



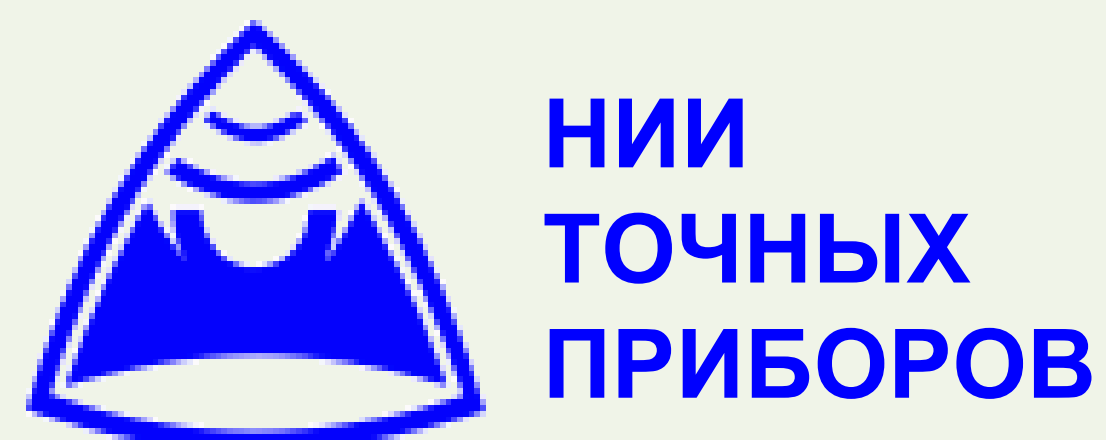
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РОСКОСМОС

Dr. Adrov Victor
Dr. Shirshov Sergey
Potapov Sergey

INDUSTRIAL PRODUCTION ORGANIZATION
GEOSPATIAL INFORMATION
USING "PHOTOMOD" SOFTWARE



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AUTOMATED PRODUCTION COMPLEX



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THE MAIN REQUESTS FOR THE ESTABLISHMENT AND DEVELOPMENT

**GROUND COMPLEX RECEIVE
DATA**

**AUTOMATIC PRODUCTION
LINES**

**ENSURE CONSUMER ACCESS
TO RESOURCES**

BACKGROUND TO THE DEVELOPMENT

- DOMESTIC ORBITAL GROUP INCREASING
- TIME WAITING SPENT FOR PHYSICAL DELIVER OF REMOTE SENSING DATA – UP TO 20% OF THE TOTAL ORDER PERIOD
- COMMERCIAL SUPPLIERS HIGH COSTS

- THE NEED TO INCREASING THE PRODUCTION OF GEOSPATIAL INFORMATION
- LABOR RESOURCE EFFICIENCY REDUCING AND INCREASING THE NUMBER OF WORKBENCH
- THE PORTION OF PERSONNEL COSTS IN THE NET COST STRUCTURE - 30%

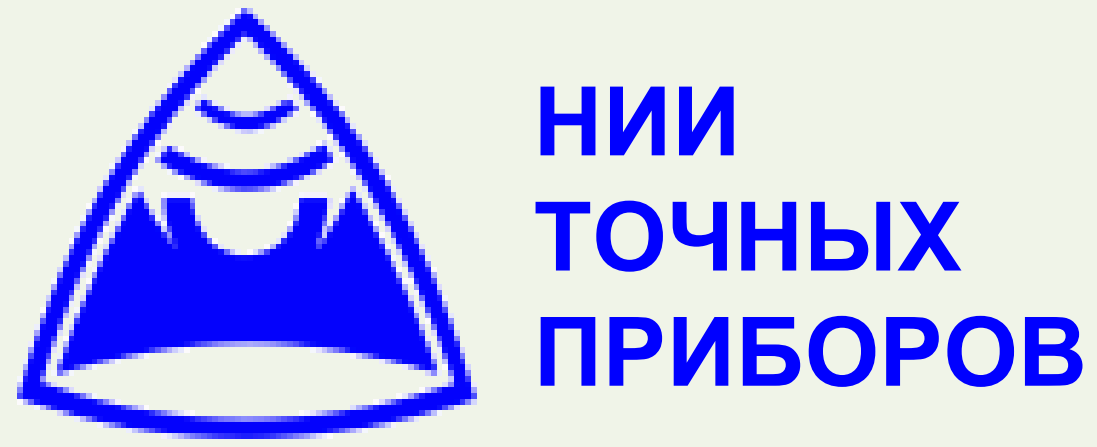
- INFORMATION SYSTEMS PROGRESS
- LOW EFFICIENCY OF INTERACTION WITH GEO-PRODUCTS CUSTOMERS
- INFORMATION EXCHANGE ENTITY REMOTENESS

