



BRIDGING THE NEED OF QUALIFIED HUMAN RESOURCES IN GEOSPATIAL INFORMATION BY DEVELOPING NATIONAL WORK COMPETENCY STANDARDS

Bandar Seri Begawan, August 15 2017

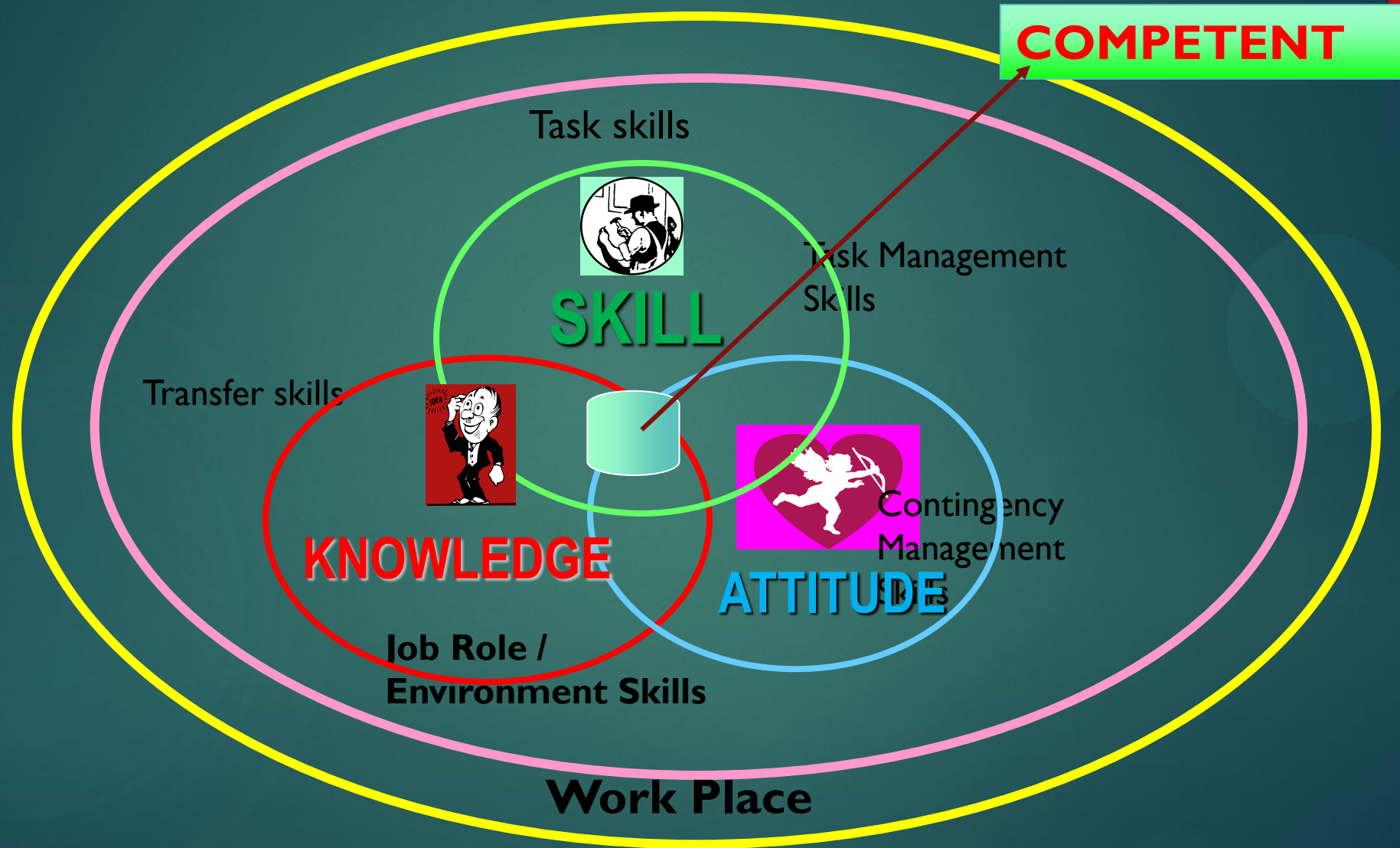
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Badan Informasi Geospasial
(Geospatial Information Agency, Indonesia)

