Opportunities Between Industry and Developing Countries in Open Access Scientific Data

-- Take the Recent Developments in Environment Data Access Policies in China as An Example

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1. *A New Milestone in Scientific Development of China - A New Strategy in Science Made in 2002*
2. *Transformation Toward to the New Strategy*
3. *Environment Data Policy Reform in the Transformation Progress*
4. *New Challenges in China*
5. *Experiences we learn -* Opportunities Between Industry and Developing Countries in Open Access Scientific Data

1. China Made a New Strategy in Science in 2002

In order to promote the implementation of the national strategy on education and science and enhance the innovative ability of science and technology of the country, China should set up the National Basic Support Plantform for Science and Technology, China has to speed up to construct it now

The Principle of the New Strategy in Science

Enhancing open and access to the digital scientific resources as well as the big (expensive) equipments

Try to Understand Why China Did So

- **China Keeps the Culture Recording the History (political events, agriculture, environment, S&T …)**

- **More Than 1,000 Different Kinds of Yearbooks Published Each Year Now**

- **About 5,000 - 6,000 Major Databases Have Been Developed and Updated Regularly**

- **Thousands of Data Nodes Operated in China**

Three Stages During the Last Thirty Years

1970's and before

Two Categories: confidential and public domain data with paper based media for free

1978 - 1993

Two Categories: confidential and digital data for charge

1994 - 2002

Two Categories: confidential data and digital data for charge. Scientific communities ask for policy reform

China Made a New Strategy

1. **China Entry WTO**
2. **Government On-Line Program by the Ministry of Information Industry of China Started in 2001**
3. **Electronic Administration Program by the National Planning Commission of China in 2002**

# 2. Transformation Toward to the New Strategy in Science
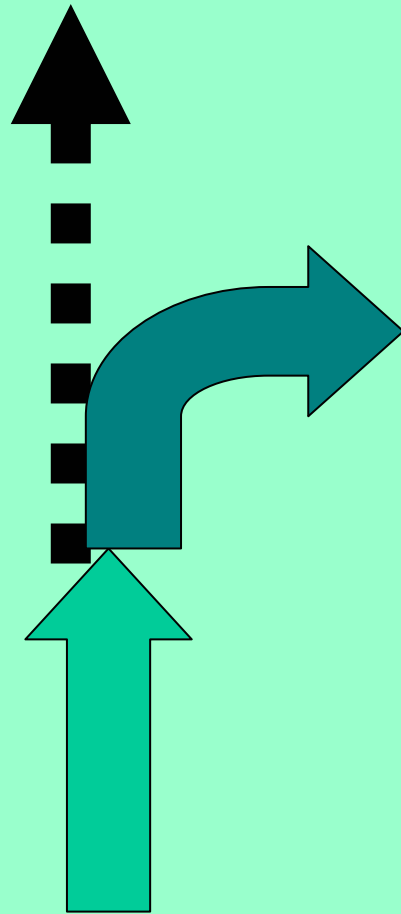
- The strategy had been approved in December 2002 and is operated by the Ministry of Science and Technology of China (MOST)

- Ministry of Finance of China lunched the long term budget for it in January 2003

