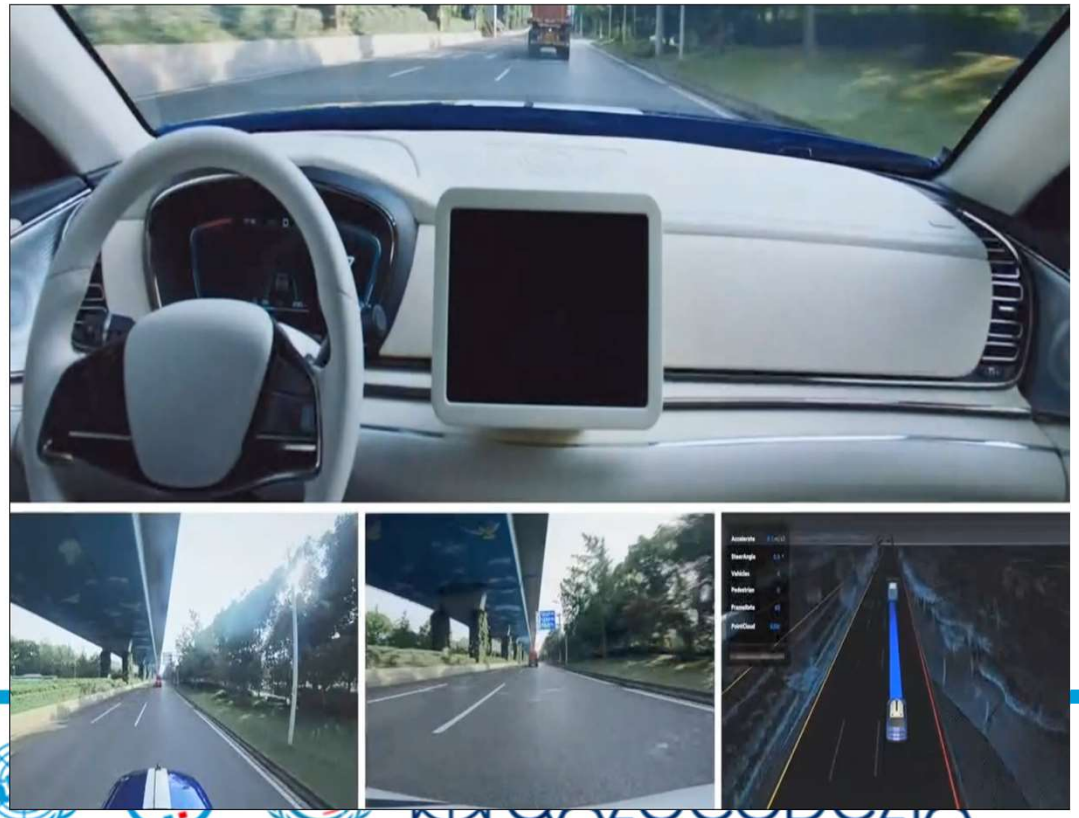
- Optical
- Hyperspectral
- Radar
- Laser
- temperature



Enhancing Geospatial Infor ar
Accelerating the Implemen
Sub-regional Workshop on al
Neighbouring Countries

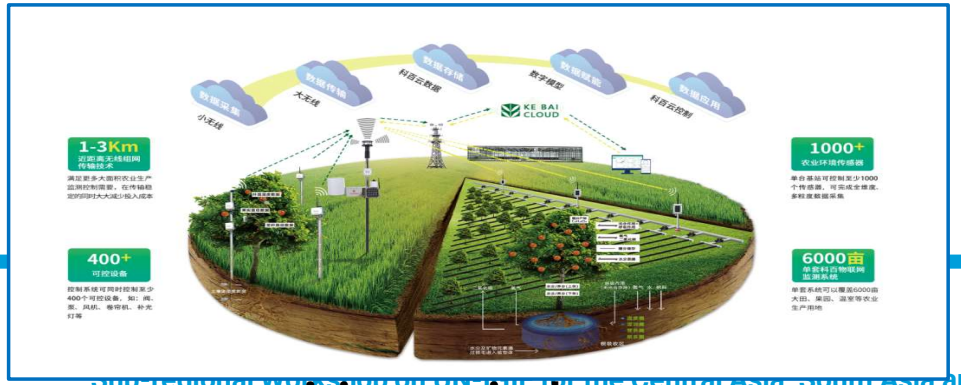
# Strategic Pathway 4 Data
# Strategic pathway 6 Standards

**Geospatial information is deeply integrating with new businesses, such as autonomous driving, intelligent transportation, and the platform economy.**