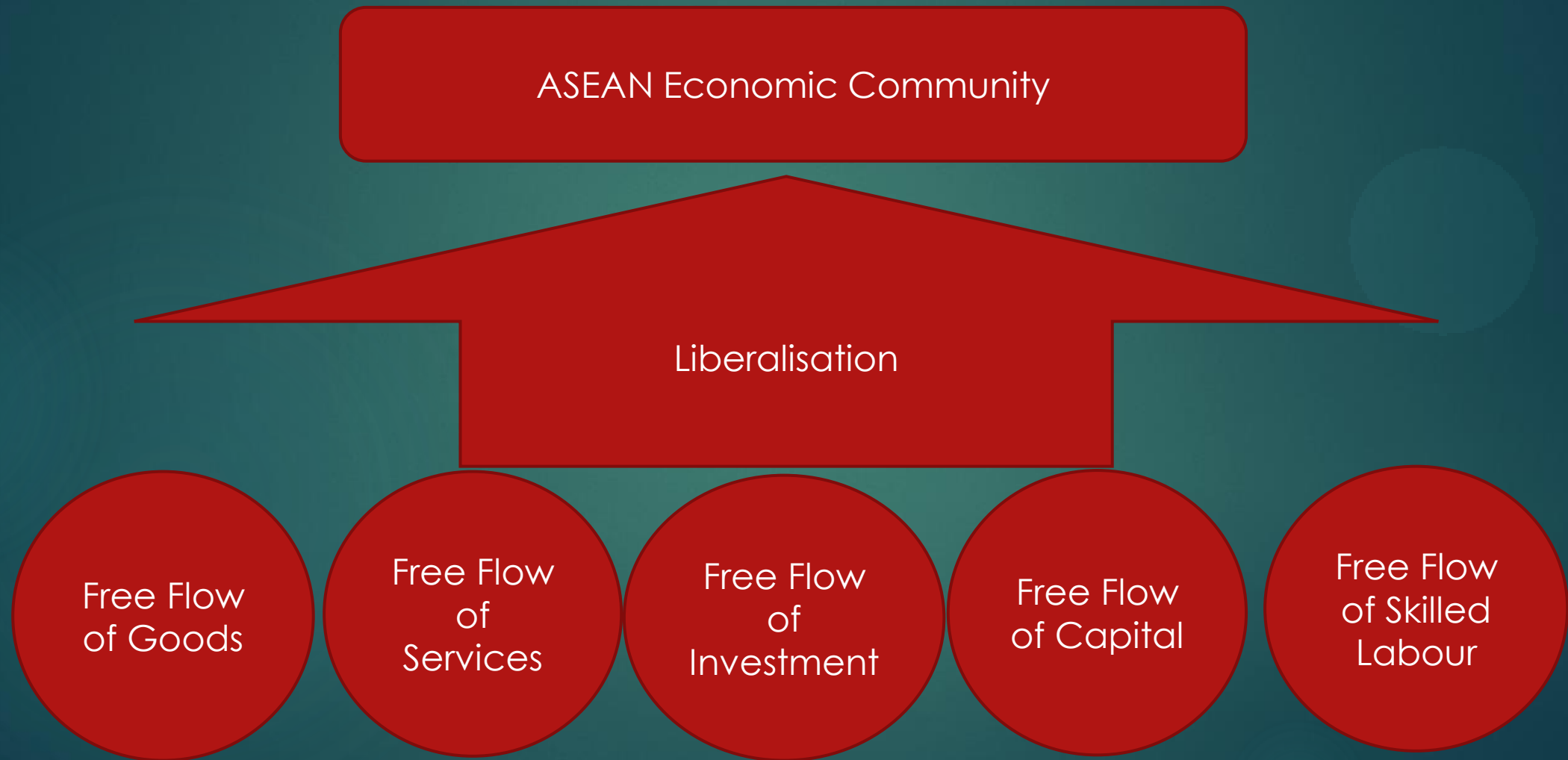
WHAT IS COMPETENCY STANDARD : FILLING THE GAP



multi-dimensional skills



THE CHALLENGE OF GLOBAL LIBERALISATION



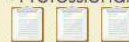
IMPLEMENTATION OF MOBILITY OF SURVEYING SERVICES

A ROADMAP

Early-harvest: due end 2016

ALL TEMPLATES DRAFTED

- Cadastral
- Education
- Professional Profile



EDUCATION SECRETARIAT

Established
by Indonesia



DATA SHARING

All countries to
update; a website
established if
possible.



BILATERAL MUTUAL RECOGNITION

Piloted by
Malaysia,
Brunei and
Singapore



Mid-term: 2-3 years

REGIONAL ANALYSIS

undertaken by external
consultant on
EDUCATION and a FIT
FOR PURPOSE profession



JOINT BOARD MEETING

opened to
Philippines and
Indonesia;
eventually all



ASEAN FLAG VISITS

AFLAG
representatives
invited to help with
Professional
Association set-up

Supporting activities

REGIONAL CPD

CPD events
and
requirements
shared



TWINNING

Bilateral twinning
arrangements
established between
universities,
Professional
Associations and/or
Boards

INTER-REGIONAL LINKAGES

Foster and build on
proactive linkages with
Australasia as well as
UN-GGIM, FIG and
others