EXPECTED RESULTS

- ON-LINE ACCESS TO THE MOST TIMELY RUSSIAN SATELLITE IMAGERY
- THE ATTRACTIVENESS INCREASING OF PRODUCTS BY REDUCING NET COST AND PRICE

- GEOINFORMATION RESOURCE PRODUCTION ACCELERATION
- REDUCING THE RISK OF HUMAN FACTOR IN PRODUCTION
- THE PRODUCT INCREASING ATTRACTIVENESS BY REDUCING NET COST AND PRICE

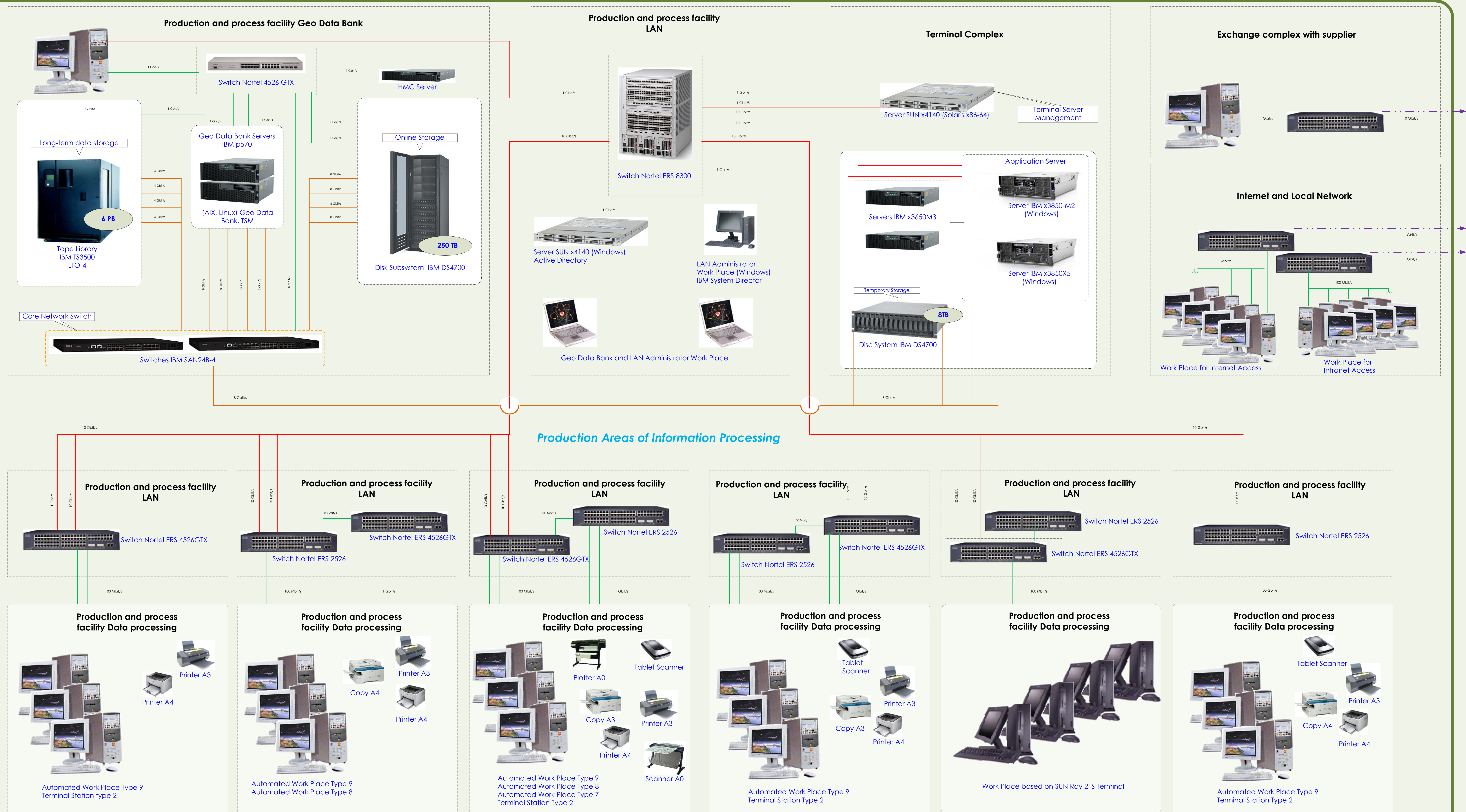
- ACCESS TO GLOBAL DATA IN NEAR-REAL TIME
- STANDARDIZED INTERACTION OF THE SYSTEM PARTICIPANTS
- HIGH-SPEED DATA COMMUNICATION OVER DEPARTMENTAL NETWORK BROADBAND LINKS