autonomous driving

intelligent transportation




precision agriculture

# Strategic Pathway 5 Innovation
# Strategic pathway 6 Standards

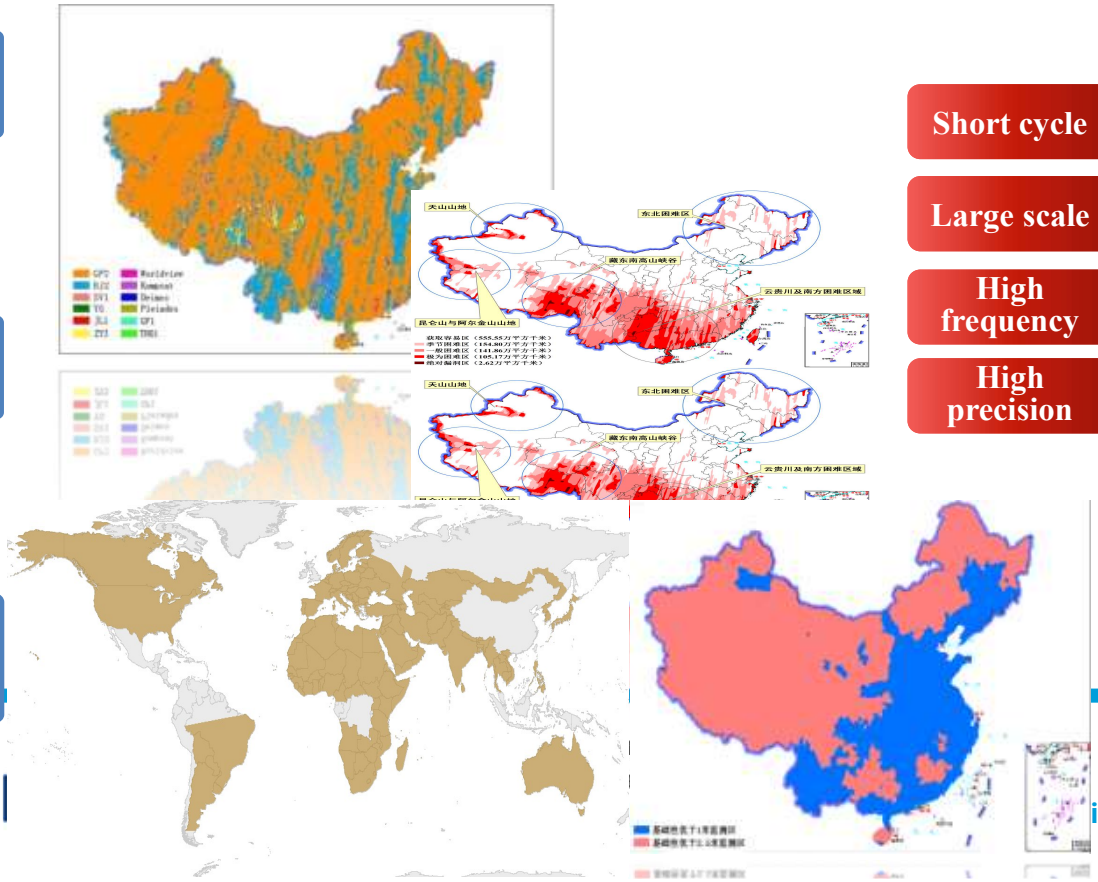
Surveying and Mapping Department

Geo spatial Information Departpment

**The overall guarantee rate of valid data aquiring is over 96%**

Provide image support for project tasks such as annual change survey, 3D China construction, global geographic information resource construction and update, basic surveying and mapping, and public version basic image demonstration and application.

- The Third National Land Survey and Annual Change Investigation
- Urban spatial planing and monitoring (geographical and national status monitoring)
- Construction of global geographic information resources
- 3D China Construction Project
- Dynamic monitoring of cultivated land protection supervision and law enforcement
- … …



**Short cycle**

**Large scale**

**High frequency**

**High precision**

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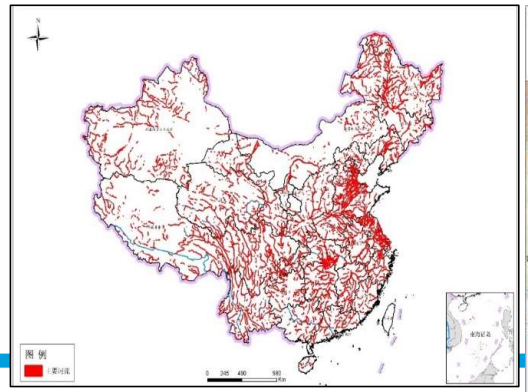
# Strategic Pathway 5 Innovation
# Strategic pathway 6 Standards

Investigation and monitoring Department

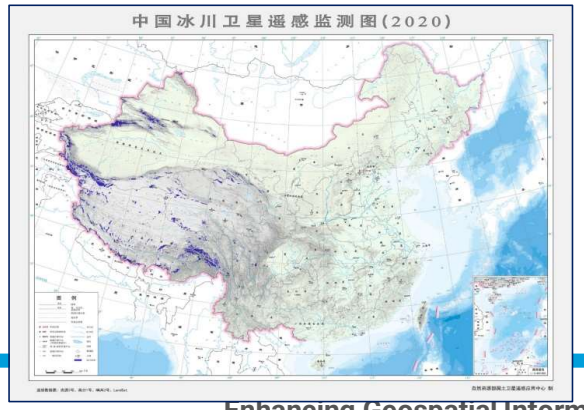
**A dedicated remote sensing monitoring and survey technology system has been constructed**

- **National surface water:** 1,265 rivers above Grade III, 2,128 associated reservoirs, and 2,953 lakes over 1 square kilometer (abundant and dry periods)
- **Glaciers across the country:** Satellite remote sensing monitoring of glacier water resources dynamics across China from 2020 to 2025
- **National mangroves:** changes in the past 40 years
- **National winter wheat:** Winter Wheat Planting in 2022
- **National wind power:** one phase each in the first and second half of the year
- **National photovoltaic:** one phase each in the first and second half of the year