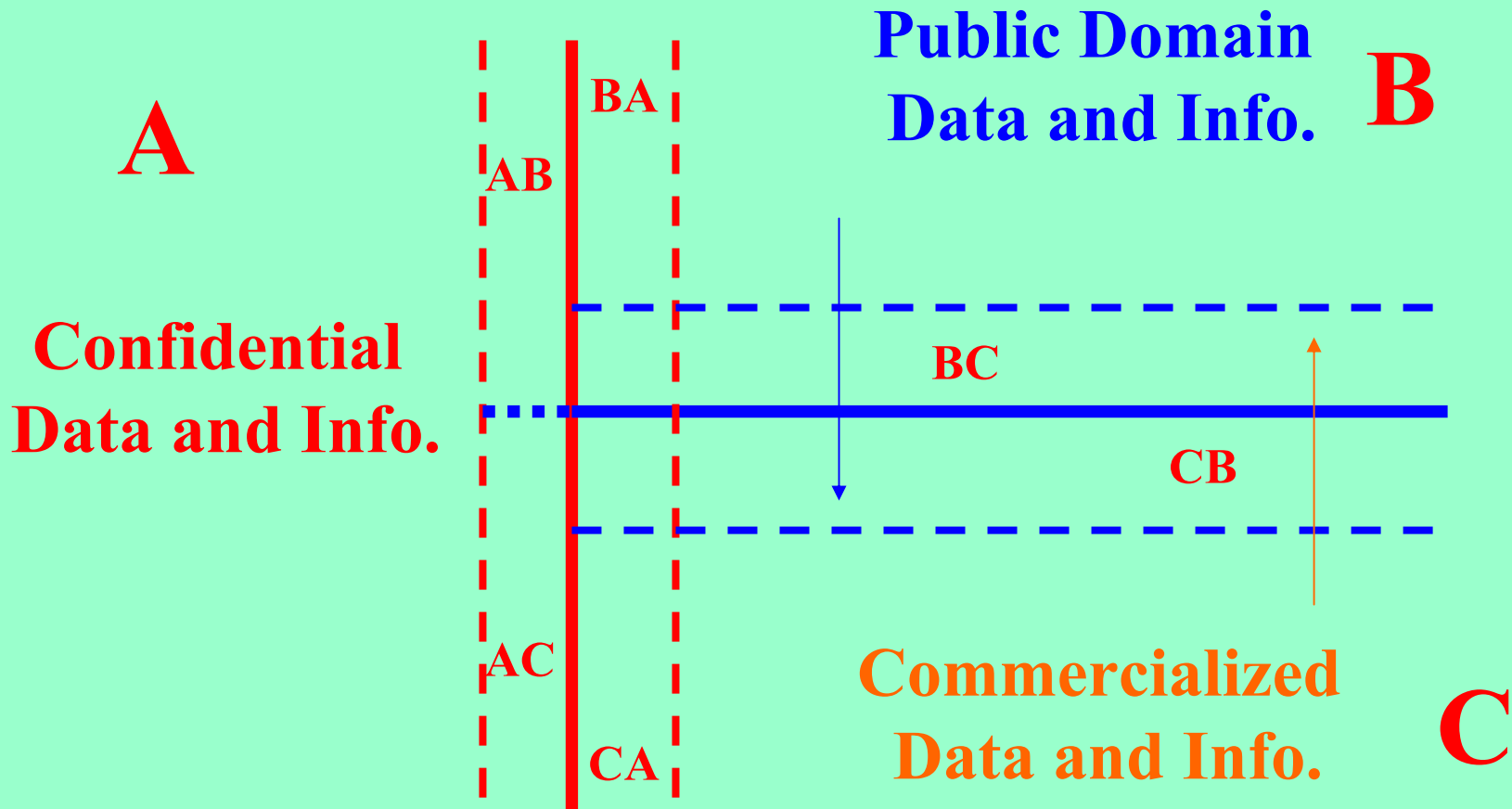# 2. Transformation Toward to the New Strategy in Science