AUTOMATED PRODUCTION SYSTEM FOR GEOSPATIAL INFORMATION



FIRST PRODUCTION COMPLEX

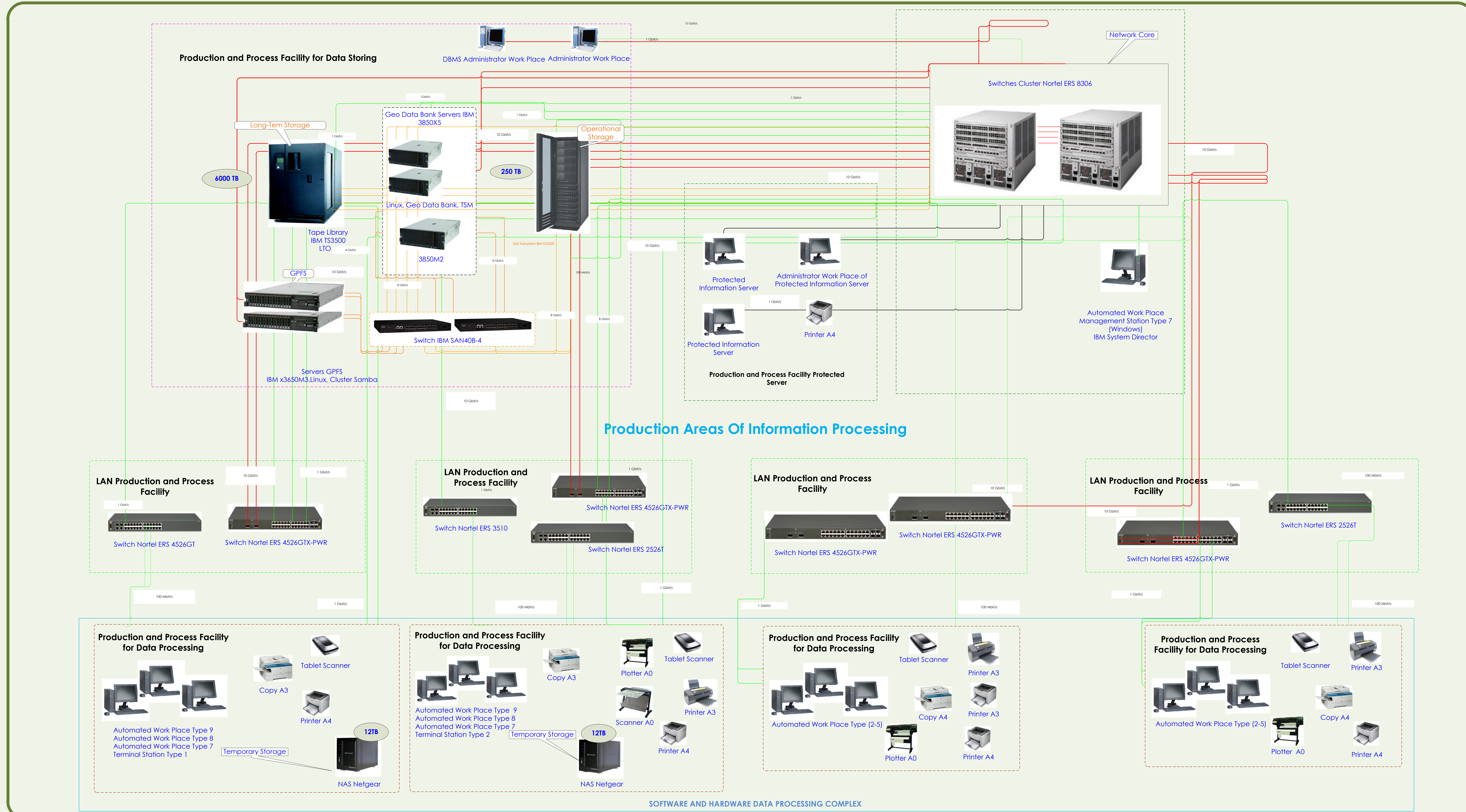




AUTOMATED PRODUCTION SYSTEM FOR GEOSPATIAL INFORMATION



SECOND PRODUCTION COMPLEX





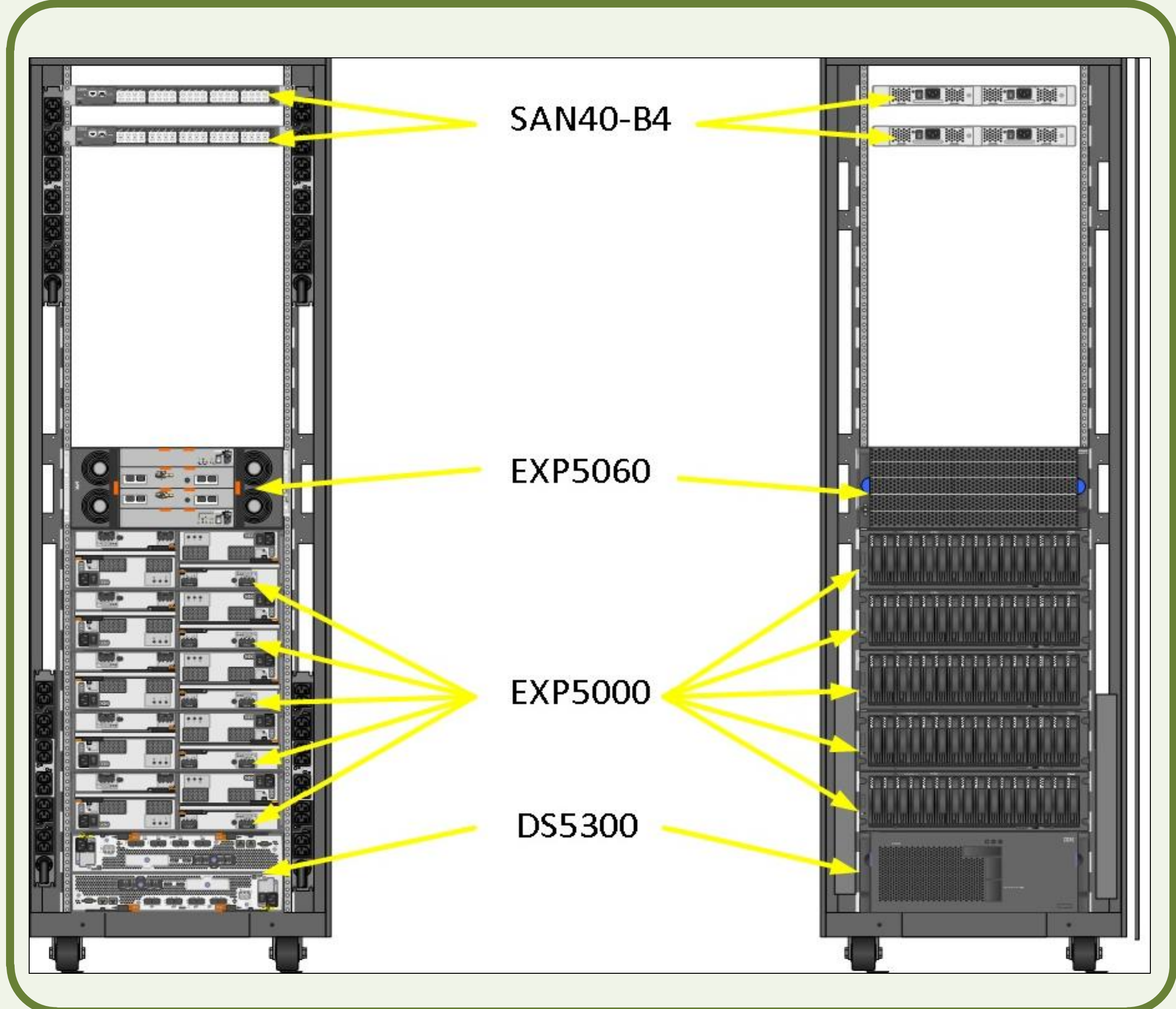
AUTOMATED PRODUCTION COMPLEX

OPERATIONAL DATA STORAGE

Servers general characteristics:

DS5300

- 8 GB Cache Memory
- EXP5000 16 HDD*300 Gb
- EXP5060 60 HDD* 2 Tb
- Data Storage size 250 Tb



LONG-TERM DATA STORAGE

TS3500



Library General Specification:

