



An Introduction to the National Digital Archives Program

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October 16, 2002

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 We are willing to help them to digitize there historical documents and cultural collections.*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:



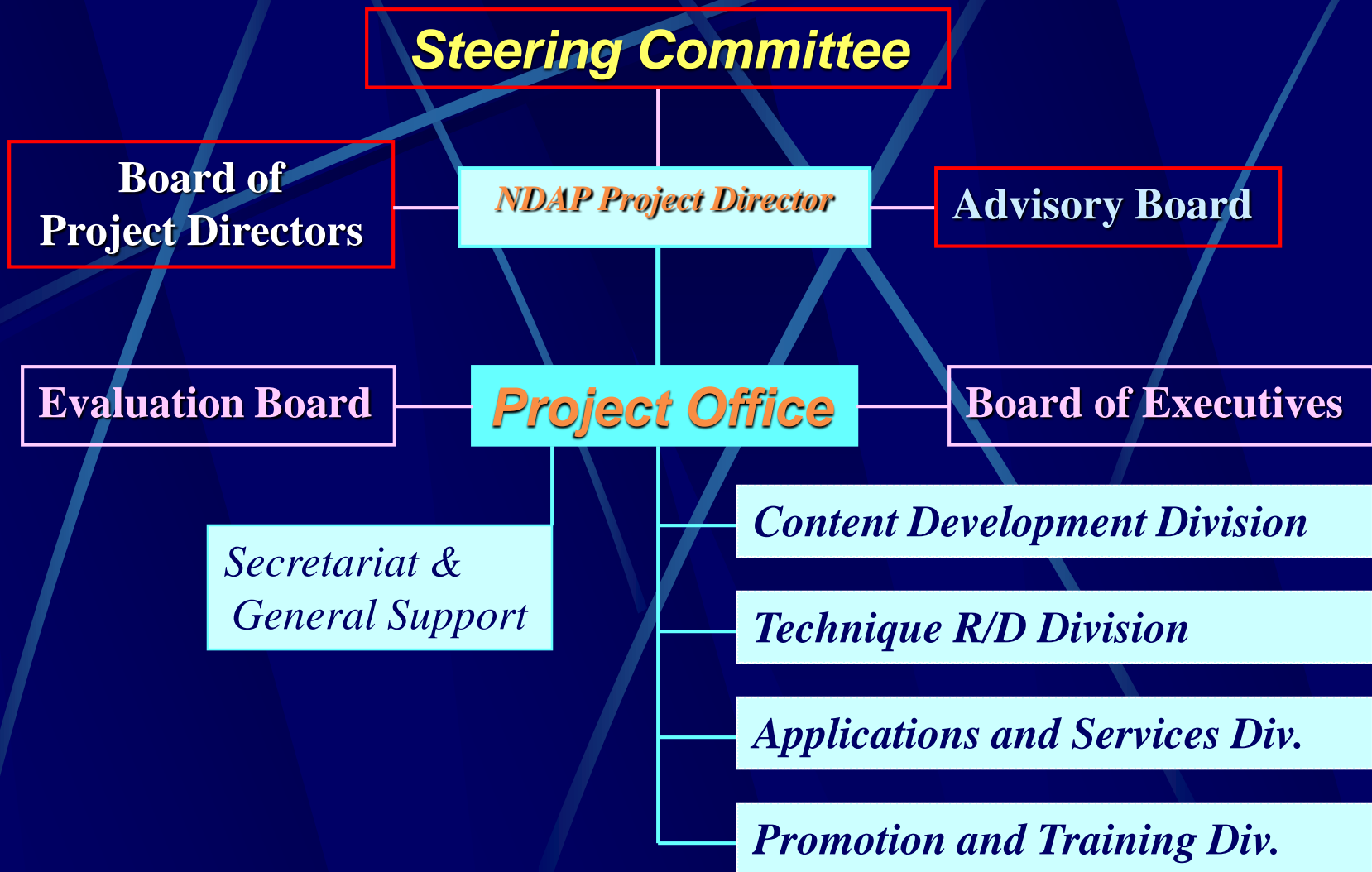
Arnold Pacey, 1983

*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**

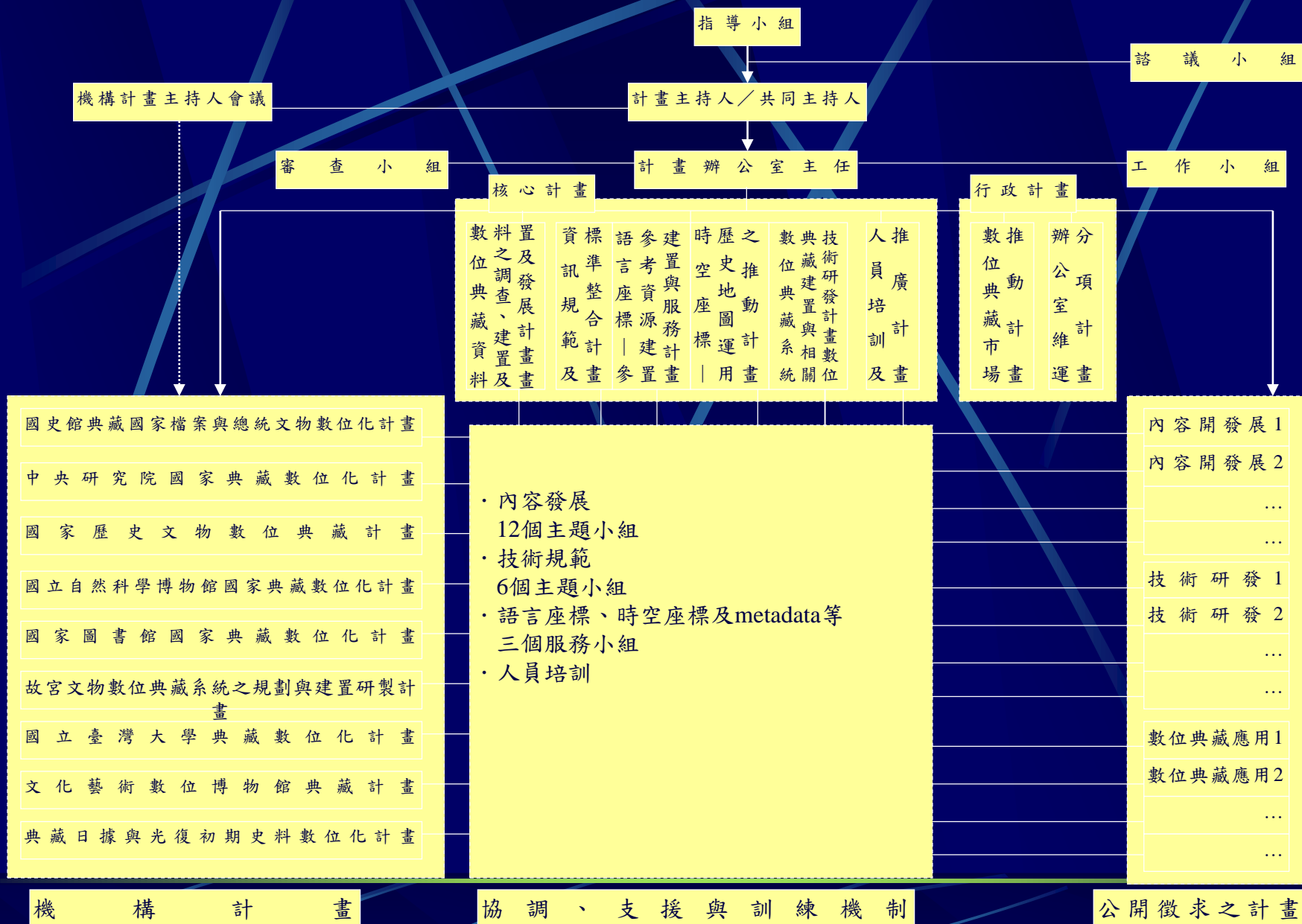
**of content
holders**