Databases

Information

Equipments

Species

Information Network
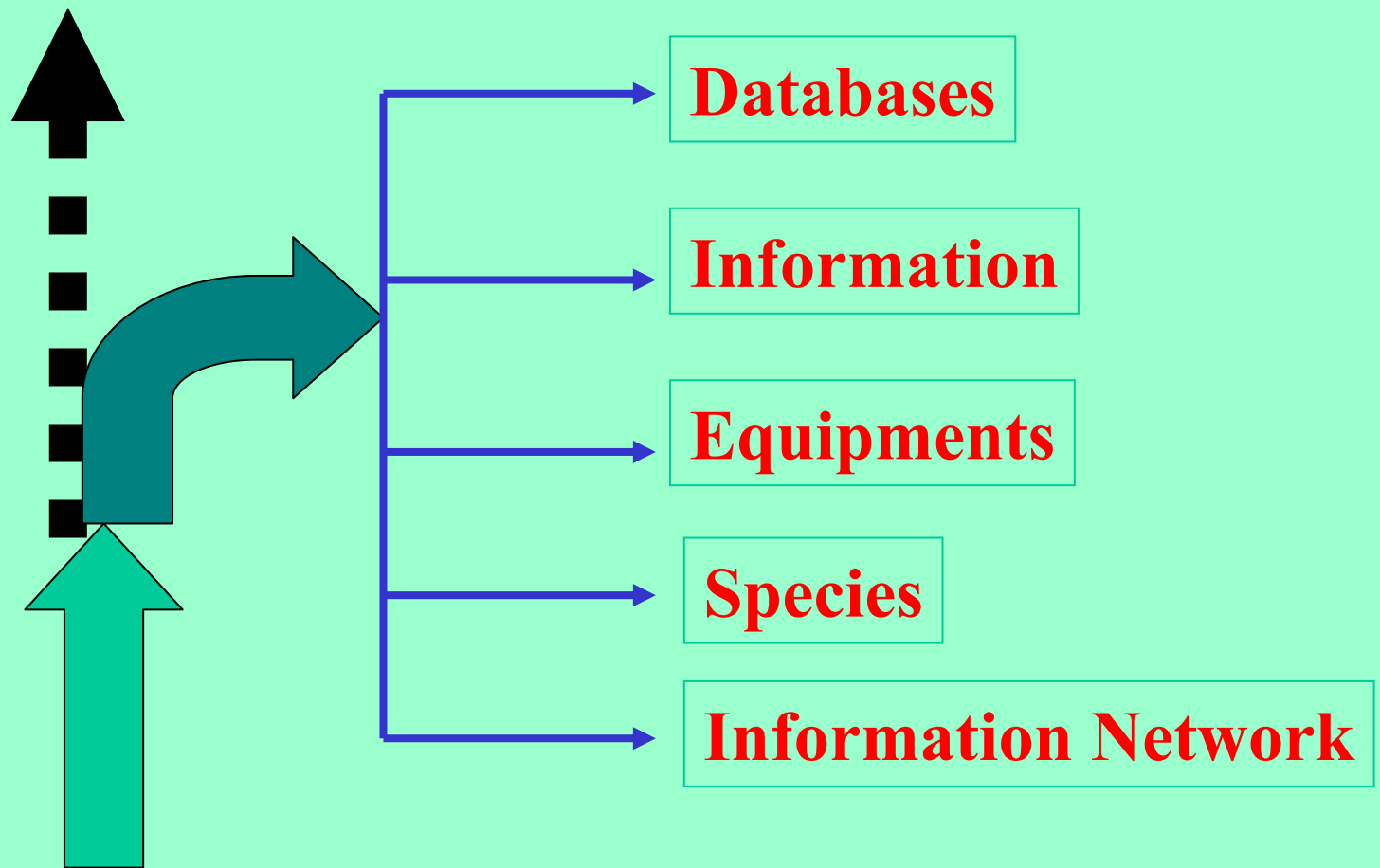
