



# NETWORKING OF PETROLEUM GEOSCIENCE INSTITUTIONS IN EAST AND SOUTHEAST ASIA REGION-IS IT FEASIBLE AND SUSTAINABLE ?

A COLLABORATIVE STUDY OF SEADPRI-UKM AND CCOP TECHNICAL  
SECRETARIAT

**OCTOBER, 2009**



## SEADPRI-Southeast Asia Disaster Prevention Research Institute

- UKM's research centre – established in June 2008:
  - to conduct multi-disciplinary research on hazards management and policy aspects.
  - to become a regional reference centre on scientific and governance issues of hazards.
- Post-graduate programmes by research
- Research focus: climatic, geological and technological hazards at national and regional levels
  - currently establishing collaboration with several research institutions in Southeast Asia on vulnerability and risk assessment of climate change.

# THE STUDY

- Brain-child of Norwegian Embassy, Bkk
- CCOP TS appointed SEADPRI-UKM for Study on collaborative basis between SEAPRI-UKM and CCOP TS
- Scope expanded to include all other disciplines of geoscience



- 2 phase study: Phase 1-Petroleum Geoscience, duration 6 months, May-Oct, 2009

Phase 2-Other disciplines of geoscience, duration 12 months. to commence after completion of Phase 1

- CCOP contributed USD 45 000  
UKM-SEADPRI USD 100 000

## STUDY TEAM MEMBERS

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# PURPOSE

To determine whether a platform for sharing knowledge, human resources, facilities, funds, & experience in curriculum dev., and promoting joint research in Petroleum Geoscience could be provided for CCOP



# OBJECTIVE

Identify institutions, make recommendations on collaborative mechanism, and how proposed network could be linked to EPPM on sustainable basis

