



An Introduction to the National Digital Archives Program

Ching-chun Hsieh

Director, Program Office of NDAP

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The NDAP

- On January 1st 2002, a national program called the National Digital Archives program has been launched in Taiwan.
 - The first phase of this program has been planned as a 5-years program, from 2002 to 2006.
 - It is a program of Information Technology Practice.

Background for NDAP ¹

- **Infrastructure:**
 - **Favorable Government Policy**
 - **Sound Tele-communication Policy and Capacity.**
 - **About 1/3 of the total population of Taiwan, approximately 7M, are Internet users.**
 - **All primary schools have had ADSL access since the summer of 2000.**
 - ...
- **Coordination is needed for various digitization projects in Taiwan.**
 - **e-Government, e-Commerce, value-added industries ...**
 - **Distance Learning, e-Learning...**
 - **Remote medical care**
 - ...

Background for NDAP ²

- **Technical merits of Taiwan**
 - **Prosperous Information Industry**
 - **Excellent capability in Chinese Language Processing and Chinese Document Processing**
 - **Good technical man-power support for multi-media systems and networking applications.**
- **Cultural Trait**
 - **Very rich collections in many fields**
 - **Chinese culture as world treasure**
 - *Back in history, many Asian countries had been influenced by Chinese culture. We are willing to help them to digitize there historical documents and cultural collections.*

Background for NDAP ³

- Cultural Trait *(continued)*
 - Good capability in Sinology Studies
 - CHGIS, ECAI, Rubbing...many on going international projects
 - Other academic international activities
 - Unique language features
 - We actively participated drafting Asian Language standards in :
 - Open Language Archives Community
 - ISLE, *Internal Standards for Language Engineering*
- Nature Resources
 - Catalog of Life* (Indexing Taiwanese known species)
 - Approximately 200,000 species of the most up-to-date checklist including citations.

Information Technology Practice

- Technology Practice:



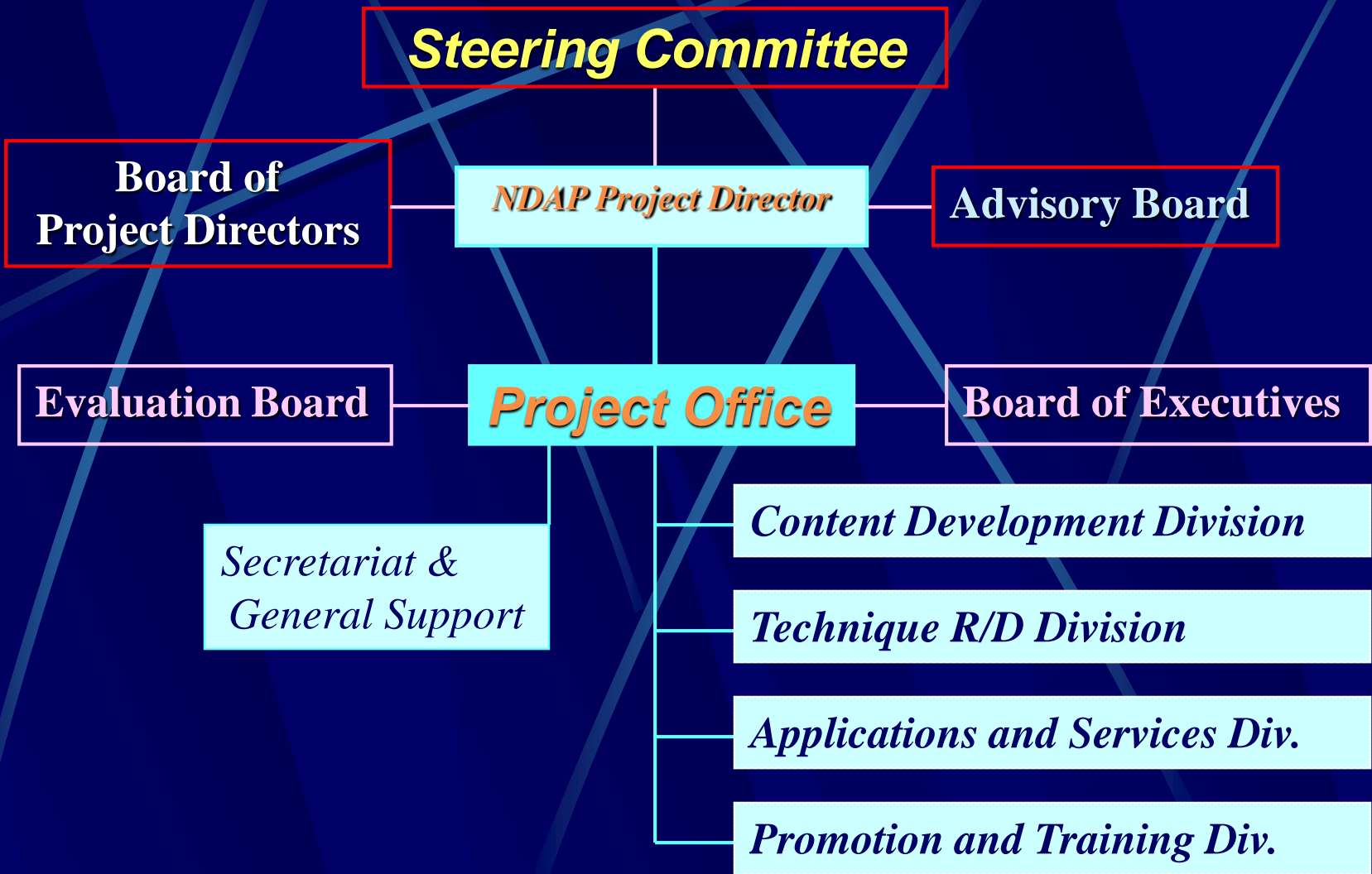
Arnold Pacey, 1983

*Outlines of NDAP*¹

- **NDAP** is a National Project authorized by the NSC and conducted by Academia Sinica.
 - It is the fifth National Project of ROC, Taiwan.
 - The project office is located in the Institute of Information Science, Academia Sinica.
 - The Director of **NDAP** is Professor Kou-Shu Yang, a member of Academia Sinica.
- The first phase of **NDAP** will be a 5-year plan, from **2002 to 2006**.

Goals of *NDAP*

- *Preserving national cultural collections*
- *Popularizing fine cultural holdings*
- *Strengthening cultural heritage and guiding cultural development*
- *Popularizing knowledge / Information sharing*
- *Enhancing education and learning*
- *Bootstrapping cultural and value-added industries*
- *Improving literacy, creativity and quality of life*
- *International Cooperation and sharing*