Rack 3584-L53

8 drives TS1040 Ultrium 4 Tape Drive

Rack-extension 3584-S54

Cartridge capacity set 6000 Tb

INDUSTRIAL POWERS AND DATA SERVERS HARDWARE FOR GEOSPATIAL INFORMATION CREATING

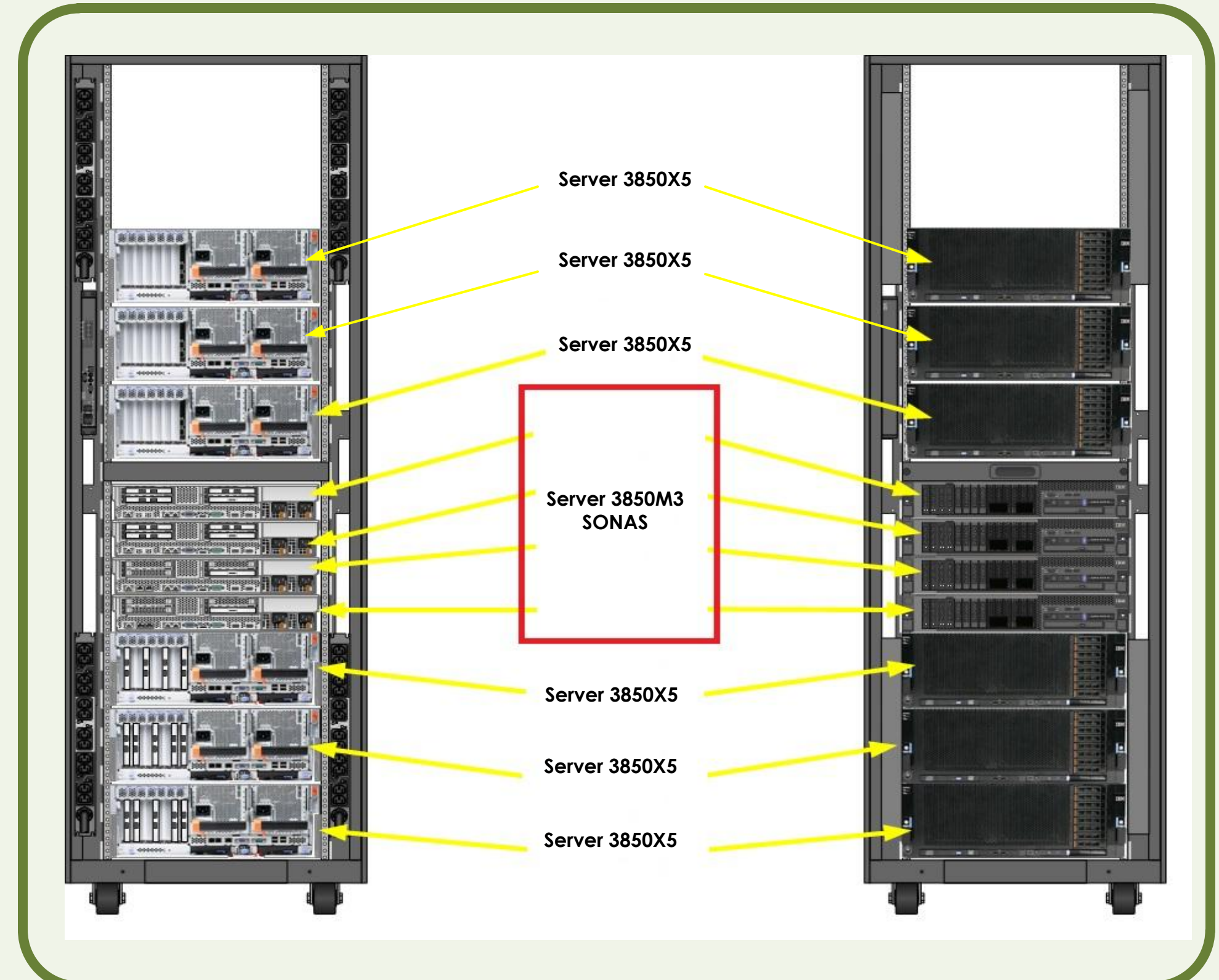
FILE ACCESS SERVERS

Data storage server 3650M3

Servers general characteristics:

**Intel Xeon Processor 5600;
48 GB SDRAM; 146GB 10K Hot-Swap SAS
HDD; 10Gb Ethernet**

SOFT: Server GPFS, Samba, CLUSTERHA



Data storage server 3650M3, data backup

Servers general characteristics:

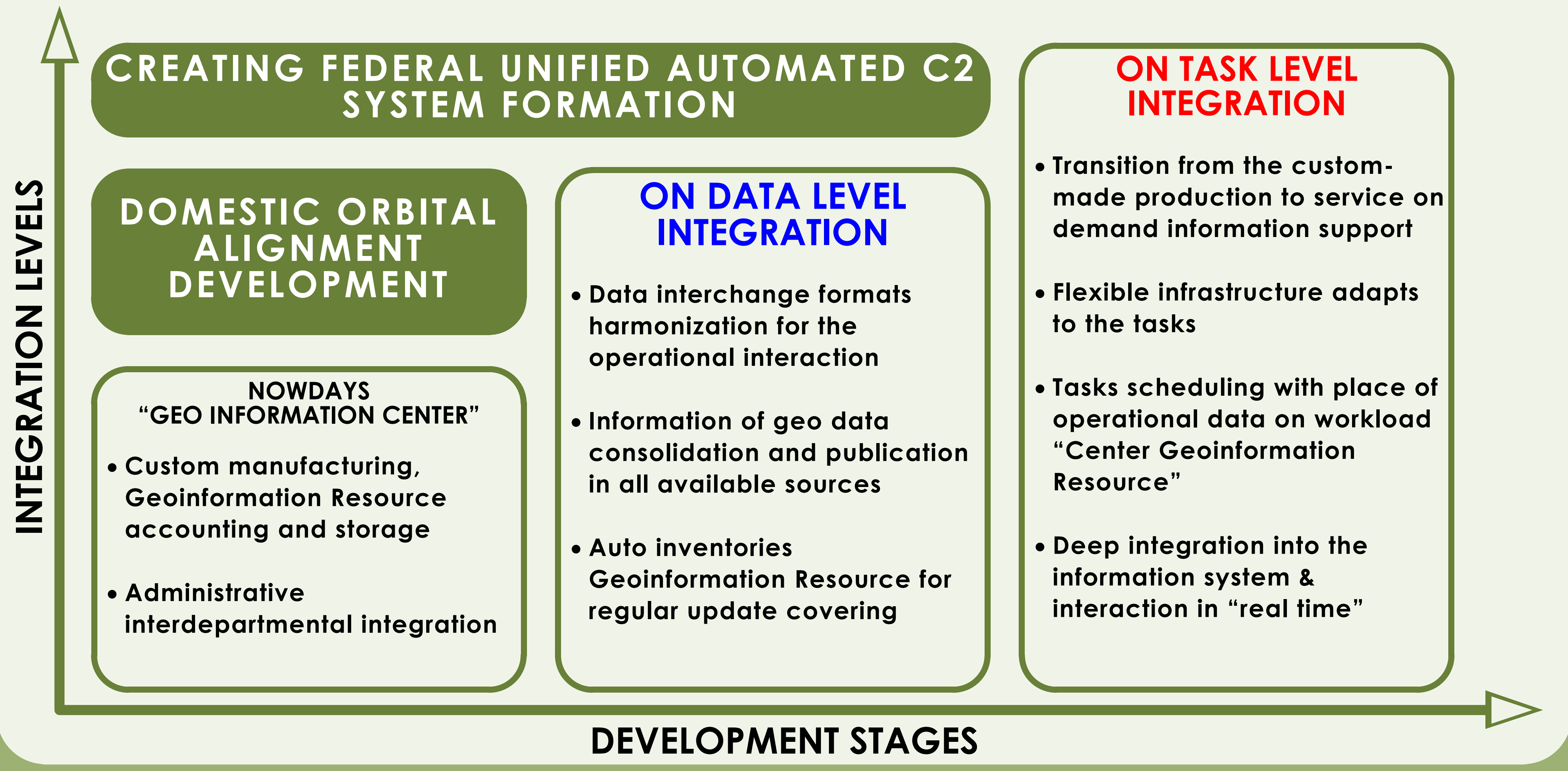
**Intel Xeon Processor 5600;
48 GB SDRAM; 146GB 10K Hot-Swap SAS
HDD; 10Gb Ethernet**