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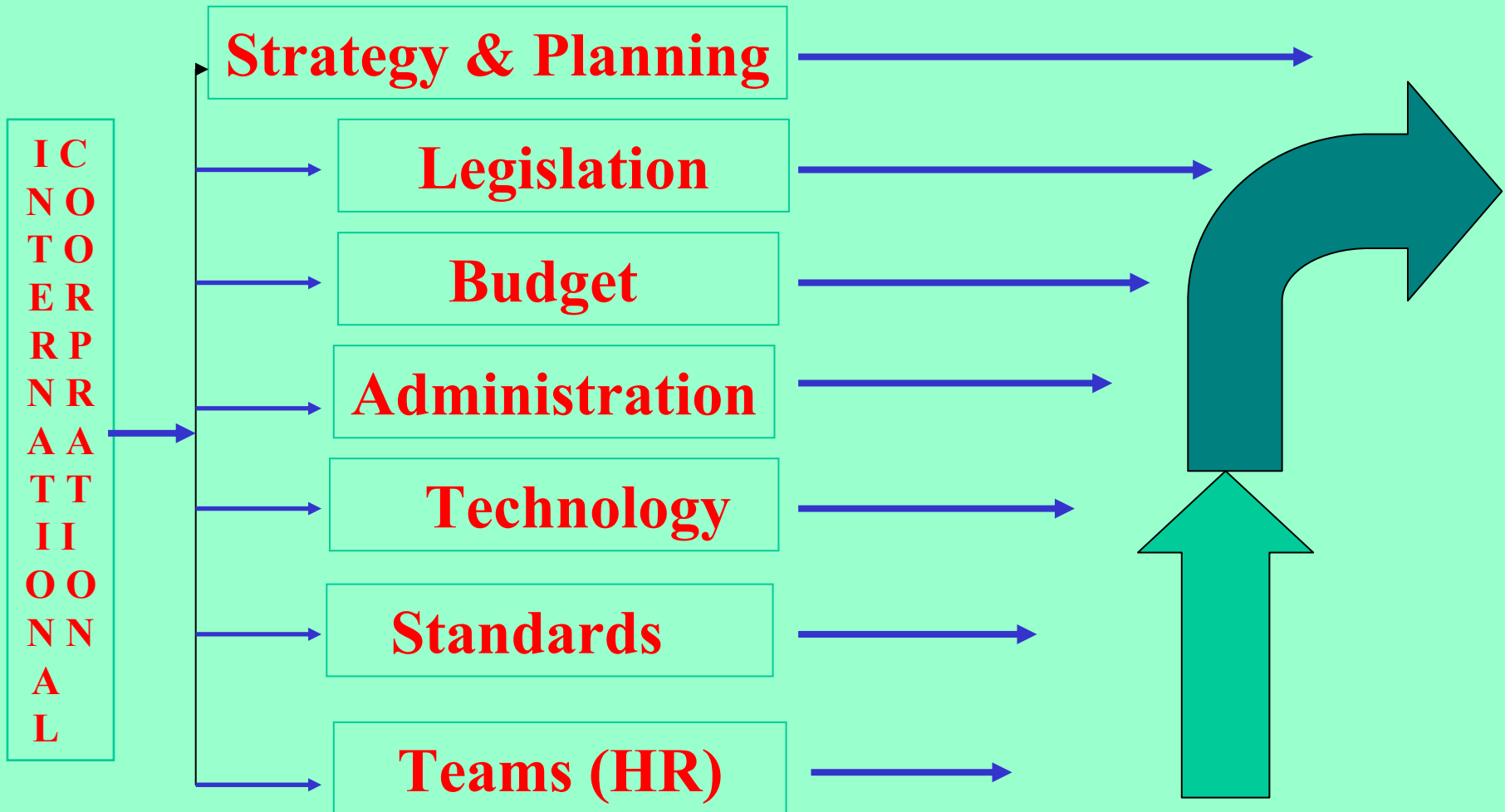
3. *Environment Data Policy Reform in China*