Organizational Chart of **NDAP**

Projects in NDAP

Supporting Core Projects

Thematic Groups

12 for content

6 for technology

Supporting Groups

• *TSL GIS*

• *Metadata*

• *Linguistic*

• *Union Cataloging...*

Training Programs

9

**Organization
Projects**

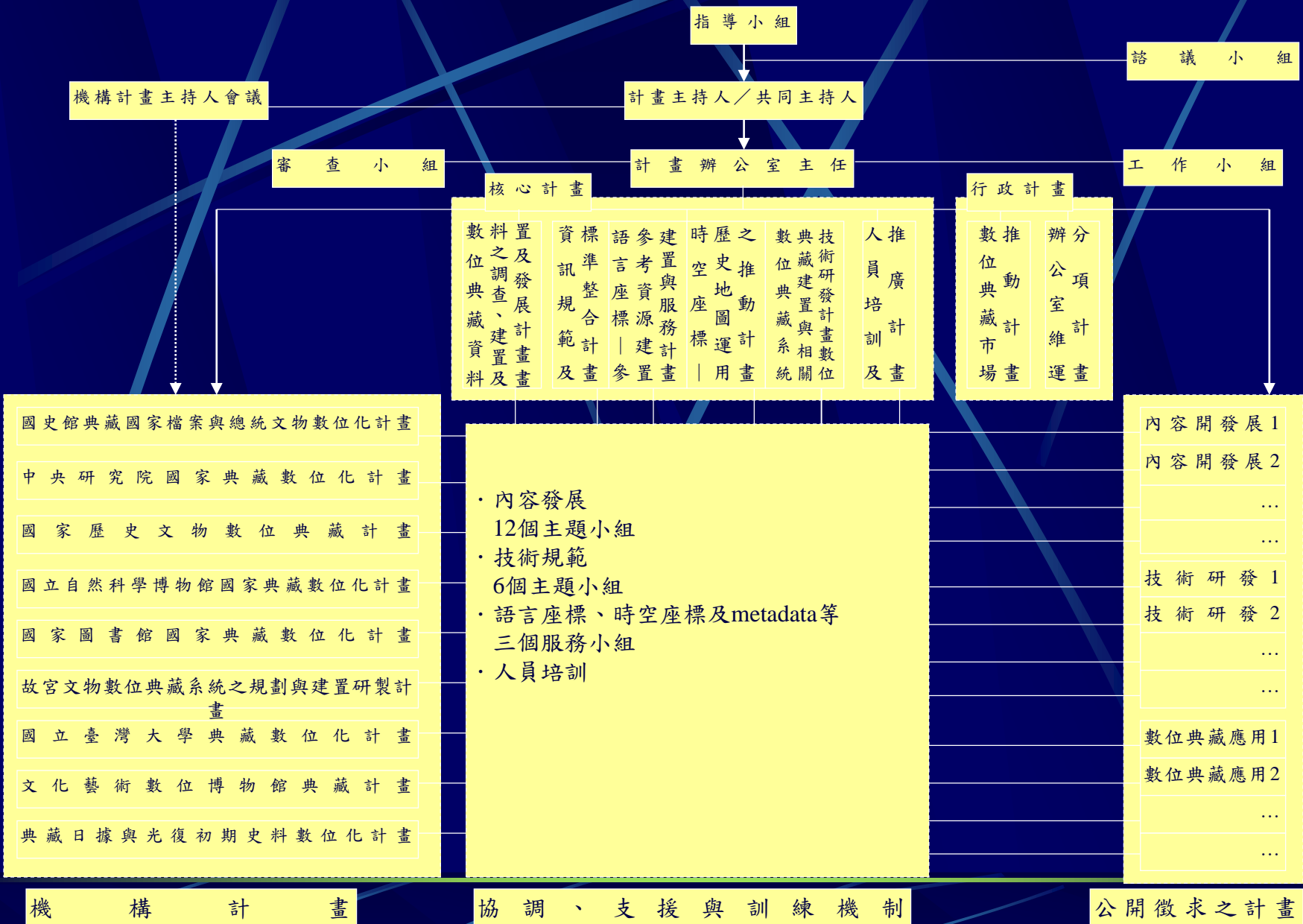
**of content
holders**

**Three Classes
of
Open Projects