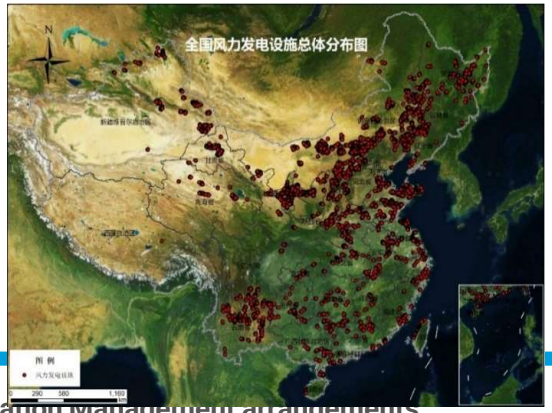


Nation wide rivers

Nationwide mangroves




Change in glaciers greater than 0.1 ha




National wind power

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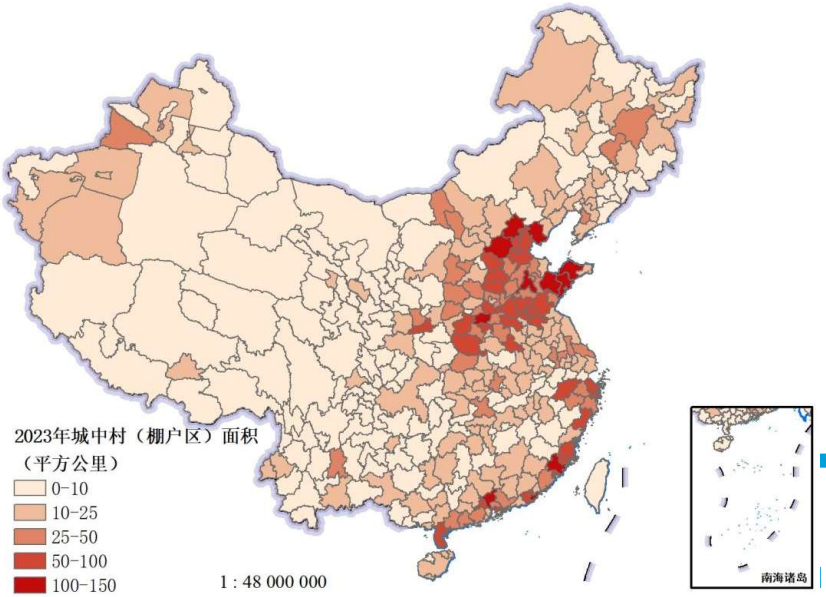
# Strategic Pathway 5 Innovation
# Strategic pathway 6 Standards

Investigation and monitoring Department

**A remote sensing monitoring and analysis technology system for supervision and implementation of land spatial planning has been constructed.**

**National urban areas and towns:** The urban areas of 683 cities with municipalities in China have been delineated for the first time, and the results have become authoritative data for the relevant work carried out by the Ministry.
**Planning implementation supervision:** remote sensing monitoring and analysis of changes in agricultural land and construction land in the Yellow River Park and rectification area in the Yellow River Basin
**CSPON construction:** urban population, inefficient utilization of urban space, major national projects, major infrastructure, space utilization and protection of rivers and lakes
**National outline assessment:** wind power photovoltaic, glacier water resources, river reservoir water quality
**Urban health evaluation:** urban physical geographical scope, urban greening coverage rate