Prepared by

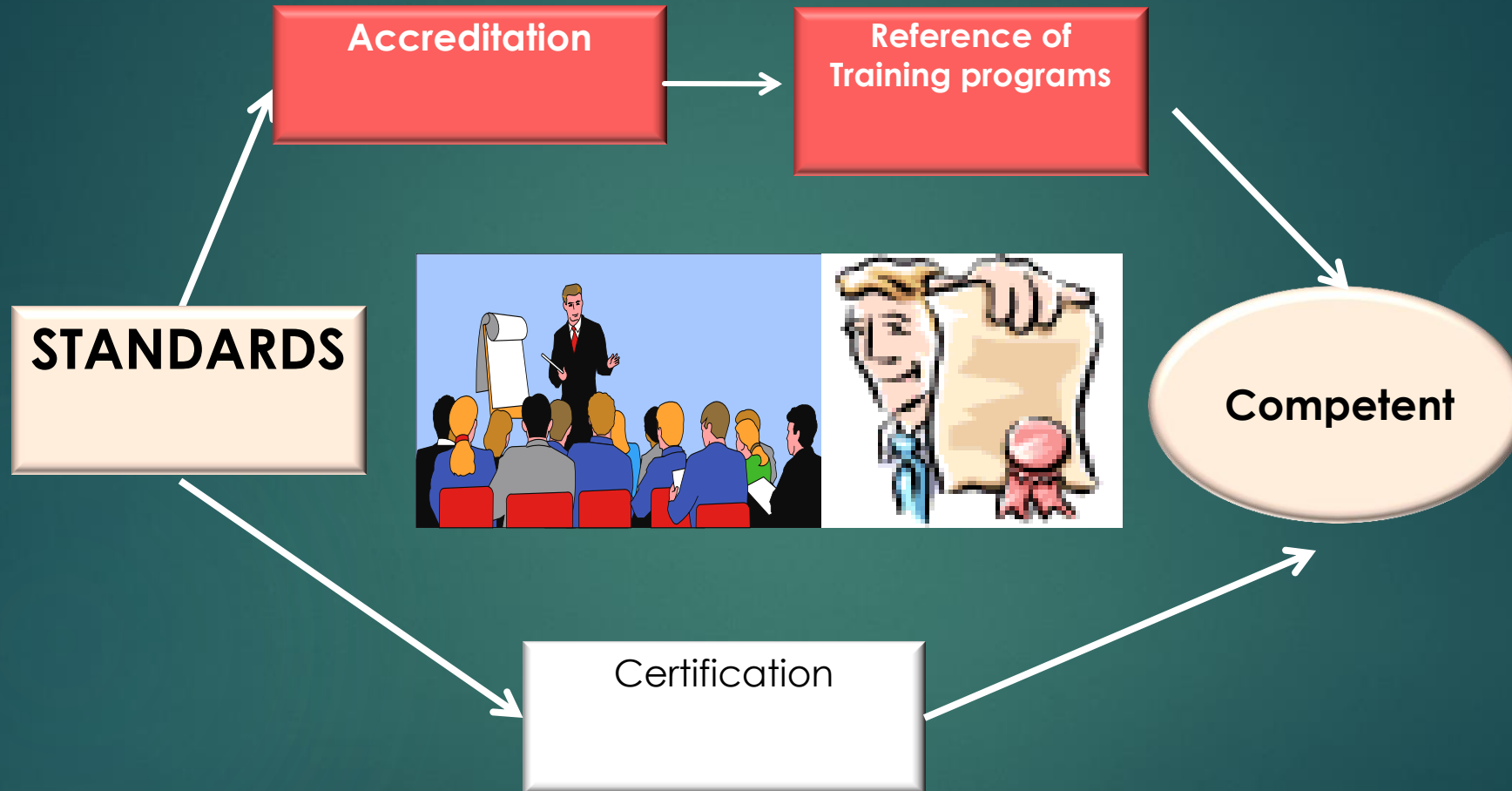
with funding from



DATA OF ASEAN SURVEYOR

No.	Country	Surveyor	
		Registered	Licensed
1	Brunei Darussalam	22	17
2	Filipina	9,325	4,397
3	Indonesia	5,500	
4	Kamboja	241	
5	Laos	2,000	
6	Malaysia	662	531
7	Myanmar		
8	Singapura	100	66
9	Thailand	500	
10	Viet Nam		

THE ROLE OF COMPETENCY STANDARDS



Why Competency Standard?

8



Education and Training

- Curriculum development

Industry

- Recruitment
- Performance Evaluation
- Dipakai untuk membuat uraian jabatan
- Industrial-need training