(28)**

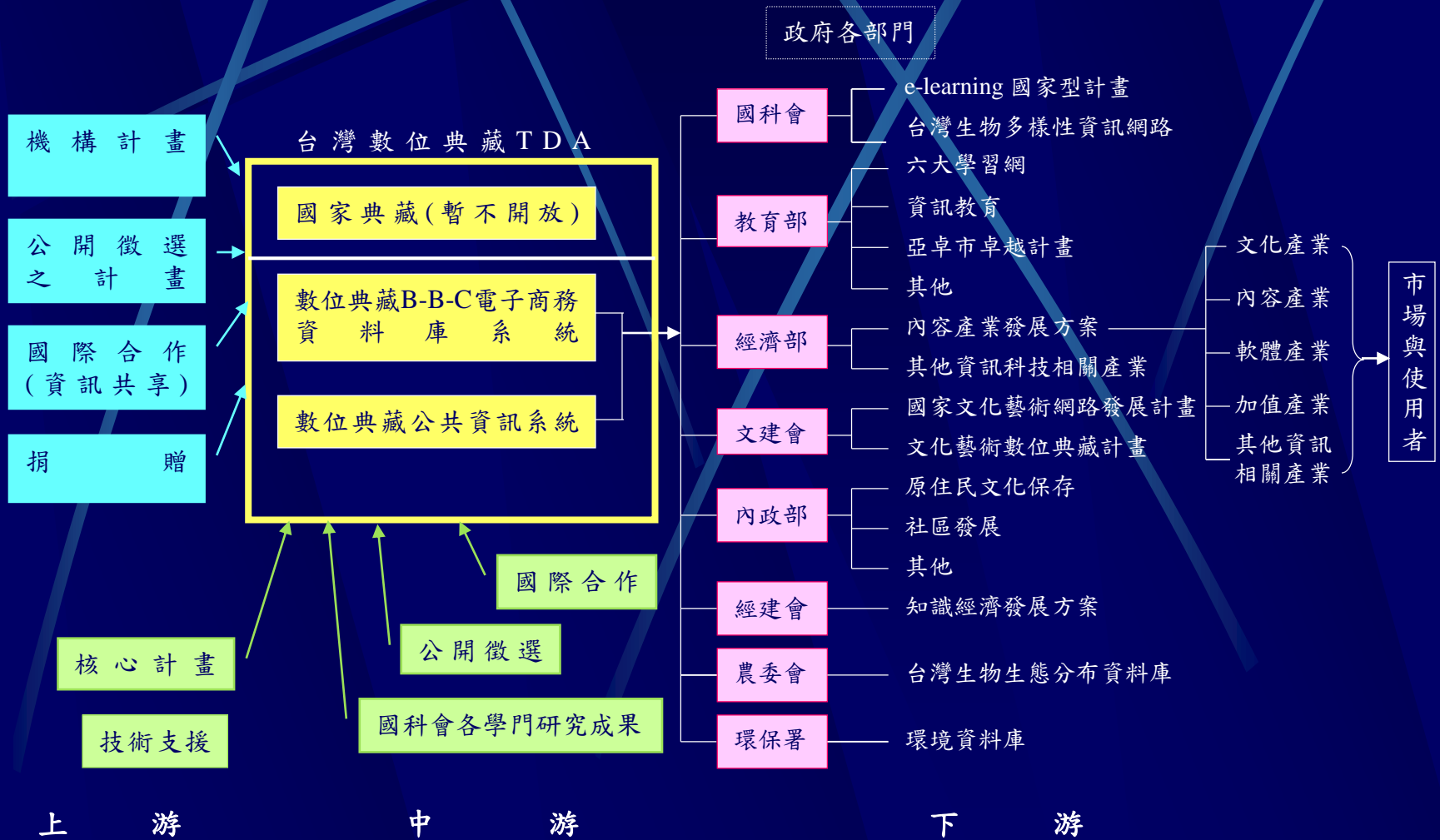
Content Holders Participated

- *National Palace Museum*
- *National Library*
- *Historica Sinica* (國史館)
- *National History Museum*
- *National Museum of Natural Sciences*
- *Committee of Taiwan Provincial Archives*
- *Council of Cultural Affairs*
- *National Taiwan University*
- *Academia Sinica*