# Study Approach

## INPUTS

WEB-BASED  
SURVEY

QUESTIONNAIRE  
-BASED SURVEY

EXPERT  
KNOWLEDGE

SCREENING

ASSESSMENT

CONSOLIDATION

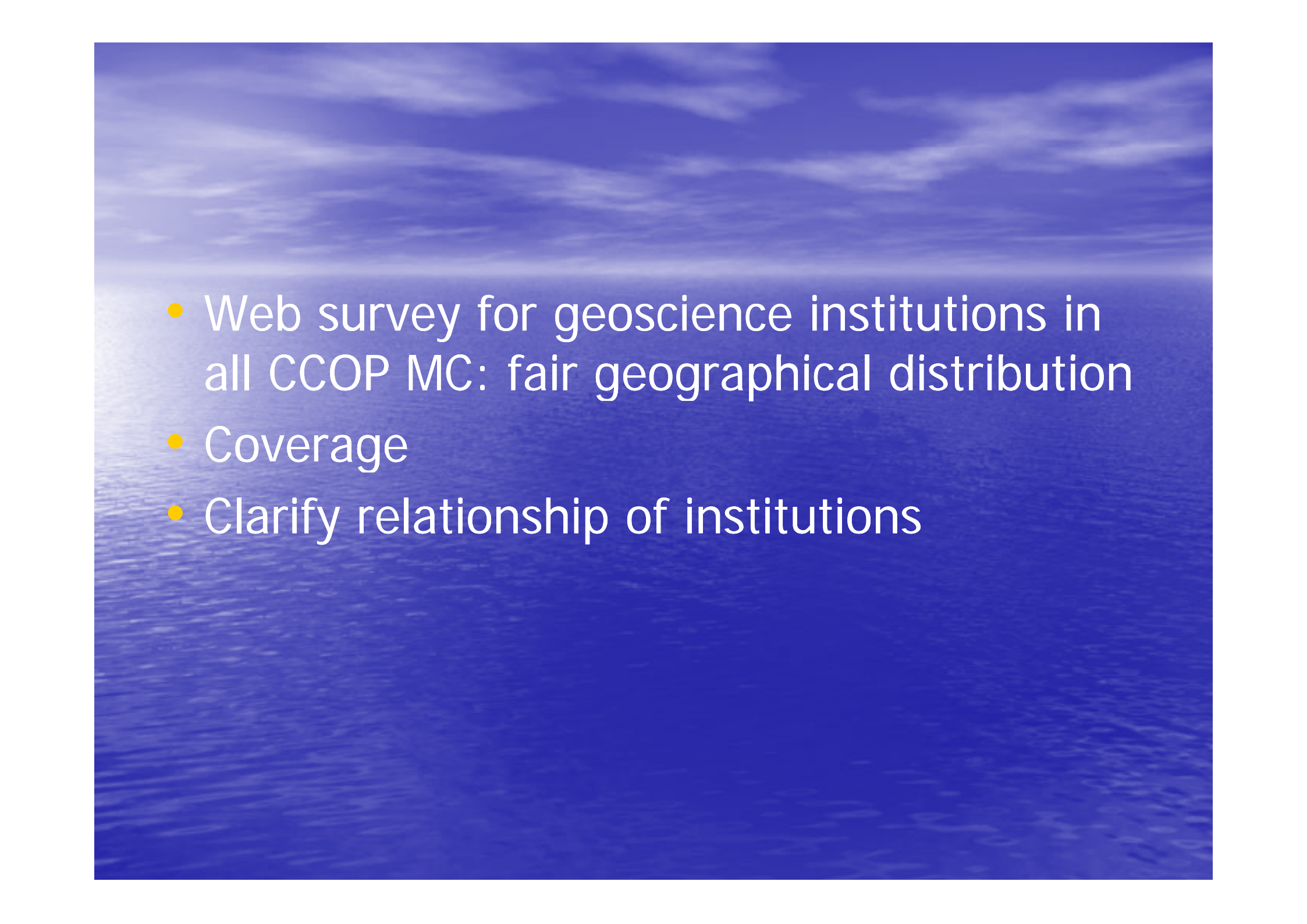
## OUTPUTS

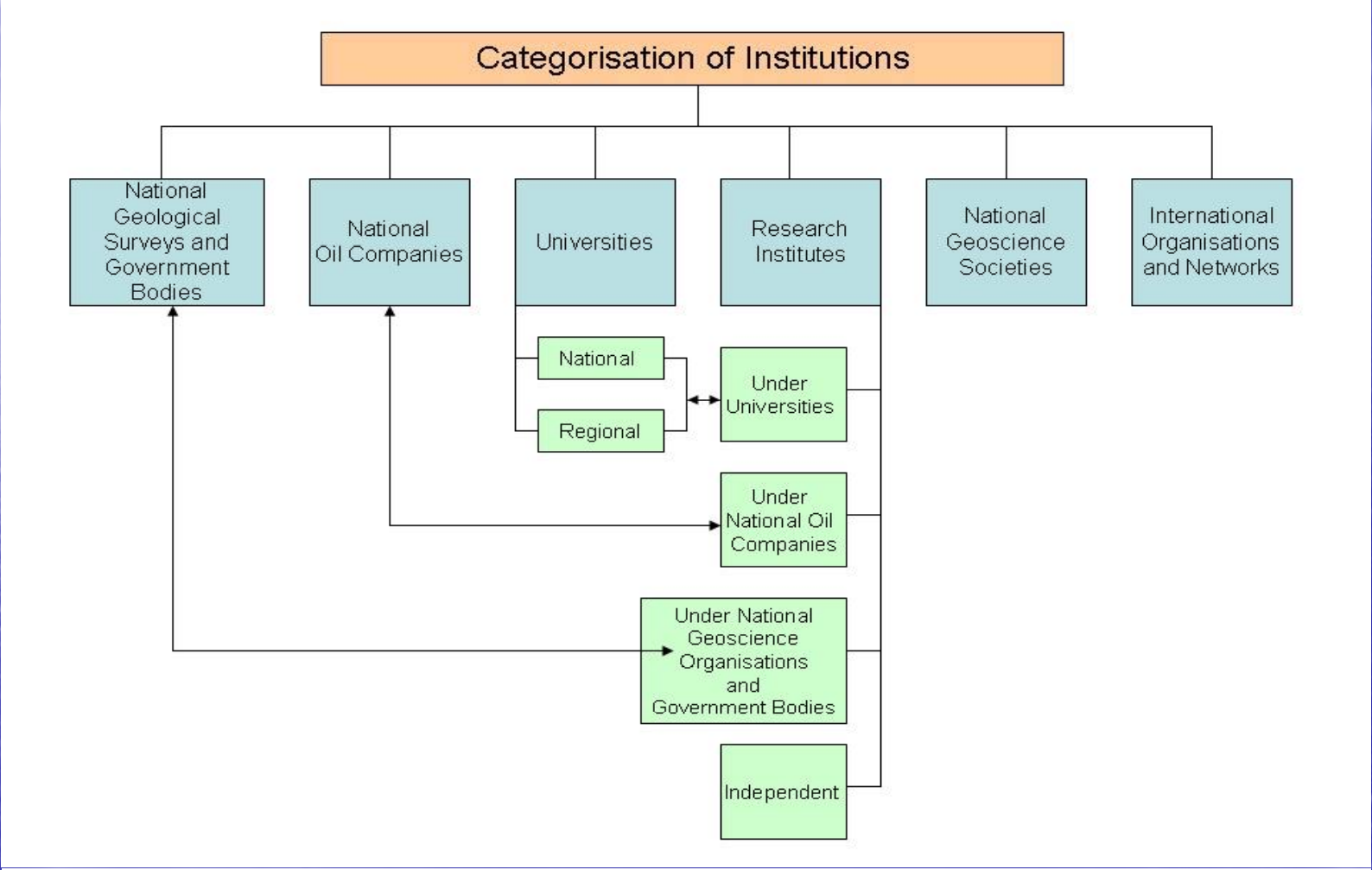
PROFILES OF  
GEOSCIENCE  
INSTITUTIONS

FRAMEWORK FOR  
NETWORKING OF  
GEOSCIENCE AND  
PETROLEUM  
GEOSCIENCE

POTENTIAL  
MEMBERS FOR  
THE NETWORKS



- 
- Web survey for geoscience institutions in all CCOP MC: fair geographical distribution
  - Coverage
  - Clarify relationship of institutions



## Coverage of Web-based Survey According to Institutions

Categories of Institution	No of Surveys
1. National Geological Survey and Government Bodies	20
2. National Oil Corporations	15