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

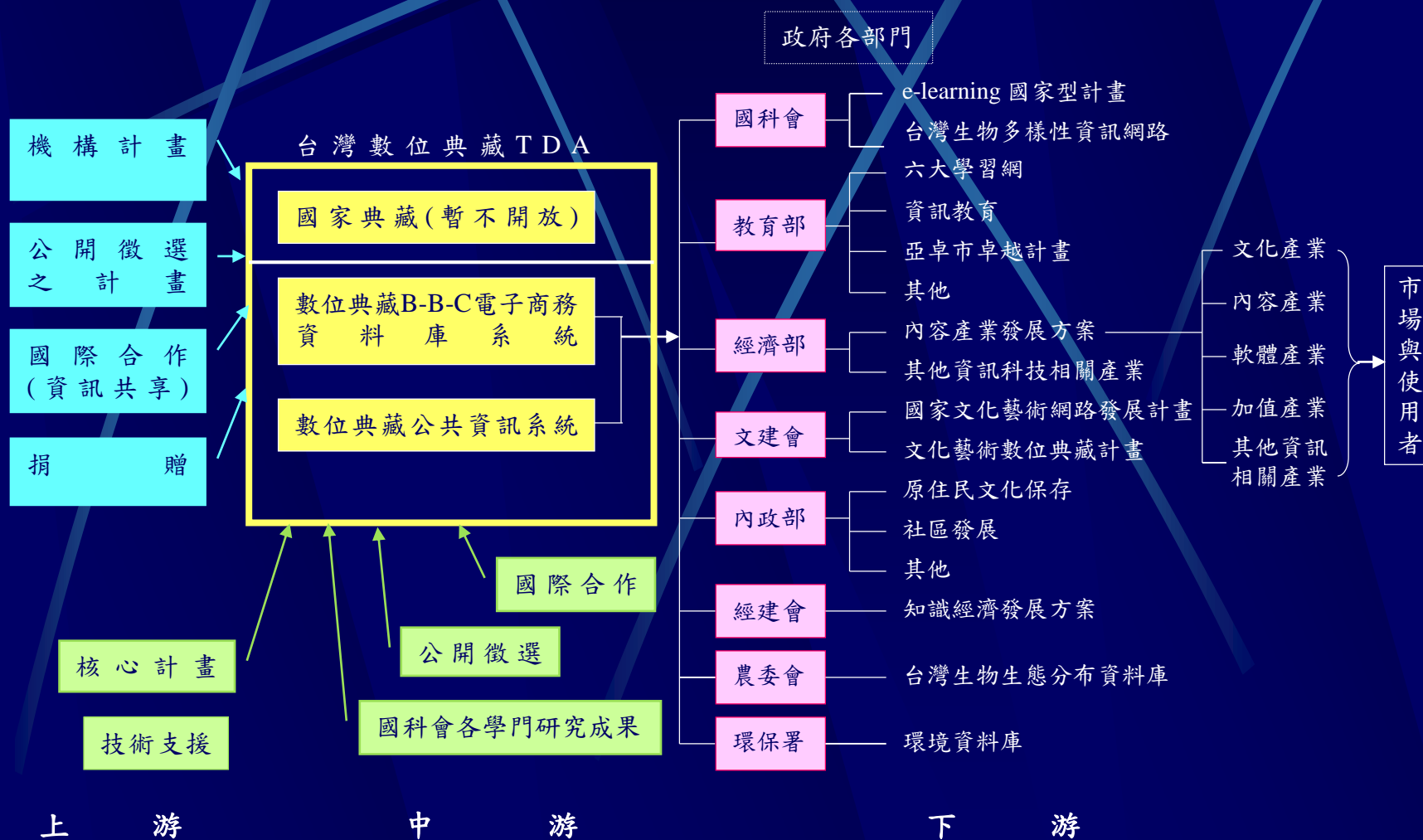
Content Holders Participated

- ***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***