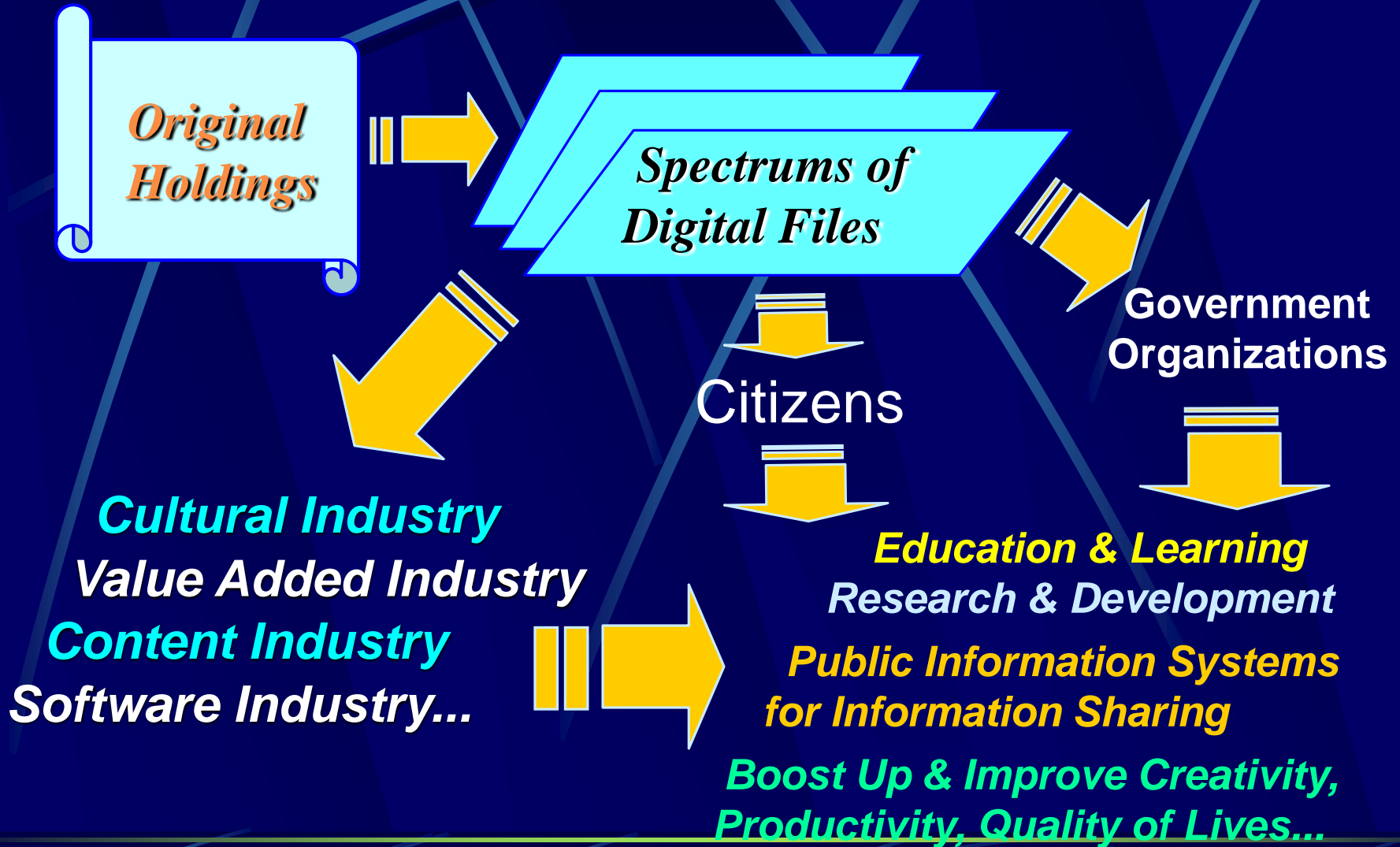
數位典藏國家型科技計畫內部運作示意圖



本計畫的產出與各部會及產業界的關係

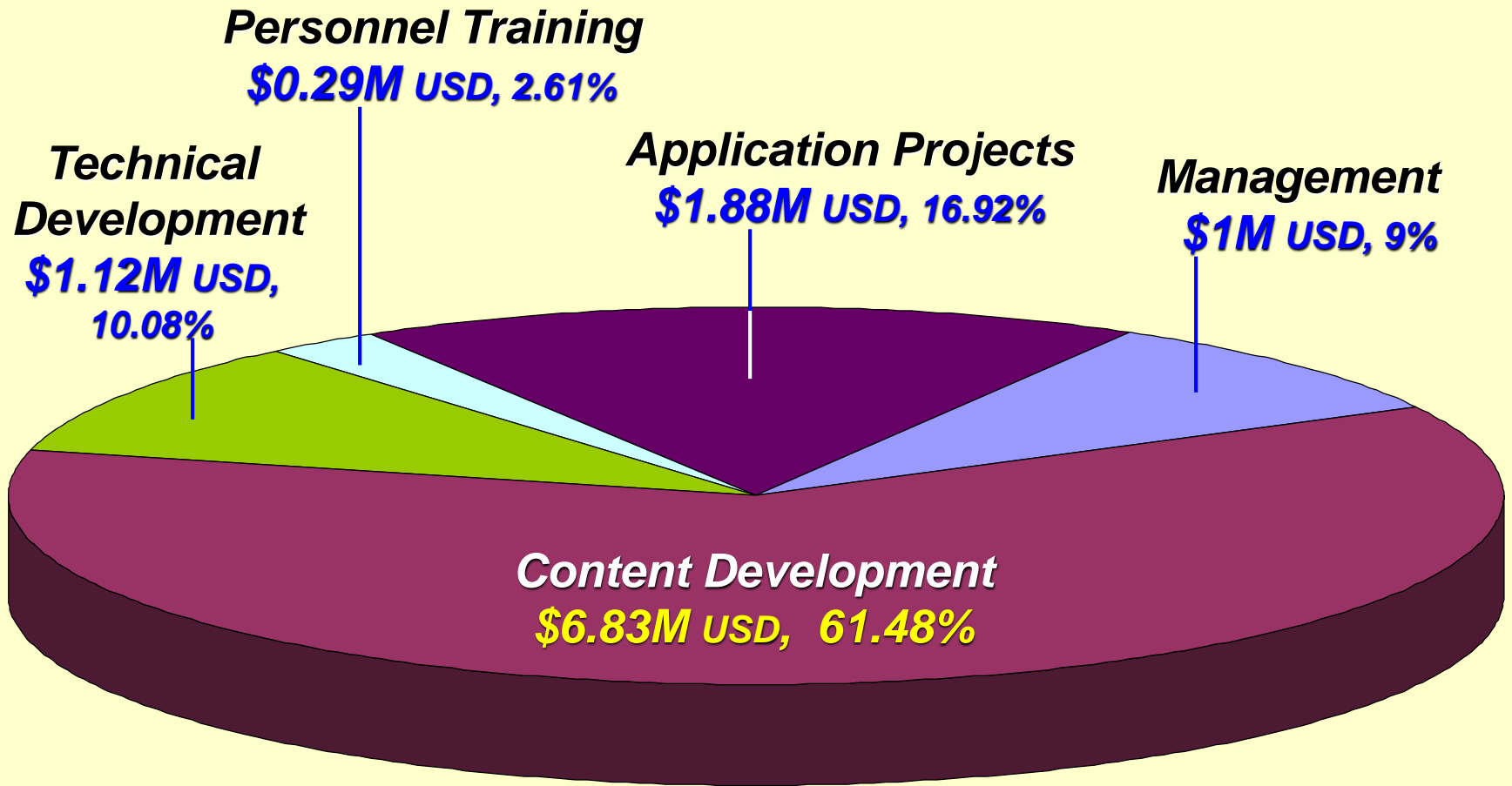