- *Open and Access to Metrology Data in 2002 as an example*
- **Identify three different michenisms**
- **Establishment of legislation framework for each of the three michenisms**

Establishment of Legislation Framework for Each of Three Michenisms
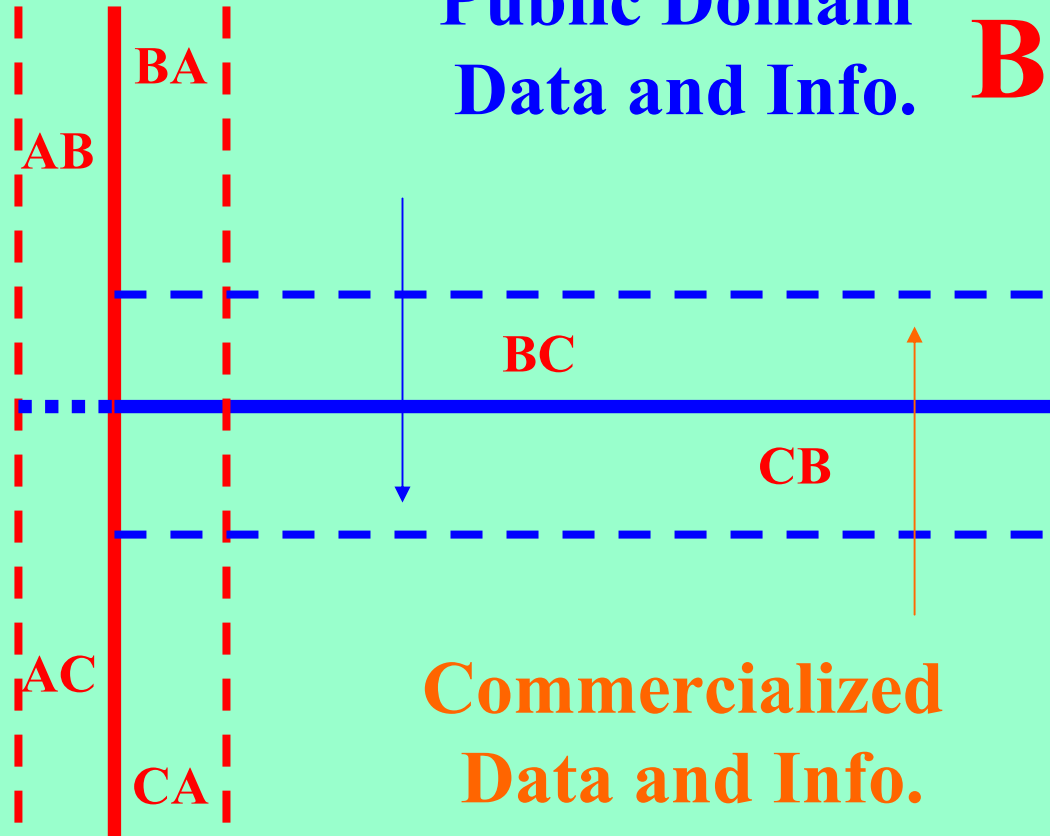
A

B

C

Public Domain Data and Info.

Confidential Data and Info.

Commercialized Data and Info.

BA

AB

BC

CB

AC

CA

Establishment of Legislation Framework for Public Demain Data and Info.

B:

Public of Information Regulation

Administrative Regulations

Rules of Departments

BA/BC/CB

Public Domain Data and Info.

B

BA

AB

BC

CB

AC

CA

Commercialized Data and Info.

C

Environment Data Policy Reform (regulation already established)