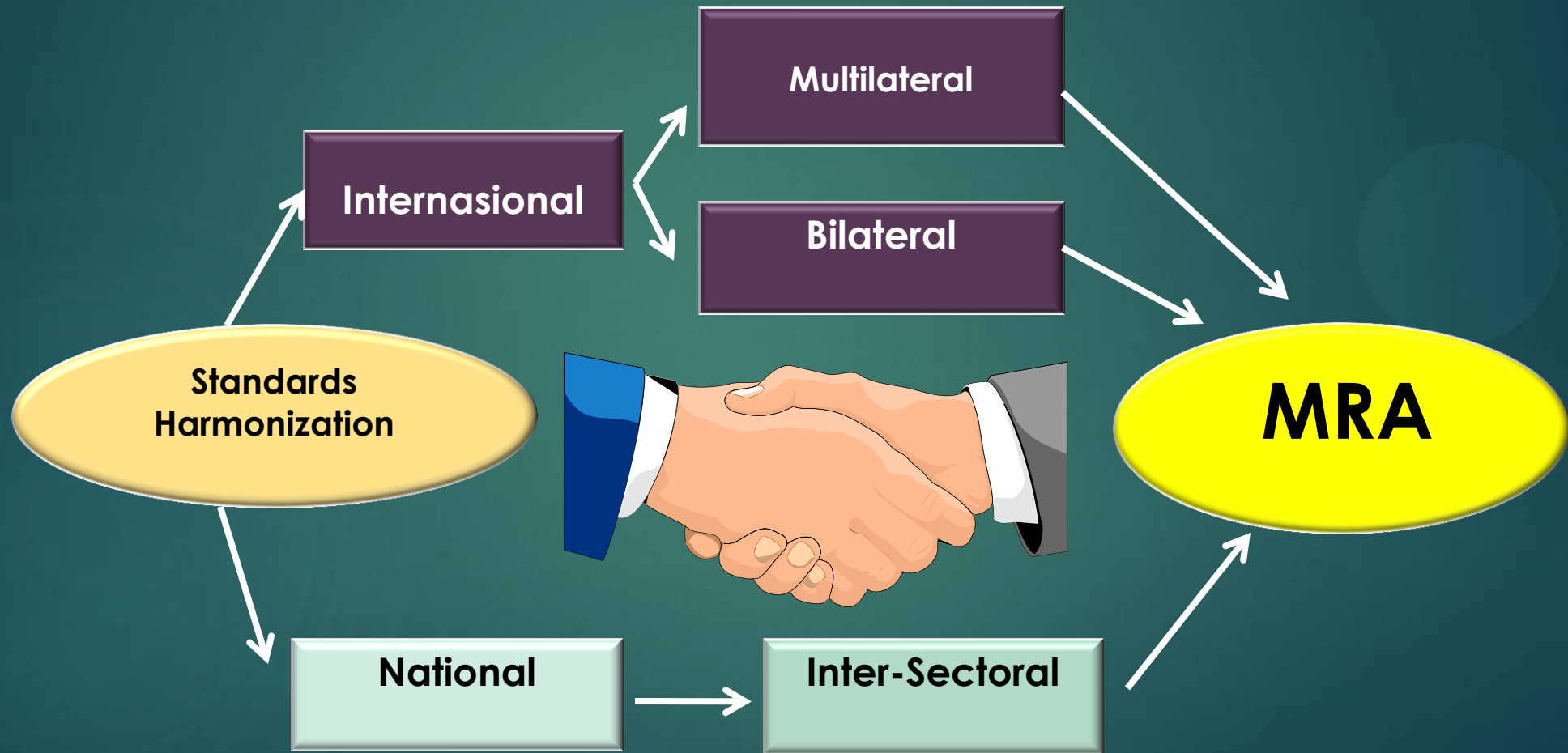
Certification

- Reference of Assessment

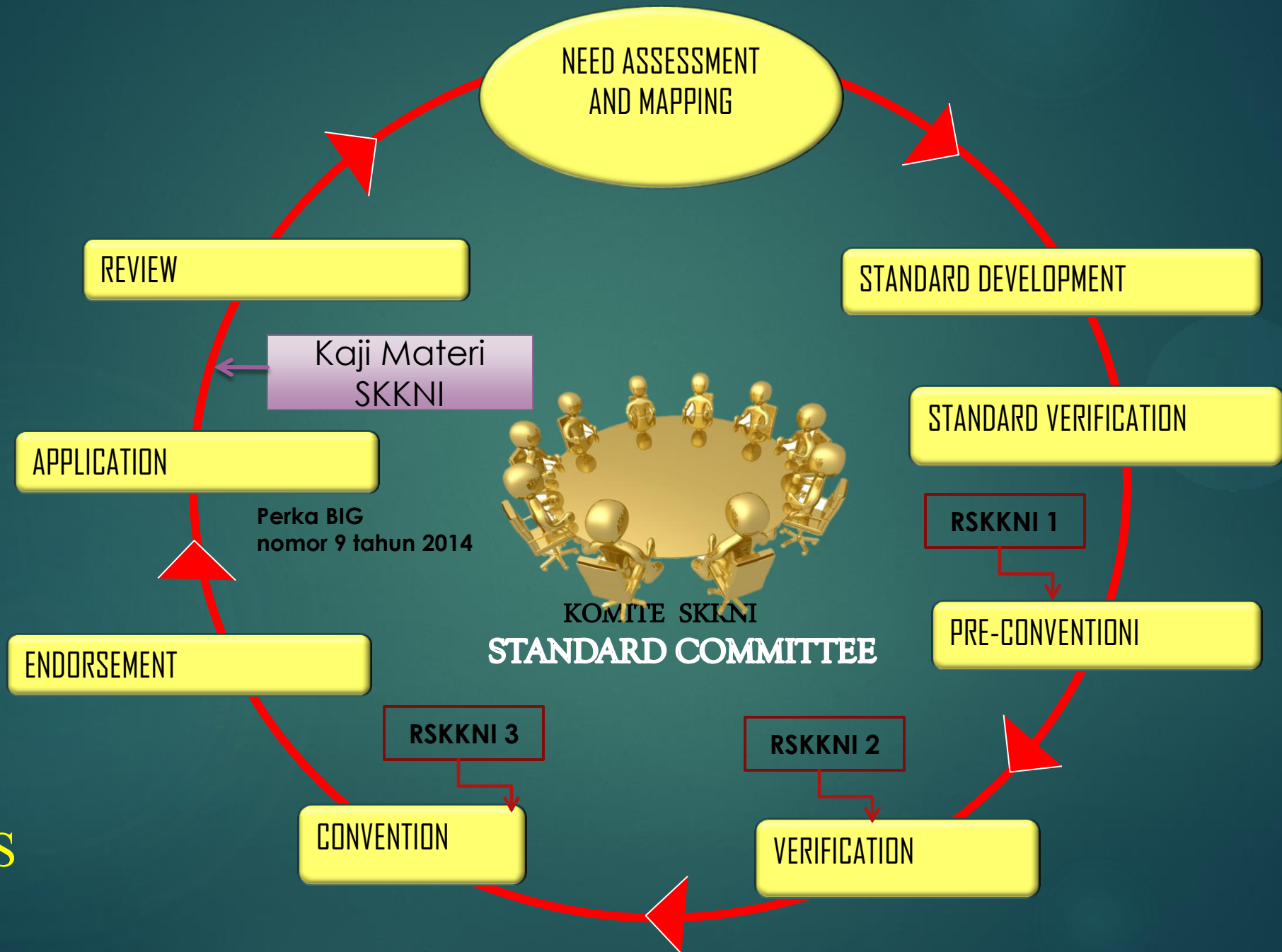
The Quality of Data/Information

HARMONISASI SKKNI

(Dilakukan Dengan Prinsip Kesetaraan)



PROCESS





QUALIFICATION FRAMEWORK

KKNI

kerangka penjenjangan kualifikasi kompetensi yang dapat menyandingkan, menyetarakan dan meng-integrasikan antara bidang pendidikan dan bidang pelatihan kerja serta pengalaman kerja dalam rangka pemberian pengakuan kompetensi kerja sesuai dengan struktur pekerjaan di berbagai sektor