A Scenario of Applying Digital Archives



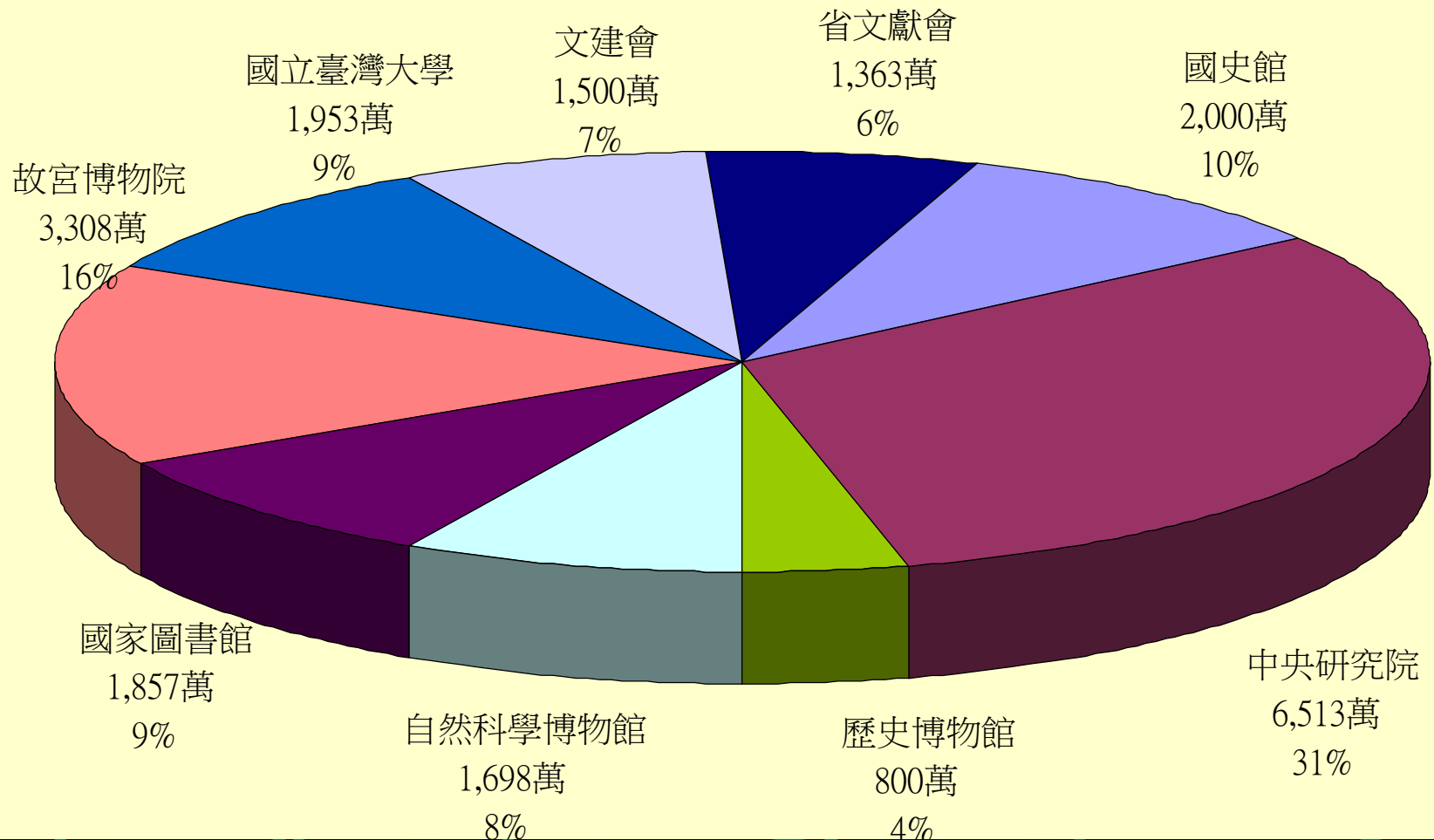
Budget Planned

- Total Budget in 2002:
11.11million ***USD***
(\$383M NTD)
- Estimated annual growth rate in
2003~2006: 10%~20%



Budget Plan of 2002: 11.11M USD (total)