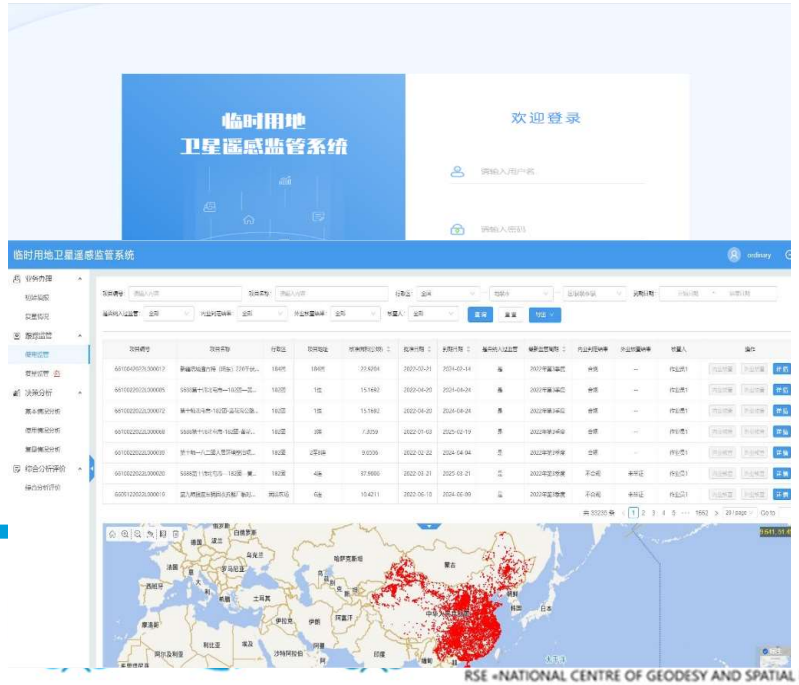

Neighbouring Countries

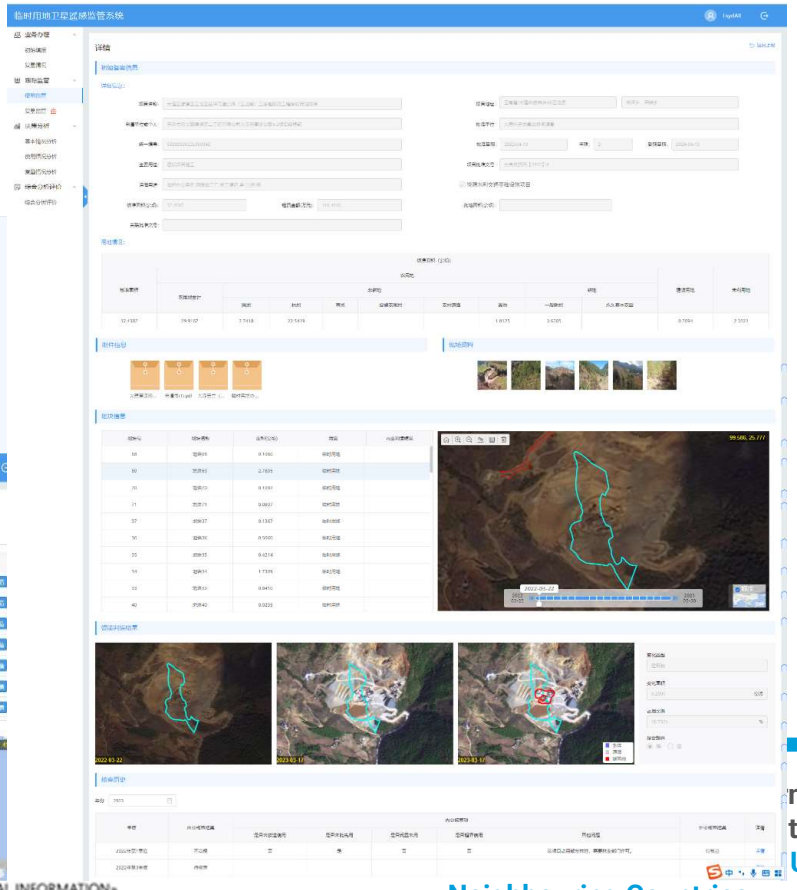
# Strategic Pathway 4 innovation
# Strategic pathway 6 Standards

Department of Natural Resources Development and Utilization

**From all aspects such as policy, management, satellite remote sensing verification to support the conservation and intensive utilization of natural resources.**

- Temporary land use
- Idle land
- Inefficient land use




- Use regulation
- Reclamation supervision
- Basic situation analysis
- Usage analysis
- Reclamation situation analysis

各省项目占地情况汇总表（6月19日）

| 序号 | 省份 | 项目总宗数 | 用地总面积（公顷） | 其中：农用地面积 | 其中：一般耕地面积 | 其中：永久基本农田 | 其中：建设用地面积 | 其中：未利用地面积 | 建设项目施工临时用地 | 地质勘察临时用地 |
|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 北京市 | 144 | 6.1900 | 6.1900 | | | 0.0000 | 0.0000 | 142 | 1 |
| 2 | 天津市 | 58 | 9.8621 | 8.4164 | 4.0046 | 0.0000 | 0.3646 | 0.0000 | 39 | 19 |
| 3 | 河北省 | 269 | 597.9746 | 486.6543 | 207.5778 | 102.4157 | 78.7039 | 18.2650 | 178 | 91 |
| 4 | 山西省 | 345 | 1068.5994 | 664.3728 | 282.4137 | 123.9065 | 148.4150 | 239.2908 | 256 | 89 |
| 5 | 内蒙古自治区 | 1023 | 4928.5540 | 3107.3714 | 490.8578 | 364.9482 | 506.8545 | 1148.1882 | 618 | 405 |
| 6 | 辽宁省 | 316 | 2132.5134 | 1213.6691 | 891.2378 | 97.9848 | 57.8226 | 854.4746 | 164 | 152 |
| 7 | 吉林省 | 340 | 794.4083 | 759.0609 | 149.5158 | 559.0722 | 0.2562 | 35.0912 | 175 | 165 |
| 8 | 黑龙江省 | 280 | 1548.0111 | 1246.5602 | 463.8961 | 447.1871 | 141.8132 | 76.5931 | 190 | 90 |
| 9 | 上海市 | 462 | 589.3750 | 256.1809 | 53501.5378 | 10.6279 | 232.5327 | 85.6119 | 460 | 1 |
| 10 | 江苏省 | 2605 | 2.3079 | | | | 2.3079 | | 2479 | 125 |
| 11 | 浙江省 | 2046 | 0.1660 | 0.0235 | | | 0.1425 | | 2031 | 14 |
| 12 | 安徽省 | 1538 | 38.9048 | 36.2599 | 22.2352 | 19.1747 | 2.6066 | 0.0383 | 1509 | 28 |
| 13 | 福建省 | 326 | 3.0992 | 1.1000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 323 | 3 |
| 14 | 江西省 | 629 | 1988.8324 | 1563.2019 | 249.0025 | 61.7346 | 3120.1172 | 94.1281 | 611 | 18 |
| 15 | 山东省 | 1620 | 29.4335 | 26.2259 | 21.4146 | 0.7468 | 3.1052 | 0.1024 | 1202 | 416 |
| 16 | 河南省 | 562 | 3964.7490 | 3290.6369 | 1270.9277 | 1142.4297 | 301.0352 | 301.5578 | 452 | 109 |
| 17 | 湖北省 | 854 | 0.3224 | 0.2028 | 0.1889 | | 0.1196 | | 818 | 35 |
| 18 | 湖南省 | 435 | 9.5794 | 8.8697 | 0.0000 | 0.0000 | 0.6357 | 0.0740 | 428 | 7 |
| 19 | 广东省 | 1680 | 3396.5057 | 2482.2555 | 168.8172 | 110.5597 | 4434.9473 | 172.9615 | 1673 | 7 |
| 20 | 广西壮族自治区 | 795 | 60.0378 | 40.2993 | 7.1840 | 3.8833 | 2.3274 | 17.4112 | 779 | 16 |
| 21 | 海南省 | 269 | 472.3336 | 282.1673 | 34.3027 | 14.9195 | 97.7315 | 4.5293 | 255 | 14 |
| 22 | 重庆市 | 704 | 251.6479 | 239.4021 | 6009.3489 | 106.9729 | 9.7497 | 0.4580 | 531 | 173 |
| 23 | 四川省 | 1523 | 946.8670 | 910.1977 | 252.9236 | 565.9001 | 21.2116 | 6.5593 | 1111 | 411 |
| 24 | 贵州省 | 992 | 3934.0156 | 6126.7630 | 1074.9039 | 731.8386 | 34556.4653 | 164.6994 | 957 | 35 |
| 25 | 云南省 | 517 | 7551.5364 | 7057.5125 | 7297.0357 | 1091.3567 | 83.6437 | 393.5490 | 510 | 7 |