3. Universities	
a) National	41
b) Regional	1
4. Research Institutes	
a) Universities	12
b) National Oil Companies	10
c) National Geoscience Organisations and Government Bodies	18
d) Independent	2
5. National Geoscience Societies	16
6. International Organizations and Networks	11
Total	146



## Coverage of Web-based Survey According to Country

Country	No of Institutions
1. Cambodia	2
2. China	45
3. Indonesia	16
4. Japan	22
5. Malaysia	15
6. Papua New Guinea	-
7. Philippines	5
8. Singapore	4
9. South Korea	7
10. Timor Leste	1
11. Thailand	10
12. Vietnam	5
Sub-Total (CCOP-Member Countries)	132
13. Regional University	1
14. Regional Organisations	5
15. Brunei Darusallam	3
16. Laos	1
17. Mongolia	1
18. Myanmar	3
TOTAL	146

## Development of Profiles

Country	No of University / Institute/ Network
Cambodia	-
China	9
Indonesia	4
Japan	3
Malaysia	4
Papua New Guinea	-
Philippines	1
Singapore	-
South Korea	1
Timor Leste	-
Thailand	4
Vietnam	2
Regional University	1
Regional Network	3
TOTAL	32

- Coverage not exhaustive
- No information for a few countries
- Language of web site
- Some bias towards Team Members' tacit knowledge



# Questionnaire

- Institution set up, curriculum & research
- Current networking, issues & challenges
- Interest in Petroleum Geoscience Network
- Expectation, contribution, preferred institutional arrangement

Responses clearly indicate interest, focus area, expectation from & contribution to network