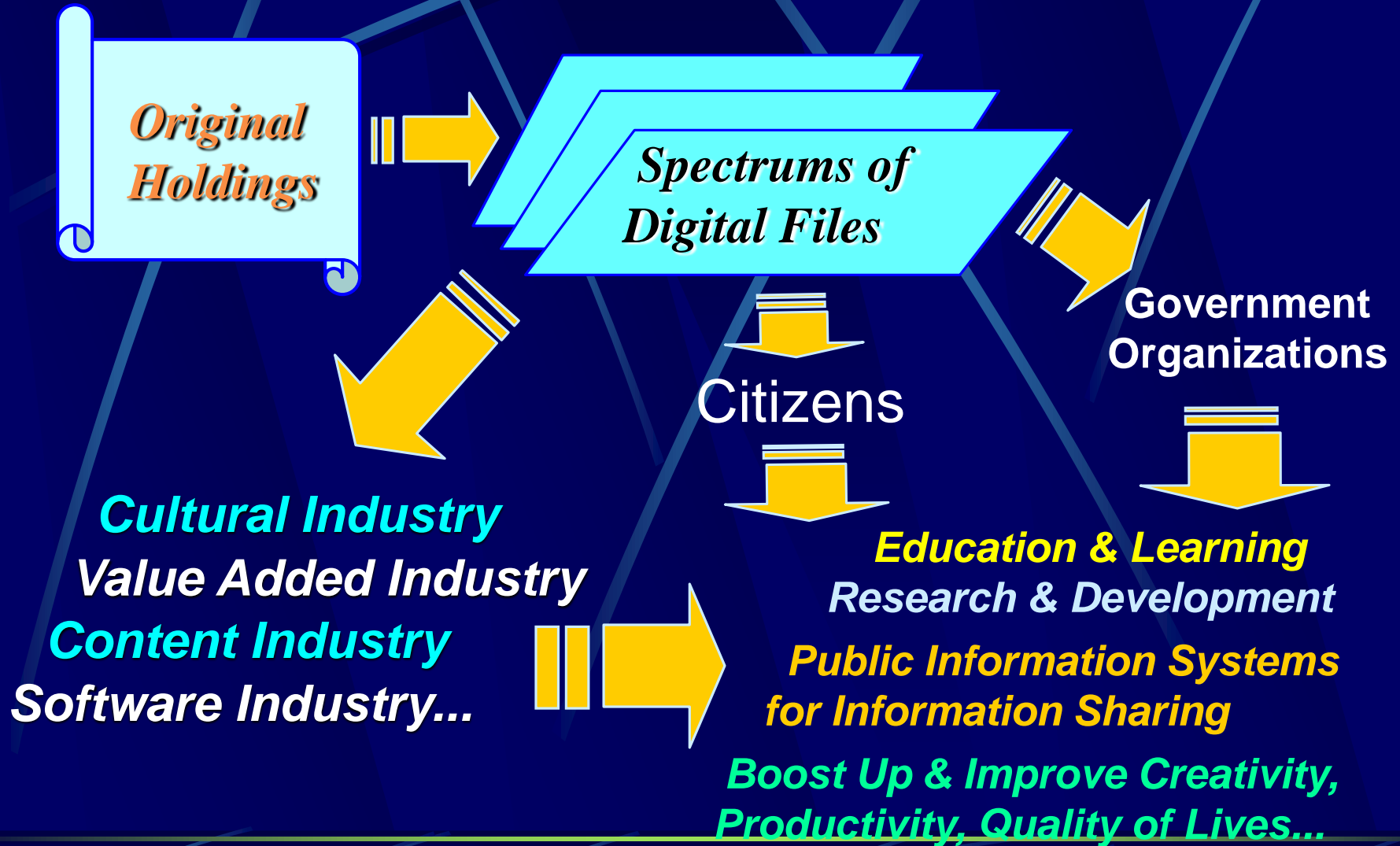
數位典藏國家型科技計畫內部運作示意圖



本計畫的產出與各部會及產業界的關係

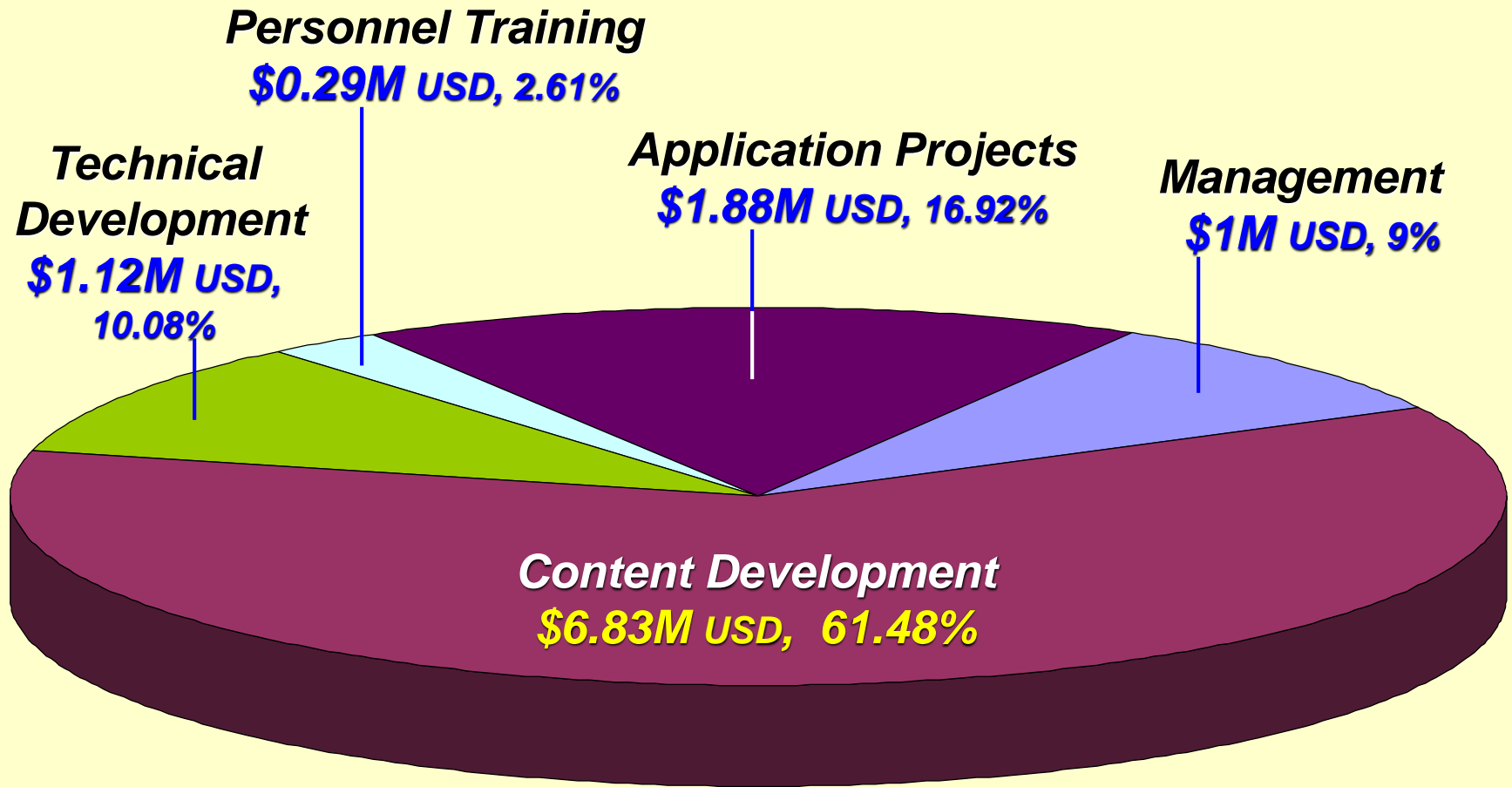


A Scenario of Applying Digital Archives