QUALIFICATION LEVEL

- ▶ 1 – 3 : OPERATOR
- ▶ 4 - 6 : ANALYST / TECHNICIAN
- ▶ 7 – 9 : EXPERT

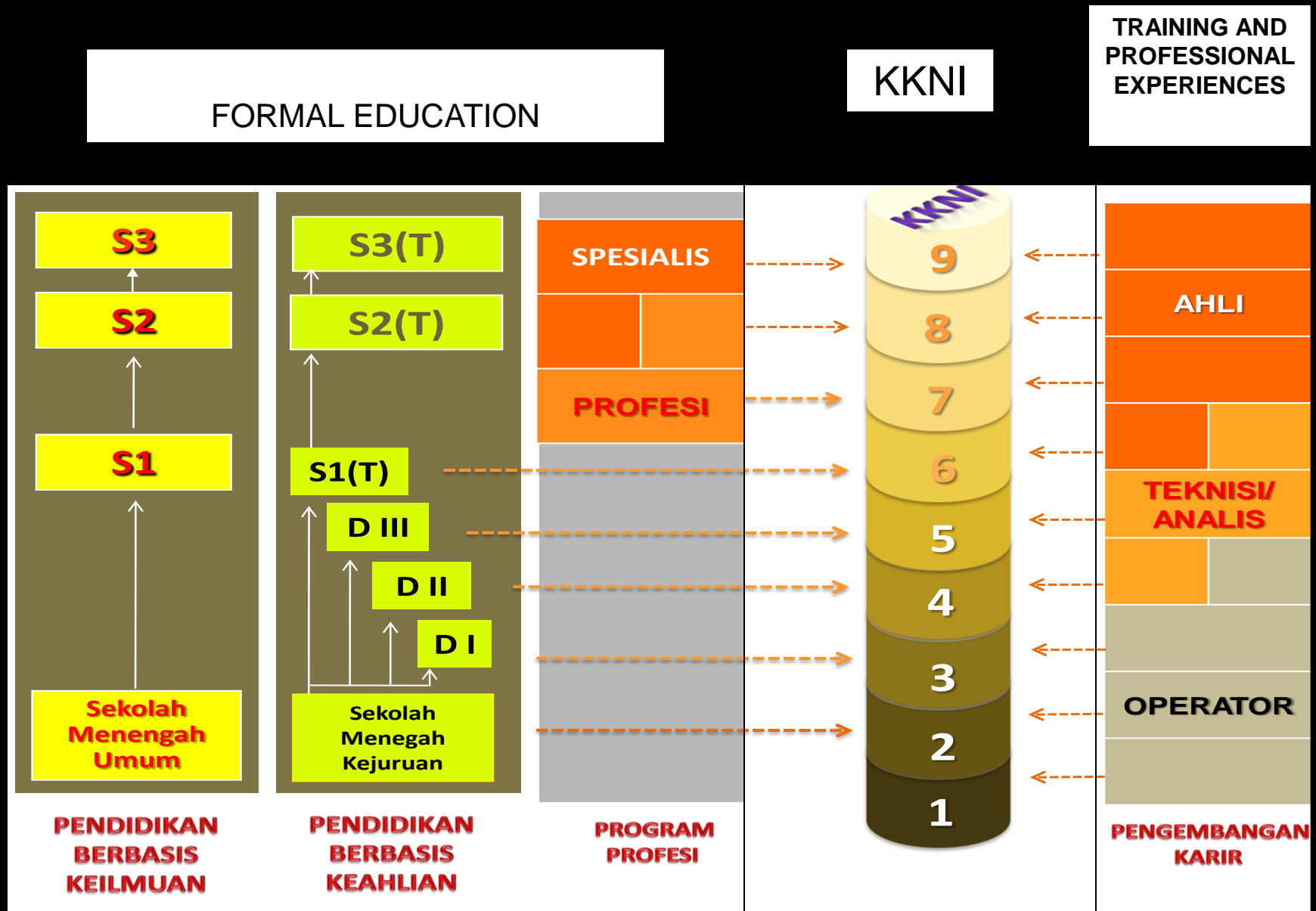




PETA KKNI

Pendidikan		Kualifikasi	Pelatihan / Pengalaman
Akademik	Vokasi/Profesi		
Doctoral	Applied Doctoral	IX	Expert 3
Master	Applied Mater	VIII	Expert 2
	Professional Education	VII	Expert 1
Bachelor	D4	VI	Analyst/Technician 3
	D3	V	Analyst/Technician 2
	D2	IV	Analyst/Technician 1
	D1	III	Operator 3
SMA	SMK	II	Operator 2
SD-SMP		I	Operator 1