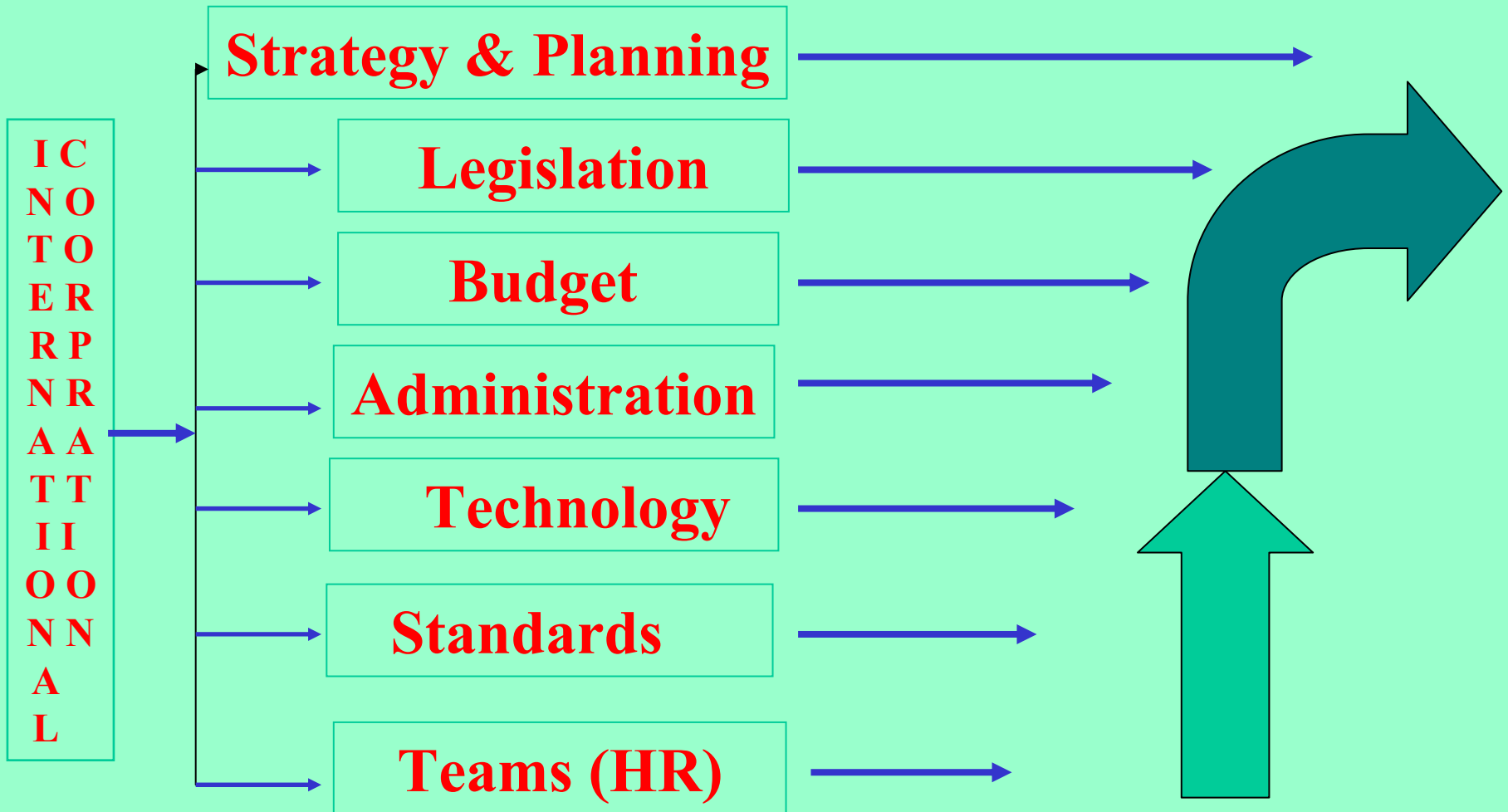*Laws:* **Survey and Mapping Law of P.R. China**

Regulations:

- **Order of the President on Access to Metrology Database of P.R. China**
- **Regulation of Access to Survey and Mapping Databases of P.R. China**
- **Regulation of Access to Geology Database of China**
- **Regulation of Access to Hydrology Database of P.R. China**

4. New Challenges in China

1. How make the Agencies' data available for research and education? (budget, employees ..)
2. How dealing with the data come from research projects? (government, PI, institute, data centers)
3. How dealing with the issues of open and access to the data within China and international users? (international policies)
4. How dealing with the issues about the open and access to the data and information? (data centers and libraries)
5. How manage the data with update technology? (archiving and delivering)
6. How Link data community with research communities?

China Needs at Least Five Years to Make the Transformation

INTERNATIONAL COORPRATION

Strategy & Planning

Legislation

Budget

Administration

Technology

Standards

Teams (HR)

5. *Experiences we learn* - Opportunities Between Industry and Developing Countries in Open Access Scientific Data

- **Share experiences to try to understand and to learn to each other (USA model and Europe model, and own model) - International organization's role**
- **Scientists and government officers work together (information summit of world)**
- **Linking data community with research communities (ICSU bodies, other international organizations)**
- **Pay attention to the training and yang scientists in new data and information technology transformation**

Thanks!