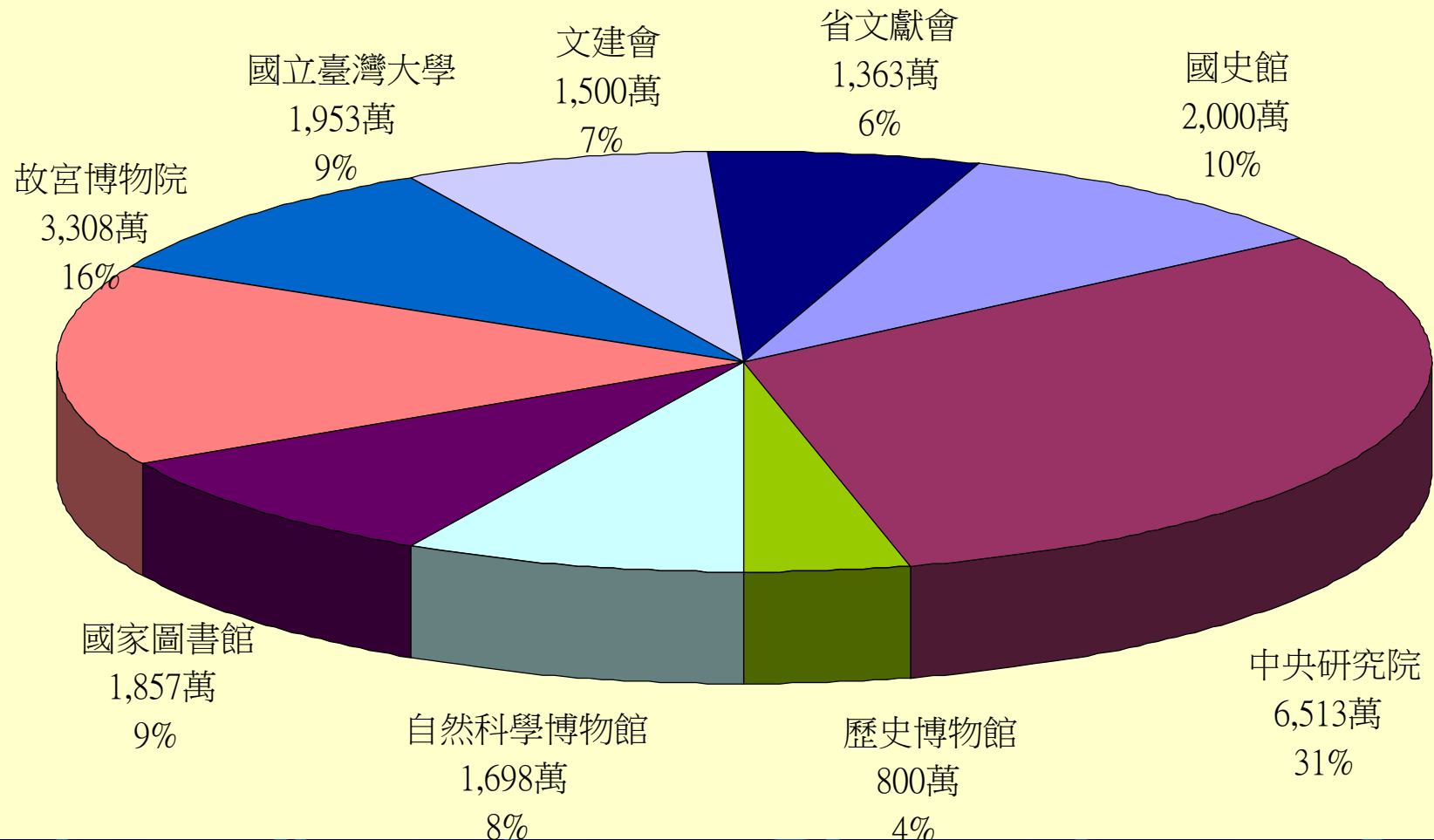
Budget Planned

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



Budget Plan of 2002: 11.11M USD (total)