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Neighbouring Countries

# Strategic pathway 7
# Partnerships

- **The United Nations Global Geospatial Knowledge and Innovation Centre has been established in China.**
- **The ASEAN-China Satellite Remote Sensing Application Centre(ACSAC) and the China-Africa Cooperation Center on Satellite Remote Sensing Application(CACSA) have been established successively.**






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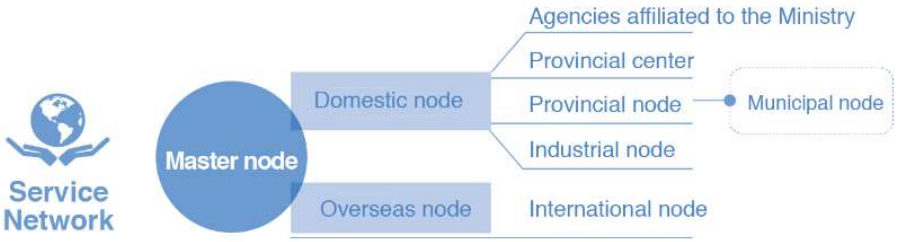
# Strategic pathway 7
# Partnerships


**35 international nodes, 10229 batches, 294927 scenes, 385 TB data push in total, Covered 97 countries and 18 regions**

http://www.sasclouds.com/english/home

| Software and hardware configurations | |
|---|---|
| Equipment | Basic Requirement |
| Server | 8 Core, 16GB RAM |
| HHD | 2TB to 10TB |
| Internet | >20MB/S |
| Operation System | WIN Server 2012 / 2016 |
| Browser | IE 11 / Chrome 49.0 |
| Client * | Query, Management, Receiving, Statistics |

* Deployed by LASAC (can be configured remotely )