PENDIDIKAN DAN JENJANG KKNI

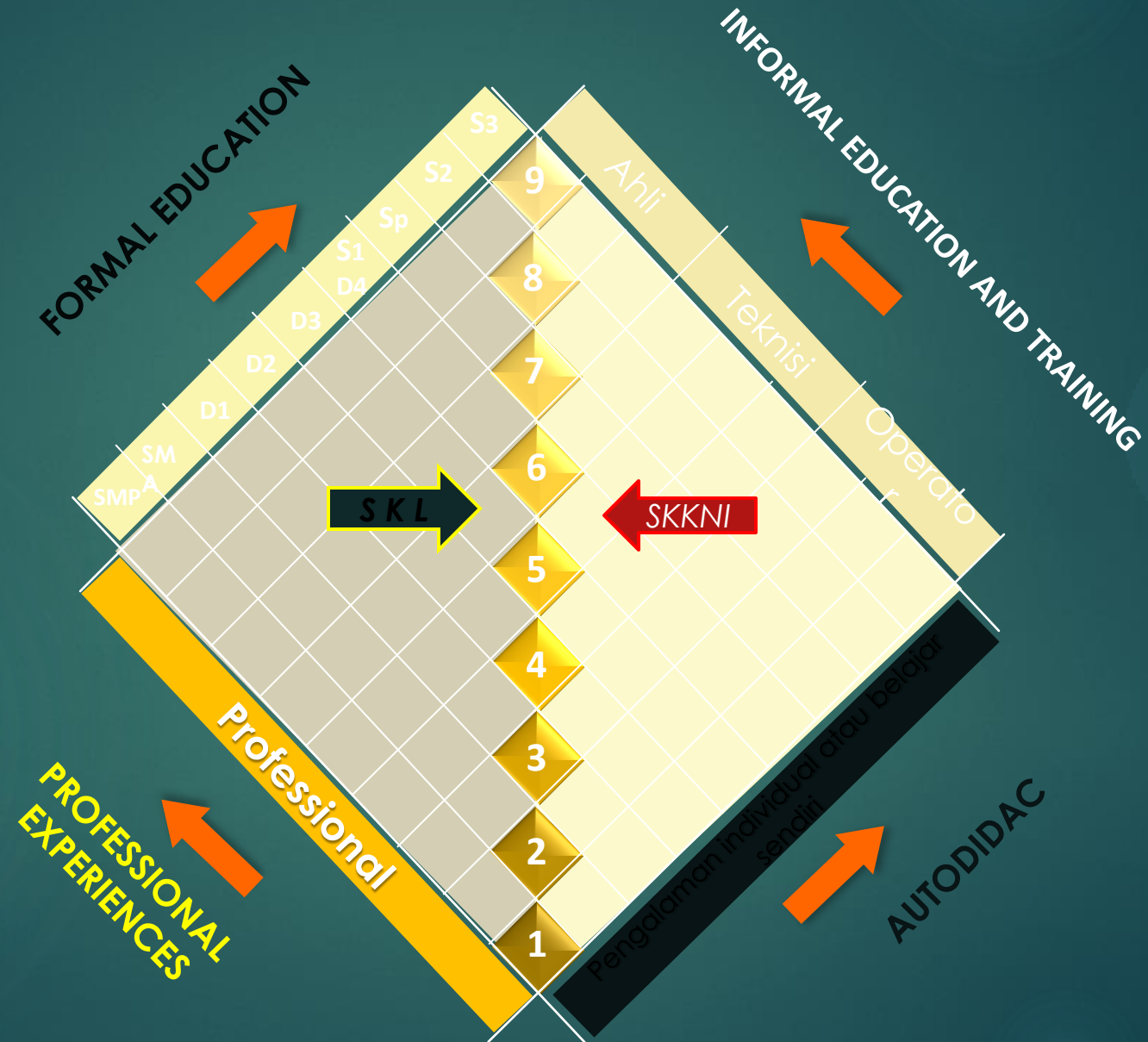


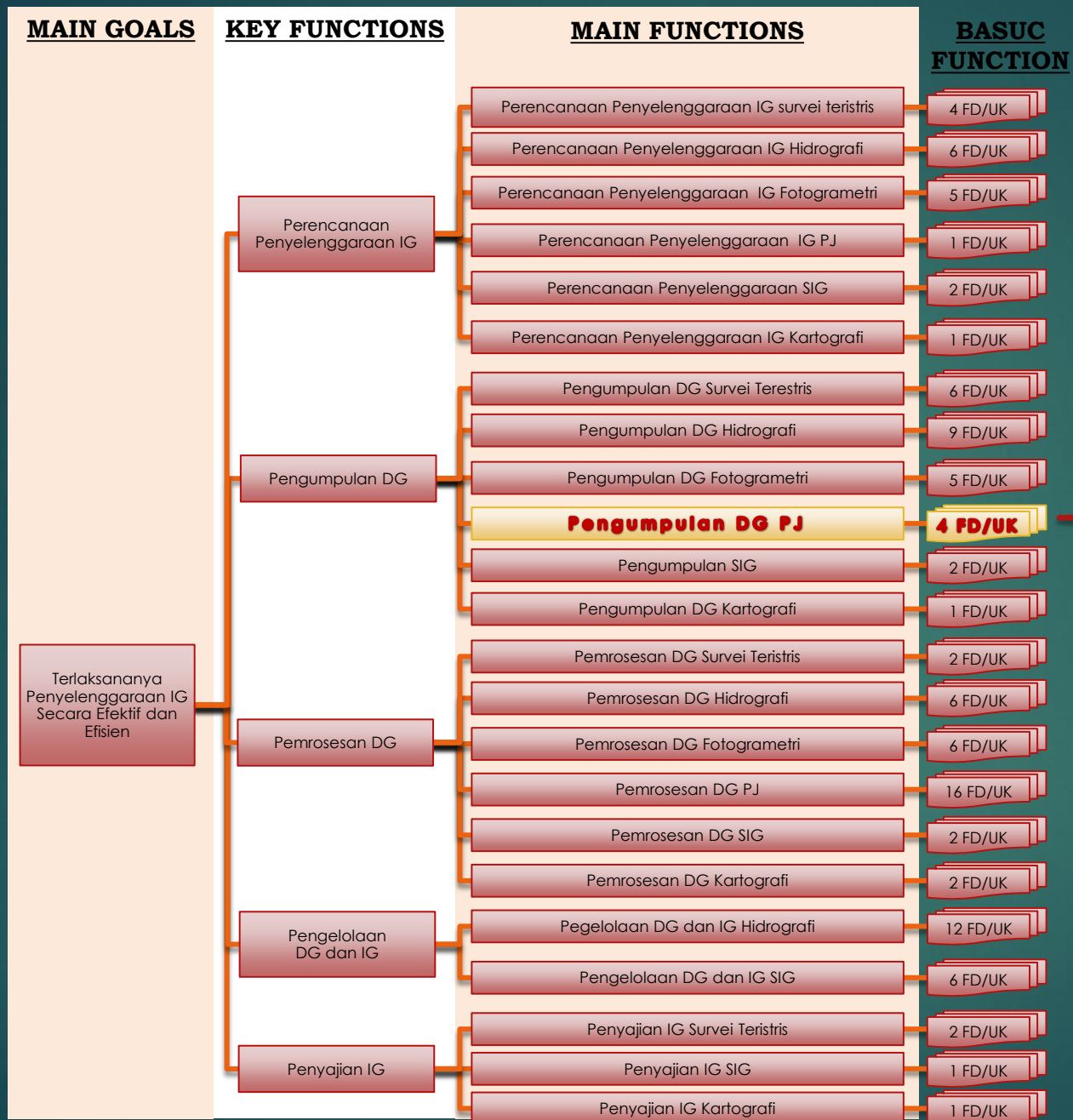
PENDEKATAN KKNI

Qualification	Components	Occupational
IX		STRATEGIKAL
VIII		
VII		
VI		MANAJERIAL
V		
IV		SUPERVISIONAL
III		
II		TEKNIK
I		

The diagram illustrates the relationship between Qualification, Components, and Occupational categories. The Components column is divided into three diagonal sections: PSIKO MOTORIK (green, bottom-left), AFEKTIF (light blue, middle), and KOGNITIF (orange, top-right). The Occupational column is divided into three horizontal sections: STRATEGIKAL (yellow, top), MANAJERIAL (light blue, middle), and SUPERVISIONAL (green, bottom). The qualification levels (IX to I) are listed on the left. The diagram shows that higher qualifications correspond to higher occupational levels and more cognitive components, while lower qualifications correspond to lower occupational levels and more psychomotor components.