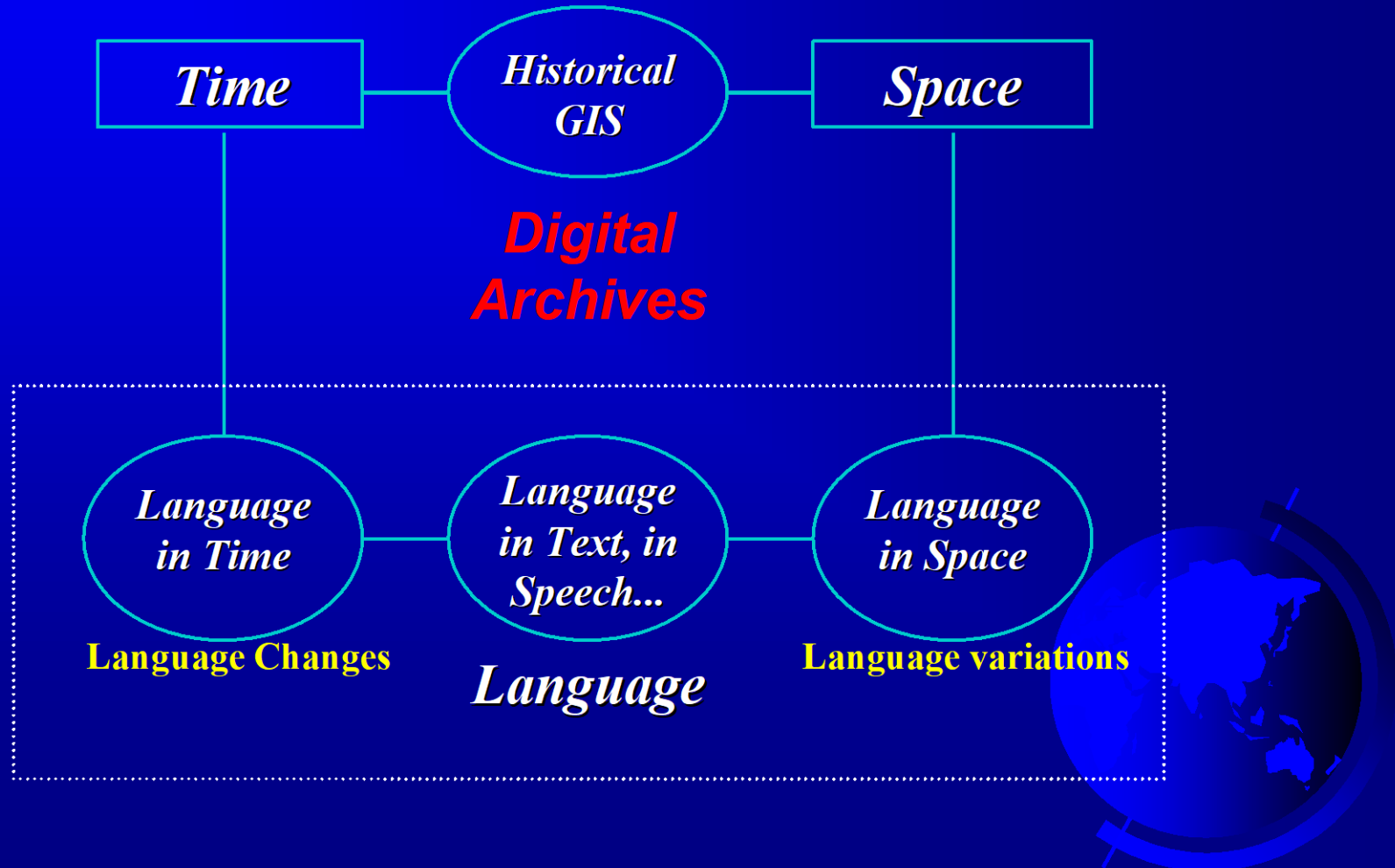
Budget for Content Holders in 2002



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 !