## Coverage of Questionnaire-based Survey

Country	No. of Questionnaires	No. of Respondent
Cambodia	-	-
China	7	1
Indonesia	4	1
Japan	3	-
Malaysia	4	2
Papua New Guinea	-	-
Philippines	1	-
Singapore	-	-
South Korea	1	-
Timor Leste	-	-
Thailand	4	3
Vietnam	1	-
Regional University	1	-
TOTAL	26	7

# Present Scenario

## Petroleum Geoscience Linkage

- Mostly bilateral, & with geoscience societies
- No Petroleum Geoscience university network
- Challenges: lack of k-sharing, difficulties in academic & research exchanges, limited joint research publications



## **Suggested Solutions**

Enhancing communications-regular scientific meetings, increase e-communications, networking funding in programs/projects

# Education and Research

- 30 univ. PG related programs, 16 with PG
- Bachelor degree: basically foundation geoscience, some with PG modules
- PG curriculum mainly in Masters level

Researches by institutes of oil corp:

- National focus
- Technical & appl. oriented
- Responds to demand of industry



Research by universities

- theoretical

- knowledge generation to add to current corpus of K.

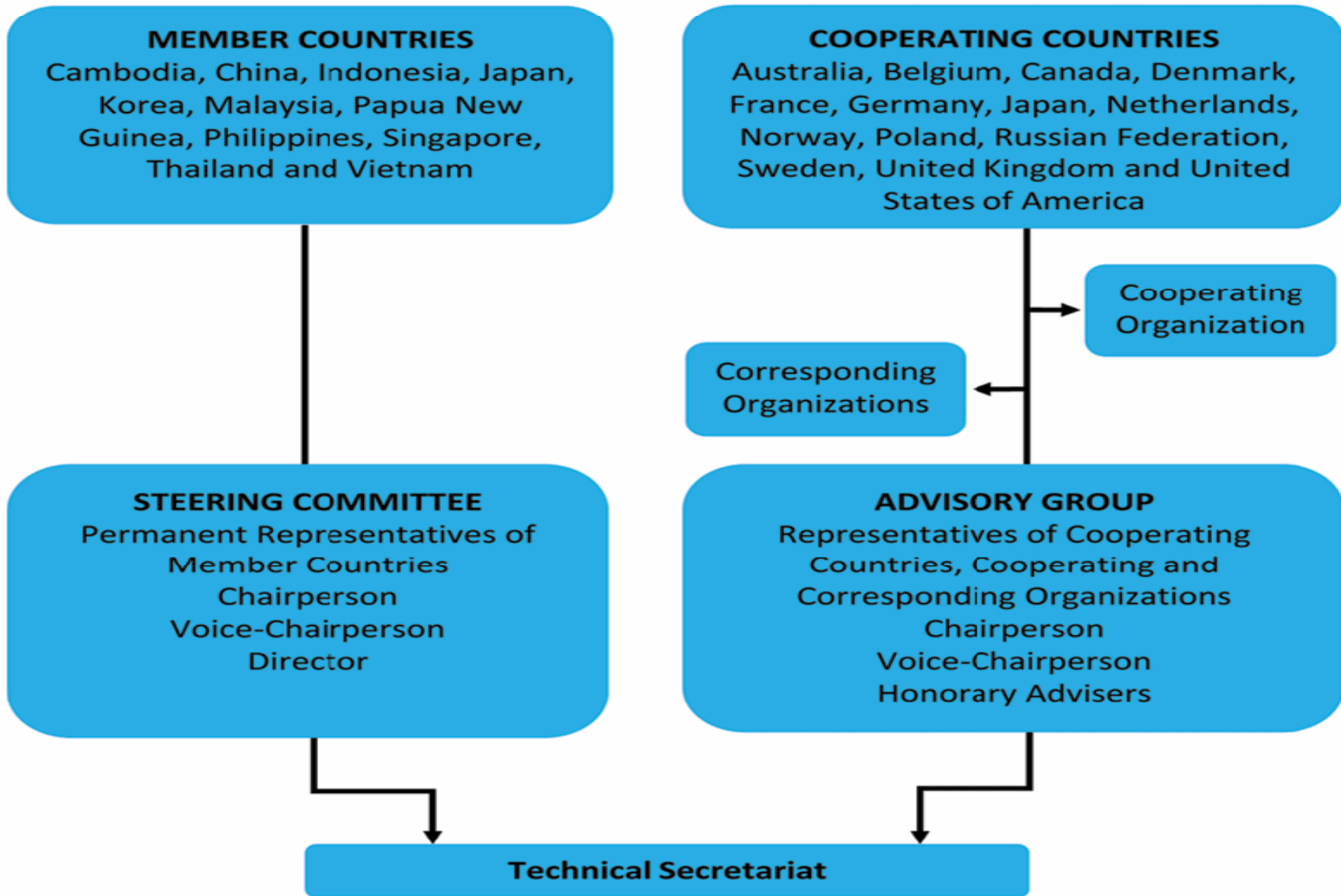


## Suggested Activities

- Share human and K-resources, facilities & funds
- Joint research, x-change of researchers & experience in curriculum dev.
- Capacity bldg for dev. countries
- Other activities identified