COMPETENCY DEVELOPMENT WAYS



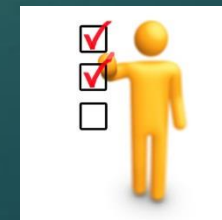


1. Melakukan Pengukuran Spektrometri Lapangan untuk Menyusun Spectral Library.

2. Melakukan Pengumpulan Data Penginderaan Jauh dengan Tracking dan Perekaman Data Satelit di Stasiun Bumi.

3. Melakukan spektrometri lapangan (field spectrometry) untuk keperluan ground truthing.

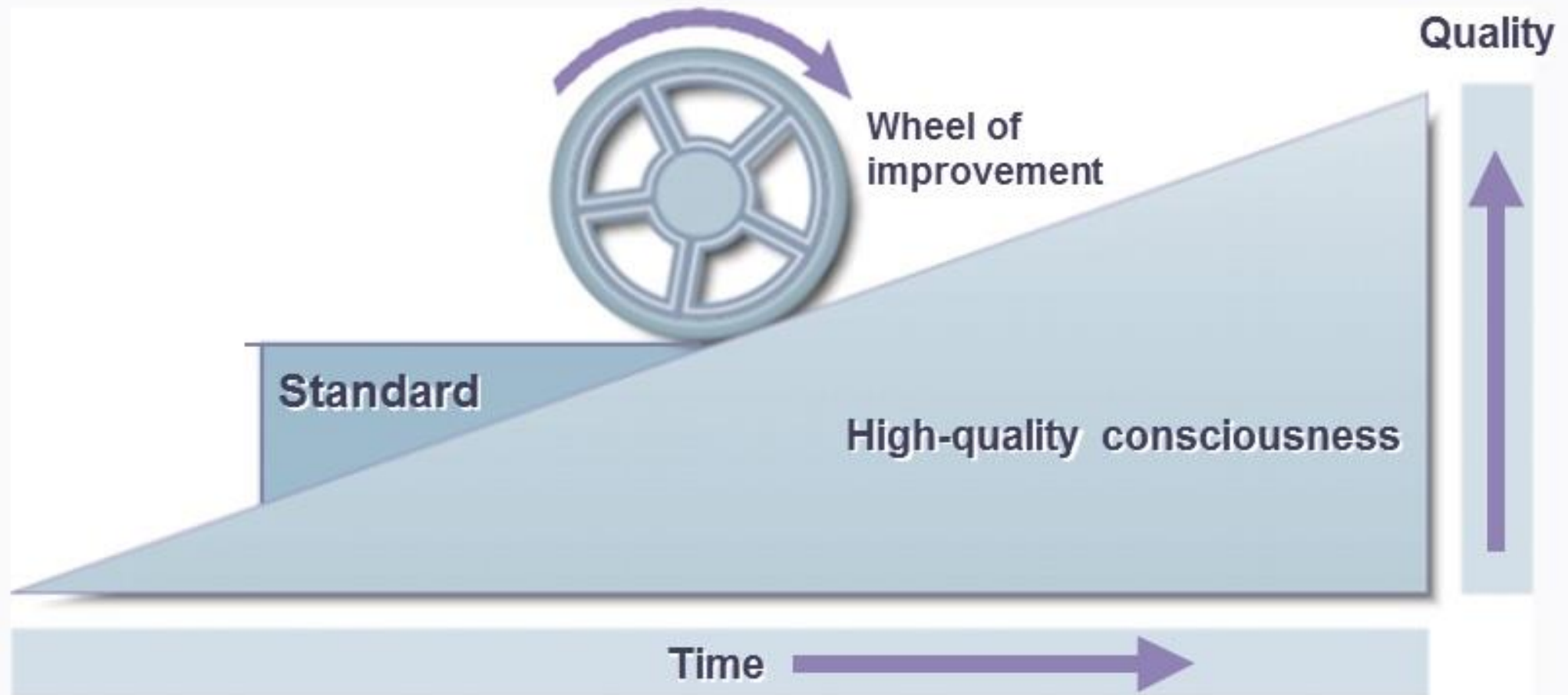
4. Melakukan Pengumpulan Data Untuk Pengambilan Sampel untuk Keperluan Ground Truthing



UNIT KOMPETENSI PER SUB BIDANG

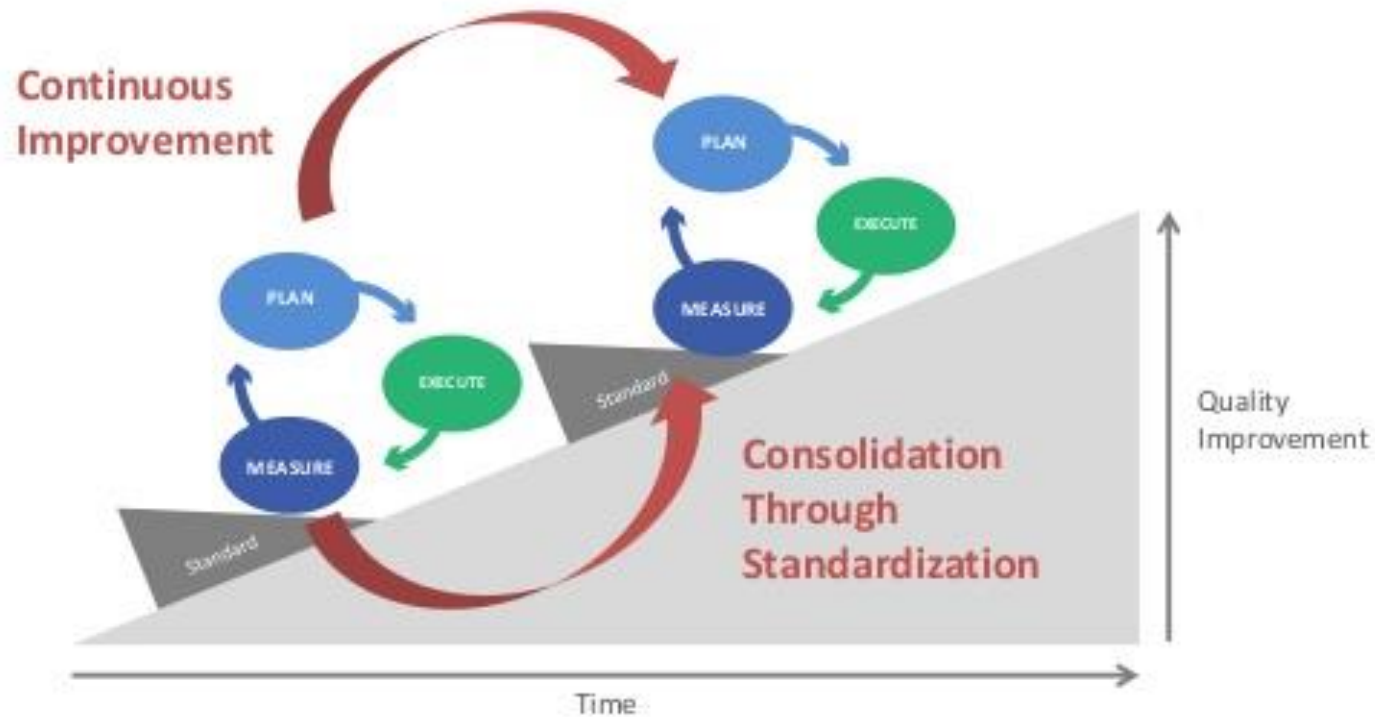
LEVEL	SUBJECT	NO. COMP. UNITS
1	Terrestrial Survey	21
2	Hydrography	62
3	Photogrammetriy	32
4	Remote Sensing	41
5	GIS	32
6	Cartography	15
7	Spatial Survey	54
JUMLAH		260