E
A
S Asia and
Neighbouring Countries

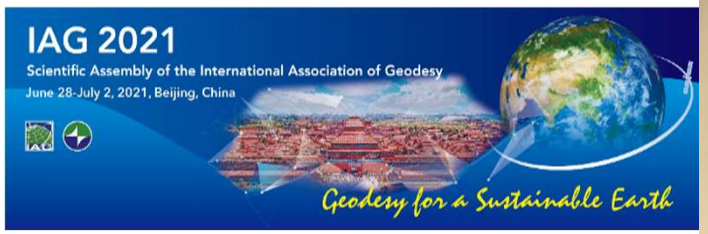
| | 国家Country | Cooperation Partners | Time | Coverage | | 国家Country | Cooperation Partners | Time | Coverage | | Country | Cooperation Partners | Time | Coverage |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 亚洲 ASIA 13 | 泰国 Thailand | 泰国地理信息与空间技术发展局 GISTDA | 2017 | 100 | 非洲 AFRICA 12 | 乌干达 Uganda | 乌干达国家公路局 Uganda National Roads Authority | 2017 | 99 | 欧洲 EUROPE 4 | 英国 UK | 英国诺丁汉大学 University of Nottingham | 2017 | 46 |
| | 老挝 Laos | 老挝内政部国家测绘局 NGD | 2017 | 100 | | 加纳 Ghana | 加纳苏尼亚尼自然资源与能源大学 UENR | 2018 | 100 | | 奥地利Austria | 维也纳大学地球科学地理和天文学院 UNIVIE | 2017 | 100 |
| | 蒙古国 Mongolia | 蒙古土地管理、大地测量和制图局 ALAMGC | 2017 | 100 | | 赞比亚 Zambia | 赞比亚大学 University of Zambia | 2019 | 100 | | 挪威 Norway | 挪威测绘地籍管理局NGO | 2017 | 90 |
| | 斯里兰卡 Sri Lanka | 斯里兰卡测绘局 Survey Department | 2018 | 97 | | 卢旺达Rwanda | 卢旺达航天局 RSA | 2021 | 100 | | 俄罗斯Russia | 俄罗斯科学院空间观测科学研究所 AEROCOSMOS | 2020 | 1.2 |
| | 孟加拉 Bangladesh | 孟加拉测绘局 Survey Department | 2018 | 98 | | 埃及 Egypt | 埃及航天局 EgSA | 2021 | 100 | 拉丁美洲 Latin Ameri-ca 4 | 委内瑞拉 Venezuela | 委内瑞拉国家航天局ABAE | 2018 | 96 |
| | 尼泊尔 Nepal | 尼泊尔国家土地管理、合作和减贫部测绘局 Survey Department | 2018 | 100 | | 埃塞俄比亚 Ethiopia | 埃塞俄比亚空间科学与地理空间研究局SSGI | 2023 | 100 | | 秘鲁 Peru | 秘鲁国家航空航天研究与发展委员会CONIDA | 2021 | 99 |
| | 柬埔寨 Cambodia | 柬埔寨亚星资源集团有限公司 | 2018 | 100 | | 尼日利亚 Nigeria | 尼日利亚国家空间研究与发展局 NASRDA | 2023 | 100 | | 阿根廷 Argentina | 阿根廷国家空间活动委员会 CONAE | 2022 | 99 |
| | 印度尼西亚 Indonesia | 印度尼西亚国家航天局 LAPAN | 2019 | 81 | | 津巴布韦 Zimbabwe | 津巴布韦国家地理空间和航天局 ZINGSA | 2023 | 100 | | 墨西哥 Mexico | 墨西哥国家统计与测绘局INEGI | 2023 | 100 |
| | 约旦 Jordan | 约旦皇家地理中心 RJGC | 2019 | 100 | | 塞内加尔 Senegal | 塞内加尔国家空间规划局 ANAT | 2023 | 100 | 国际组织 Int'l Organiz-ations 3 | 非洲资源测绘发展区域中心 RCMRD | | 2016 | 97 |
| | 亚美尼亚 Armenia | 亚美尼亚共和国教育、科学、文化和体育部科学委员会、亚美尼亚共和国国家科学院 Science Committee MESCS RA, NAS RA | 2022 | 100 | | 科特迪瓦 Côte d'Ivoire | 科特迪瓦国家技术和发展研究局 BNETD | 2024 | 100 | | 联合国空间科学技术教育西亚区域中心 RCSSTEWA | | 2019 | 100 |
| | 印度 India | 德里大学 University of Dehli | 2023 | / | | 佛得角Cabo Verde | 佛得角国家土地管理局INGT | 2024 | 100 | | 联合国粮食及农业组织 FAO | | 2021 | 84 |
| | 塔吉克斯坦 Tajikistan | 塔吉克斯坦国家科学院科学与新技术创新发展中心CIDSNT | 2023 | 97 | | 喀麦隆 Cameroon | 喀麦隆国家气候变化观测站 ONACC | 2025 | 99.95 | | | | | |
| | 巴基斯坦 Pakistan | SoP | 2025 | 100 | | | | | | | | | | |

# Strategic pathway 7 Partnerships
# Strategic pathway 8 Capacity and Education

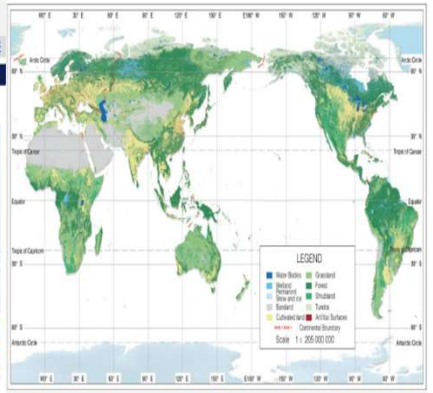
China-Pakistan’s scientific and technical cooperation In surveying, mapping and geoinformation

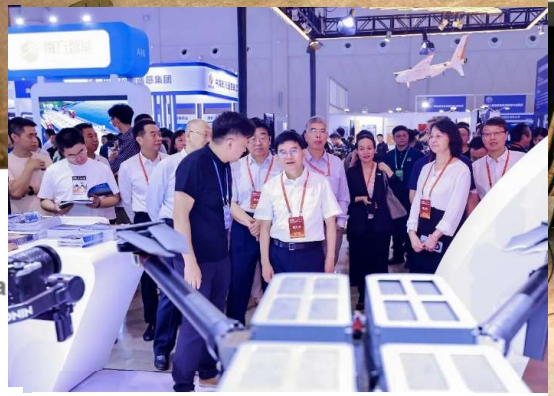
（2023.11——2026.11）

# Strategic Pathway 9
# Communication and Engagement








ICA
International Cartographic Association
Association Cartographique Internationa
ACI

FAO
Food and Agriculture Organization
of the United Nations

GEO
GROUP ON
EARTH OBSERVATIONS

Enhancing Geospatial Informati
Accelerating the Implementatio
Sub-regional Workshop on UN-I
Neighbouring Countries

and
Evaluation

Plans and
Methods

# The "15th Five-Year Plan" (2026-2030)

**1.Fourmulation of the Natural Resources 15th Five Year plan**

High-quality development as the core, balancing between conservation and utilization to support Chinese modernization as the priority.