**SOFT: Server GPFS, Samba, TSM server, client
(Tivoli Storage Manager), CLUSTERHA**

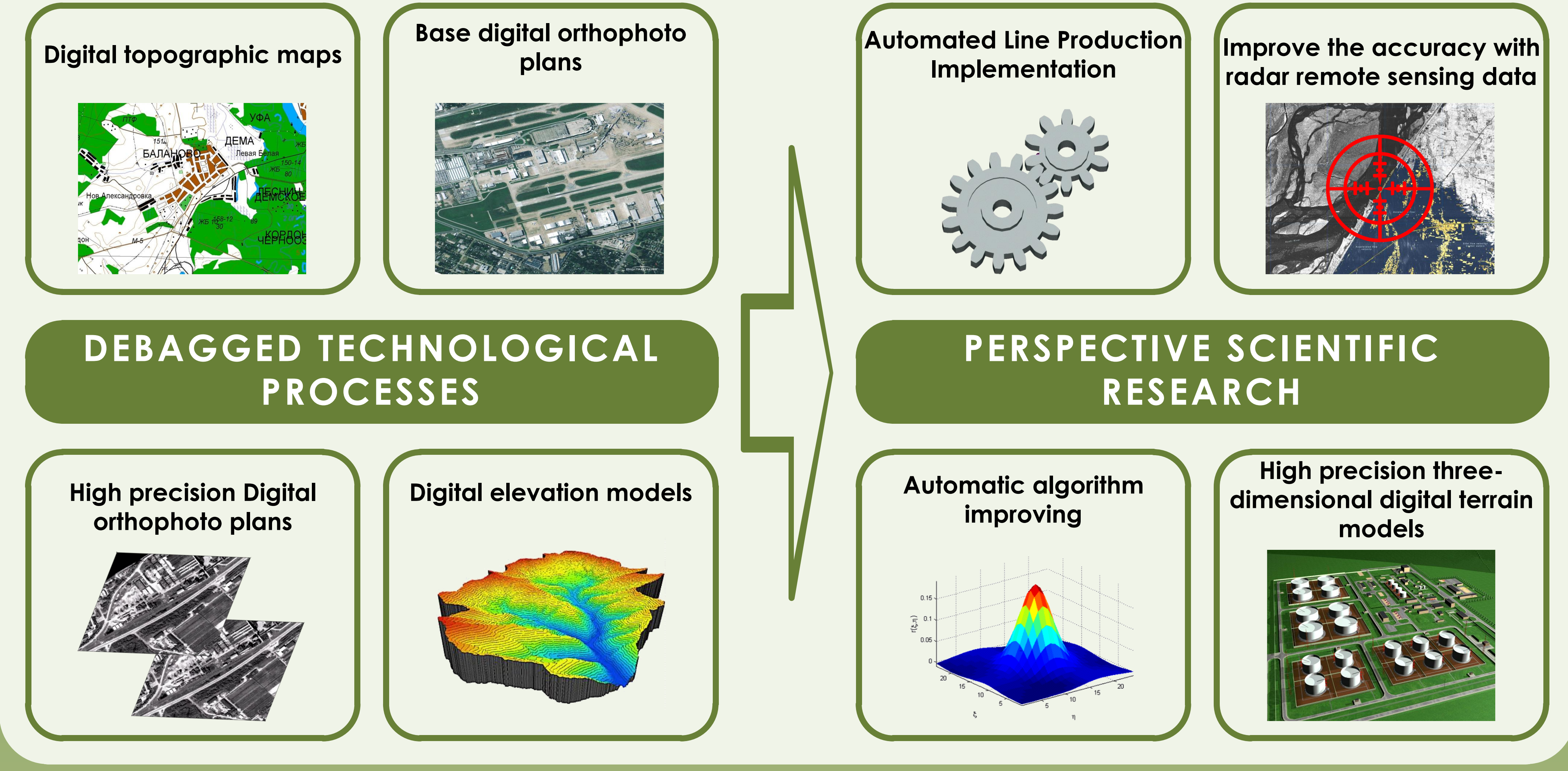


AUTOMATED PRODUCTION COMPLEX

DEVELOPMENT AND INTEGRATION INTO A UNIFIED SYSTEM

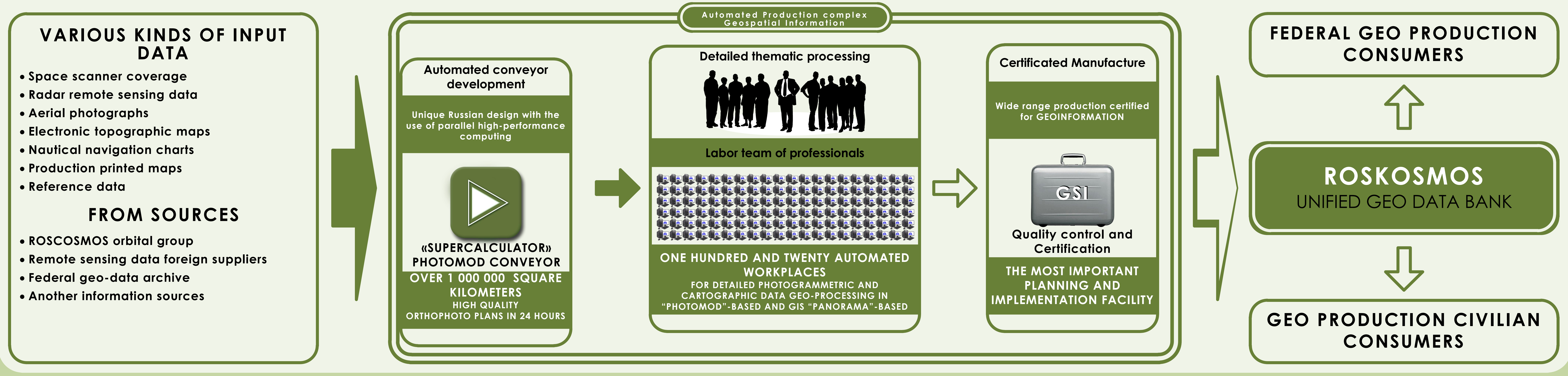


SCIENTIFIC AND PRODUCTION ADVANCE



DEVELOPMENT AUTOMATED PRODUCTION COMPLEX GEOSPATIAL INFORMATION – GOOD ANSWER FOR THE CHALLENGES OF OUR DAYS

AUTOMATED PRODUCTION COMPLEX GEOSPATIAL INFORMATION IN INTEGRATED GEOGRAPHICALLY DISTRIBUTED UNIFIED SYSTEM





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THANKS FOR YOUR ATTENTION!