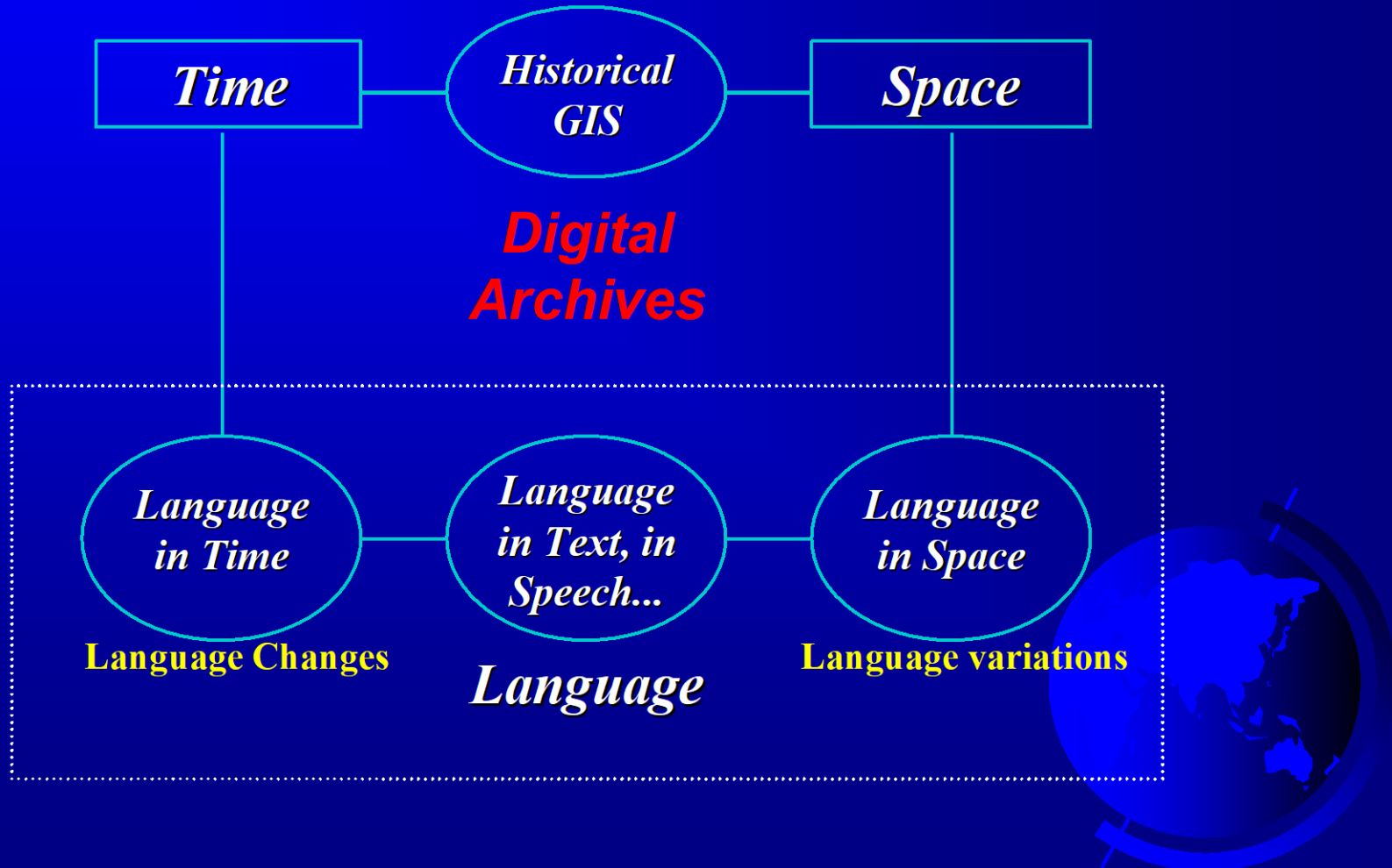
Budget for Content Holders in 2002



Important Issues

- Intellectual property right
- Time, Space and Language Coordinates
- Multi-lingual issues
- Public information systems
- Technical Specifications and Standards
- Meta-language and Documentation
 - *Metadata*
 - *Content Markup*
 - *References and Linking*
- Cooperation and collaboration

Space, Time and Language Coordinates for Digital Archives



Major Concerns for Collaboration

- **Communication**
 - **Inter-organizational and Intra-organizational communication problems**
 - **The two-cultural syndrome**
- **Multi-lingual issues**

Major Concerns for Collaboration

- **Intellectual Property Rights (*IPR*)**
 - **For preservation: Dark Archive**
 - **For social ware fare and sharing: Public Information System**
 - **For Value-adding: e-commerce model, B2B2C**
- **Ethical Issues**
 - **For content holder, technical person, domain expert, manager, agent, funding organization...**

Major Concerns for Collaboration

Technical Specifications and Standards for Compatibility and Interoperability:

- **Meta-language for Documentation and Representation**
 - For Content
 - For Background
 - For Presentation and Interface
- *TSL* Coordinates
- Digitization Procedures, Specifications and Standards

Taiwan Digital Archives ¹

- Sources
 - By donation
 - By **NDAP**
- **TDA Contents by NDAP 2002:**
 - Language Archives and Language Coordinate
 - Time and Space Coordinates
 - Historical GIS
 - *Taiwan*
 - *China*
 - Historical Time

One million air photos
will be integrated into
the system by 2006

(All of the following contents are expected to be linked to the Language, Time and Space coordinates)

Taiwan Digital Archives ²

- Collections of aboriginal cultures in Taiwan
- Contemporary Taiwan Historical Archives
 - 1860~1926 **Archive of foreign affairs**
 - 1895~1945 (**Japanese ruling period**)
 - 1945~1947 **Administration Archive of Taiwan**
 - 1950~1970 **Archive of Economical Cooperation and Development**
 - **K. S. Chiang(蔣介石)Archive**
 - **Archives of the Resources Planning(**
 - **淡新Archive (Full Text and Image DB)**
 - **岸裡大社 Archive**
 - **伊能嘉矩 script Archive (Image DB)**

Taiwan Digital Archives ³

- Fishes and Shell Fishes in and around Taiwan
- Plants of Taiwan
- Insects of Taiwan
- Minerals in Taiwan
- Animals and Birds in Taiwan
- Taiwan Archaeology Collections
- Fossil collections

To be completed
by 2006

Taiwan Digital Archives 4

- Rubbings
 - Bronze
 - Stone
 - From China
 - In Taiwan, since 1860
 - Bamboo and wood
- Jade, porcelain, bronze and other fine art collections
 - Mainly Chin and Han Period at present
- Ancient Calligraphic collections
- Ancient Paintings

Taiwan Digital Archives 5

- Historical Archives
 - *Government Archives of Ching Dynasty*
- Image database of Rare Books
- An Archive of Collected Drawings in Ancient Books
- Selected Gazetteer Documents
- Early Periodicals and News Papers published in Taiwan

Concluding Remark

- The Internet speeds up the coming of a new civilization.
- The trend of shifting major media from paper to digital is unavoidable. Under this circumstance, cultural issues are the most priority we must solve.
- NDAP provide a good start to address cultural issues in this ever fast changing world.

Concluding Remark

- International cooperation and collaboration are most welcome. We are willing to share our work with you. Please contact us at:

hsieh@sinica.edu.tw

or, visit our web-site at:

www.ndao.sinica.edu.tw

The End

Thank you very much !