- from ministry to Institutions
- from industry to  each business field such land and ocean satellite remote sensing
- from State-province, city, county, township

**2.One Map Key Project**

For a coordinated development

**3.High technologies empowering Fundamental Surveying and Mapping System**

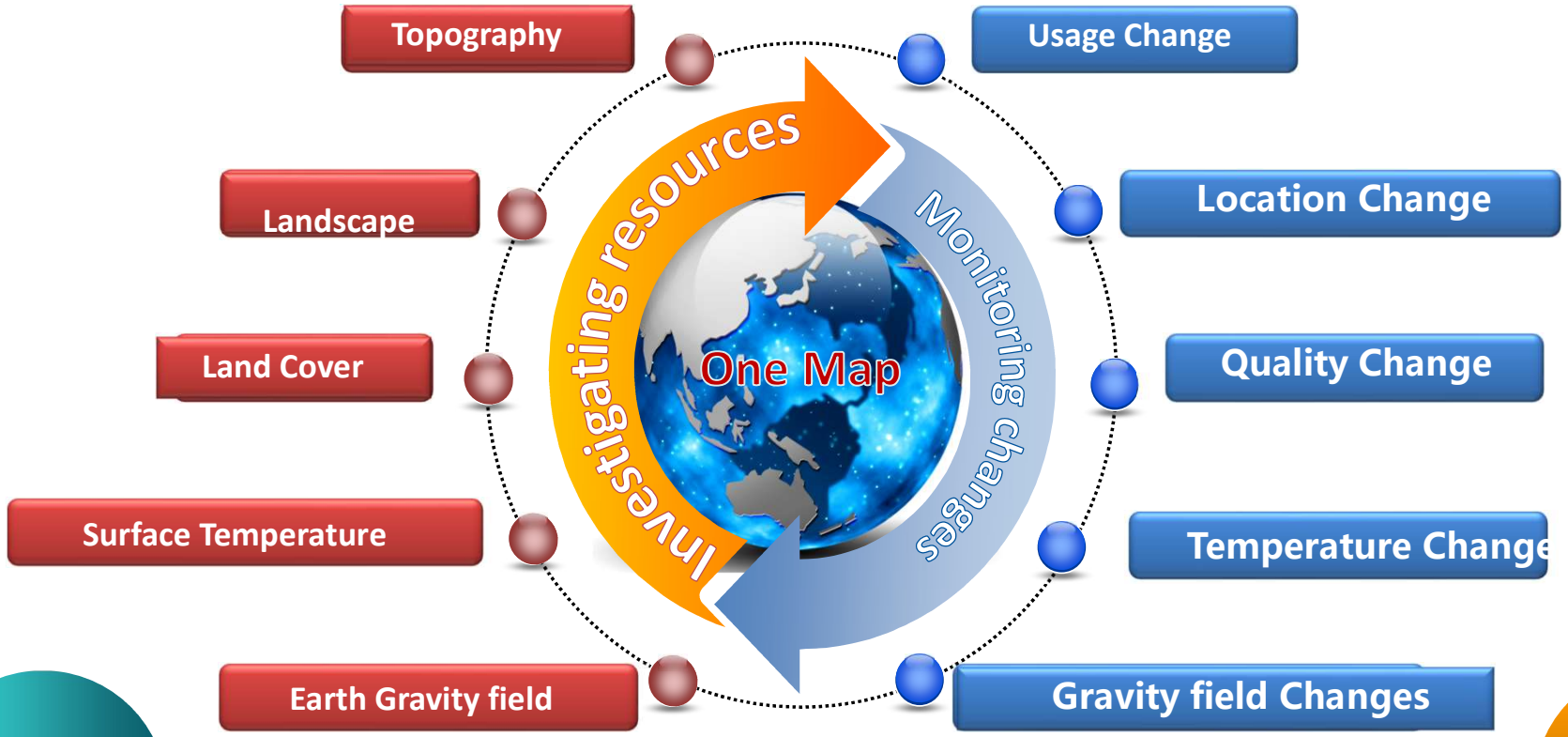
ReS3D China, smart cities, World Map

**4.Activating the value of geospatial information data**

Improving the chain of data supply, circulation, and application, and fostering new quality productive forces.SatCloud

**5.Global and regional cooperation**

# Background of One Map




Gravity satellite

Laser altimetry satellite

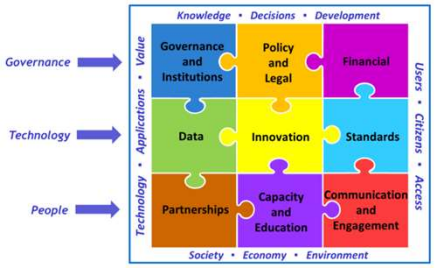
Optical (visible light) satellite

Hyper spectral satellite

Radar satellite

# Background of One Map

**Requirements for the Construction of "One Map" in the New Period**




**Link to Applications**

**An important starting point to realize the "four integrations"**

Integration of ministries/Integration of departments and bureaus / Integration of departments / Integration of departments and provinces