STANDAR SDM DAN INDUSTRI SEBAGAI PENGUNGKIT KUALITAS

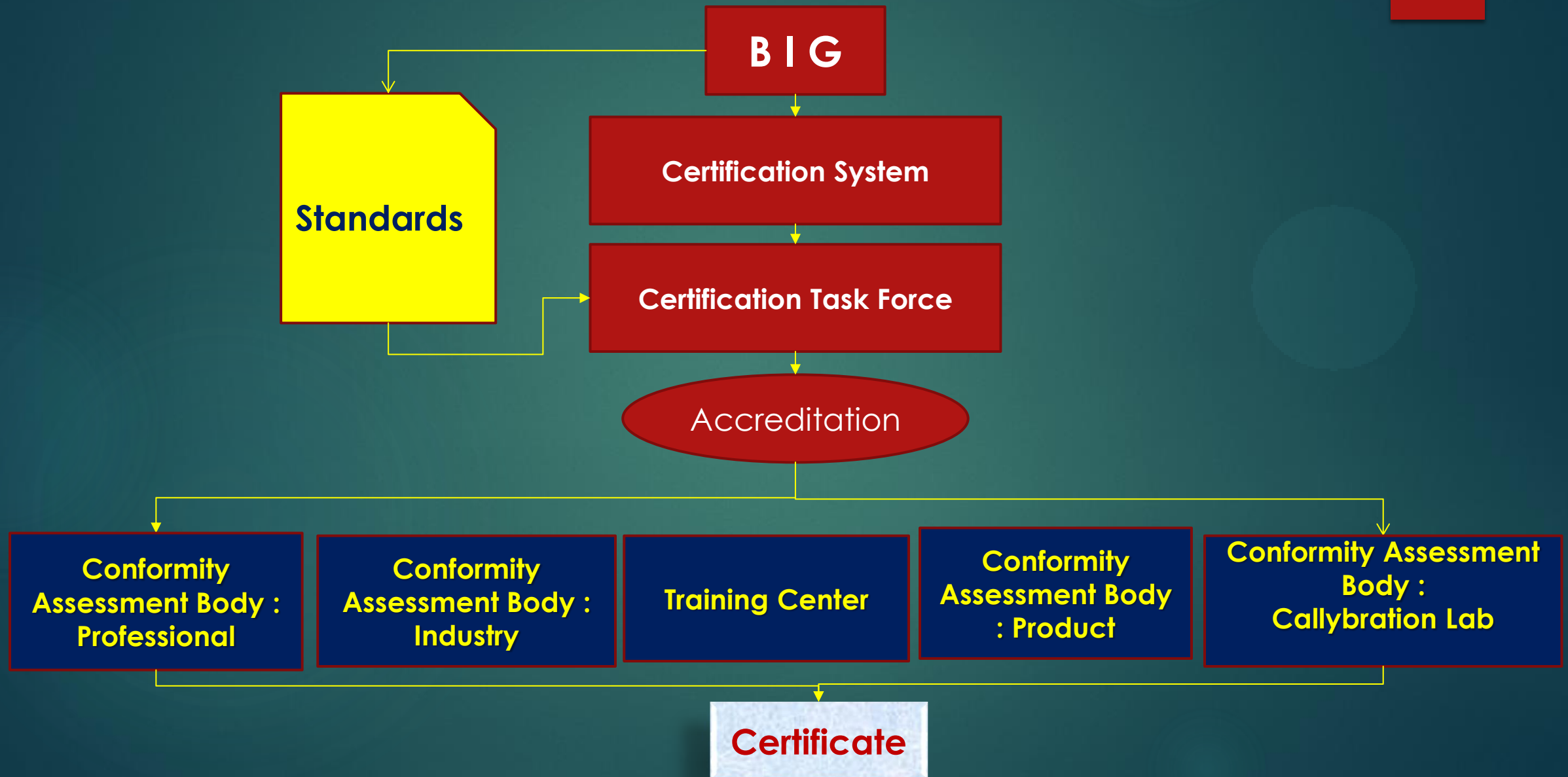


STANDAR SDM DAN INDUSTRI SEBAGAI PENGUNGKIT KUALITAS

Continuous Improvement



CERTIFICATION



ACCREDITATION FLOW



CLOSING

The Credible Certification with qualified Standards will lead to the Accountable Manpower and Industry