Opportunities from PETRAD & EPPM topics

# CCOP ORGANIZATIONAL CHART



# Implementation

Present Organization

-CCOP TS

Sector Coordinator, Project Coordinator

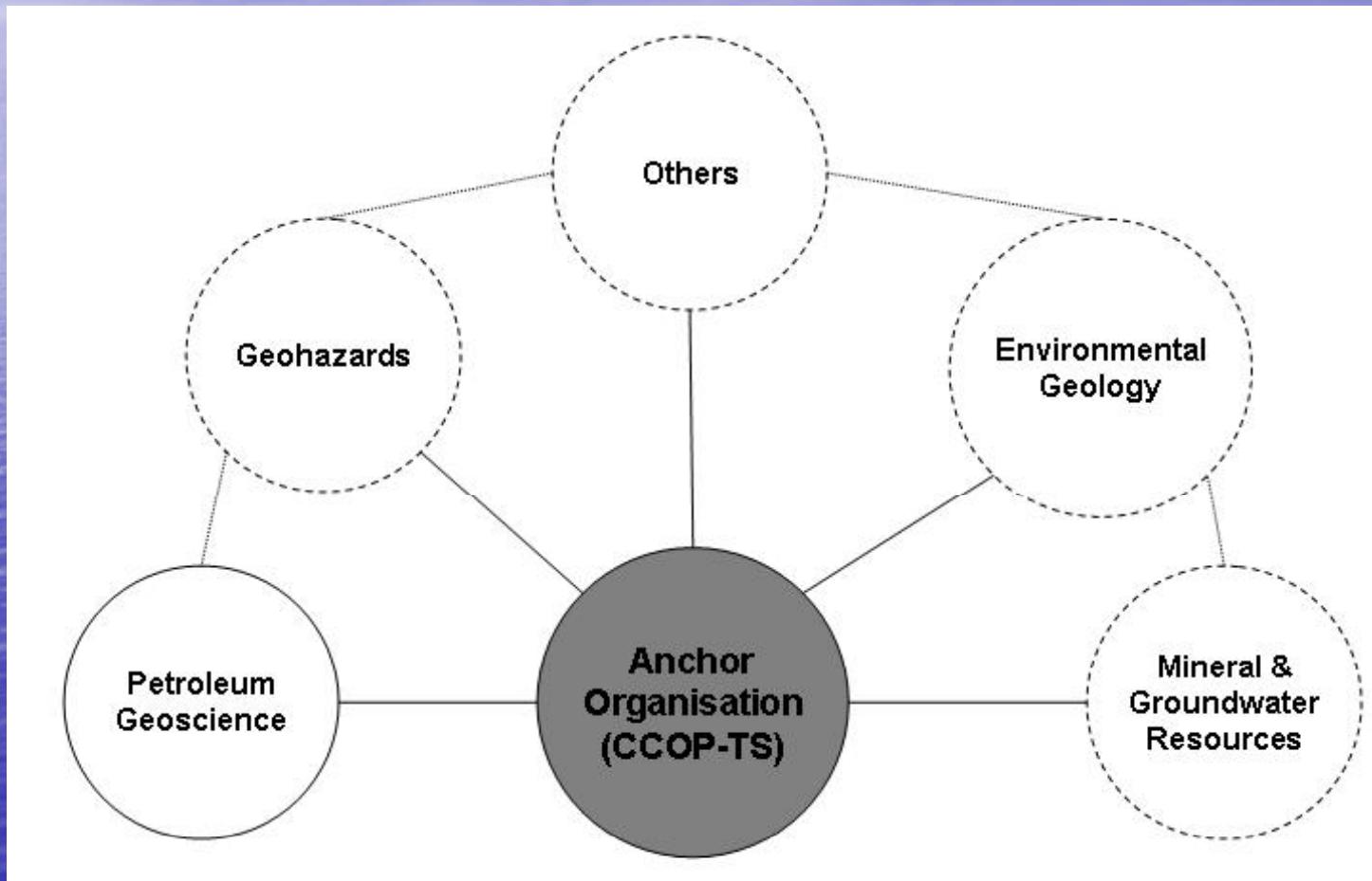
-Member Countries

National CCOP Committee

National Sector Coordinator, National Project  
Coordinator



# Proposed CCOP Network of Networks



# Proposed Framework Concept

**CCOP network of networks** comprising  
PG net, Geohazards net, Env. Geol net,  
Mineral net, Groundwater net, & others

**Sector network of networks** comprising

- a. National network of inst., univ., nat. geosc. org., nat oil co. etc
- b. Regional univ. & institutes
- c. Regional Organizations

**Anchor Organization** as the hub

EPPM network established for  
implementation of project

PG Network to build on EPPM network,  
include univ. & institutes, expand scope,  
enhance sharing and collaboration