- One Map
- One set
- One platform

**Map-based planning**

1

2

Natural Resources "One Map"

**Map-based management**

- Make planning alive
- Manage resources
- Enable all to use

**Important measures to implement the "four unifications"**

Unified base map, unified standard, unified planning, unified platform

3

4

**Important carrier to promote the transformation and upgrading of natural resources management**

**Important means to support the fulfillment of the "two unifications" responsibilities of the Ministry**

**Lay a solid foundation**

**"Vertically consistent, horizontally collaborative" multi-sensor type, multi-temporal and spatial resolution, and full-geographical coverage**
**The remote sensing dynamic monitoring and supervision capability of natural resources is an effective means to achieve unified linkage and business integration of "one map"**

# Background of One Map

| Type | Satellite | Quantity | Launch Time | Major Payloads | Resolution (meters) | Main Purposes |
|---|---|---|---|---|---|---|
| Optical | **ZY3** | 3 | 2012，2016，2020 | optical, near-infrared laser altimeter (02, 03 satellites) | **2**/8 | 1:50000 stereo mapping |
| | **ZY1** | 1 | 2011 | optical, near-infrared | 2.36/10 | natural resources monitoring |
| | **GF1** | 4 | 2013， 2018 | optical, near-infrared | 2/8 | feature update, natural resources monitoring |
| | **GF2** | 1 | 2014 | optical, near-infrared | 0.8/3.2 | feature update, natural resources monitoring |
| | **GF7** | 1 | 2019 | optical, near-infrared laser altimeter | **0.65**/0.79 | 1:10000 stereo mapping |
| | **GFDM** | 1 | 2020 | optical, near-infrared, polarization detection, atmospheric exploration | 0.41/1.64 | feature update, natural resources monitoring |
| Hyperspectral | **ZY1 02D/E** | 2 | 2019，2021 | optical, near-infrared, hyper-spectral | 2/20 | geological survey, vegetation fine classification |
| Radar | **3m L-SAR** | 2 | 2022 | L-SAR | 3/6/12/30 | topographic mapping |

# Prospevtive of One Map from Satellite Application View

Clear connection of business logic

Unified linkage of underlying data

interconnection High speed network

Sufficient storage computing intelligence

"Multi-supervision integration" links the upstream and downstream businesses of departments and bureaus, making satellite remote sensing the "lubricant" for the integration of departments and bureaus.

**Integration of departments and bureaus**

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Investigation | Planning | Approving | Land supply | Land Use | Remediation | registration authority | Right and interest | Law enforcement | … … |

"One supervision for multiple purposes", unified layout of business supervision standards, making satellite remote sensing the "adhesive" for the integration of ministries and bureaus

**Integration of departments and bureaus**

中华人民共和国自然资源部 Ministry of Natural Resources of the People's Republic of China

国家林业和草原局 National Forestry and Grassland Administration 国家公园管理局 National Park Administration

自然资源部 中国地质调查局 China Geological Survey

"Win-win cooperation" actively serves other industry ministries and commissions, and makes satellite remote sensing a "catalyst" for the integration of departments and bureaus.

**Integration of ministries**

中华人民共和国国家发展和改革委员会 National Development and Reform Commission

国家文物局 NATIONAL CULTURAL HERITAGE ADMINISTRATION

国家体育总局 General Administration of Sport of China

国家能源局 National Energy Administration

"Co-construction and sharing" speeds up the implementation of the three-year action plan, and makes satellite remote sensing a "booster" for the integration of ministries and provinces.

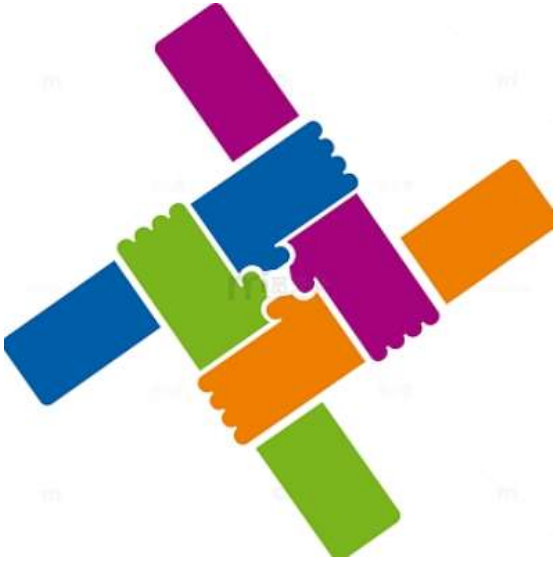
**Integration of departments and provinces**

- Co-construction of satellite remote sensing image resource pool
- Jointly research intelligent interpretation technology capabilities
- Jointly explore satellite remote sensing application

Enhancing Geospatial Information Management arrangements
Accelerating the Implementation of the SDGs
Sub-regional Workshop on UN-IGIF for the Central Asia, South Asia and

Improve remote sensing dynamic perception and decision-making support capabilities to support the construction of "one map" of natural resources

- Satellite remote sensing applications are experiencing innovation from perception to cognition
- High-quality satellite remote sensing application services a healty and beautiful Earth



# Thank you!

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