## Elements of PG Network

**National Networks:** existing EPPM members in MC + new members from univ. & institutes identified in Study

Institutionalized under National Platform  
Led by Focal Point

**Regional Organizations:** existing Org associated with EPPM to continue linkage

## **Regional Network of Universities:**

All universities & institutes of Nat. Networks

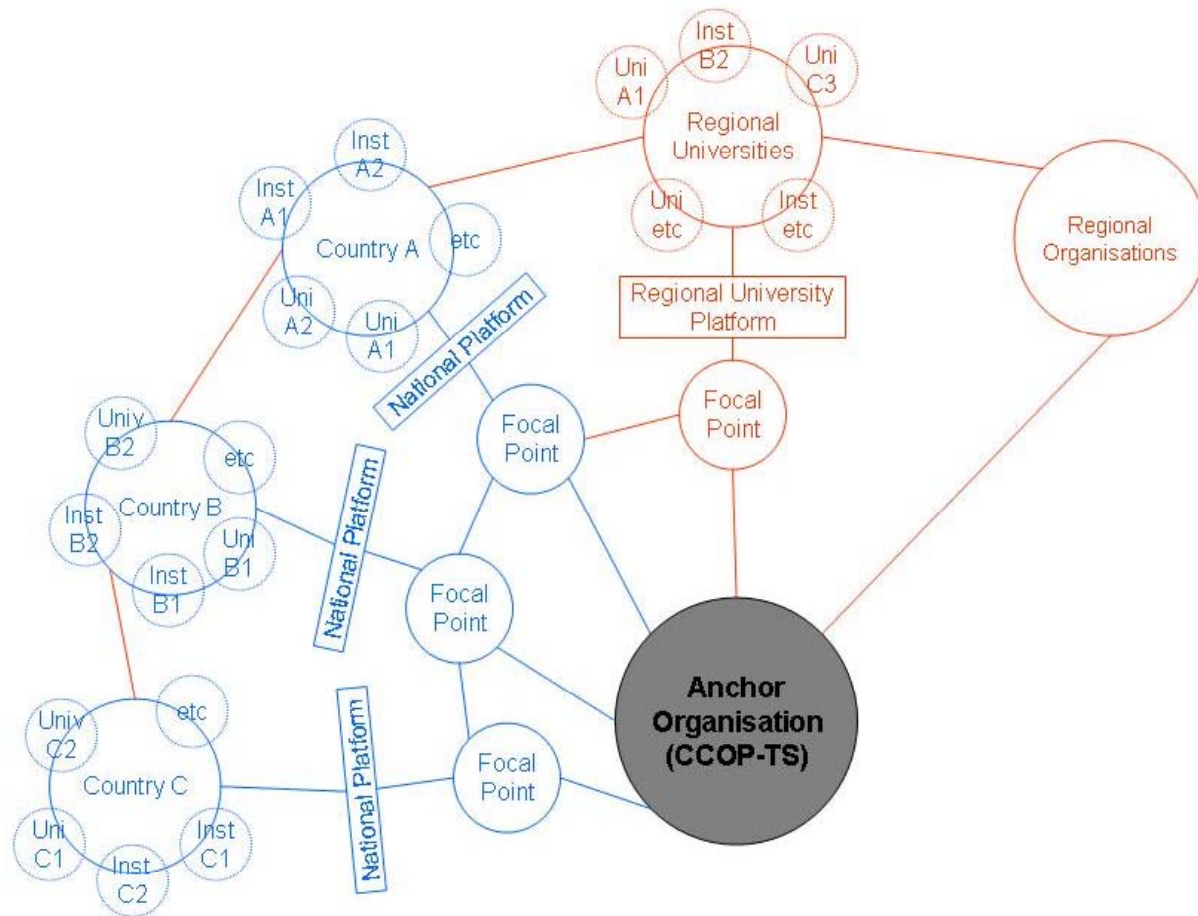
Institutionalized under Regional Univ.

Institutes Platform

Led by Focal Point

**Anchor Organization:** CCOP TS as Central  
Hub

# Proposed Network of Petroleum Geoscience Institutions





- Communications IT driven: e mail and web
- Dedicated web site of the Hub, and Members should have own web
- K-management working culture

## Strengths of Proposed Framework

-Potentials to harmonize operation

CCOP TS: Sect Coord., Proj Coord.

Member Country: Nat Sect Coord., Nat Proj  
Coord., Nat. CCOP Committee

-Promote networking in MC under Nat. Network

-Enable networking of all interested institutions in  
a sector, and x-discipline networking between  
sectors

# Sustainability

Willingness to share, activities, interest, commitment,  
**good leaders and active members**

Underlying strengths of CCOP: Coordinated 30 yrs pet.  
activities

Activities from EPPM focus areas, PETRAD's series of  
specialized seminars, and numerous current hot topics of  
common interest

New players and contacts for CCOP TS to dev. activities,  
secure and distribute funds



## **Mobilizing the Network**

EPPM Annual Seminar appropriate platform  
to launch Network

Nat. Network to be initiated by PR

Regional Univ. Network to be initiated by  
Anchor Org.

Schedule meetings of Platforms essential

# CONCLUSIONS

## **Proposed PG network is feasible**

- strong interest and commitment shown
- building on foundation of EPPM network
- Part of CCOP Strategy
- No other petroleum geoscience network
- CCOP TS can manage network effectively

## The Proposed Network is Sustainable

-Essential elements are there:

willingness to share, contribute, interest,  
commitment

**need good leaders and active members**

-No lack of potential activities:

Long list of network activities suggested

EPPM project activities

PETRAD specialized topics



## **New Opportunities for CCOP**

New players and contacts

Wider areas

Interdisciplinary activities can now be a reality with  
CCOP Network of Networks

Individually benefit network members, collectively  
contribute to making the E and SE Asia region of  
excellence in petroleum geoscience

A blue-tinted photograph of a vast ocean under a cloudy sky. The text "THANK YOU" is centered in white.

**THANK YOU**