



ANNEX to Classification grid

We propose to use the 6 dimensions and the criteria defined in the U-MAP project as a first approach to define the specifics of the Thai HEIs. Here you will find a summary table of the dimensions and criteria:

1. Teaching and learning profile	2. Student profile	3. Research involvement	4. Involvement in knowledge exchange	5. International orientation	6. Regional engagement
1.1 Degree level focus 1.2 Range of subjects 1.3 Orientation of degrees 1.4 Expenditure on teaching	2.1 Mature students 2.2 Part time students 2.3 Distance learning students 2.4 Size of student body	3.1 Peer reviewed academic publications 3.2 Professional publications 3.3 Other research output 3.4 Doctorate production 3.5 Expenditure on research	4.1 Start-up firms4.2 Patent applications filed4.3 Cultural activities4.4 Income from knowledge exchange activities	5.1 Foreign degree seeking students 5.2 Incoming students in exchange programmes 5.3 Students sent out in exchange programmes 5.4 International academic staff 5.5 Importance of international income sources	6.1 New entrants from the region 6.2 Graduates working in the region 6.3 Importance of local/regional income sources

The table is followed by a matrix containg the defintions of the criteria, the rationale behind using them in a multidimensional classification, the measurable data elements and the possible sources where to find those. Besides, the the threshold criteria are mentioned – using the European threshold criteria, for a possible implementation in the Thai system this part should be revised. The last coloumn contains some explicatory notes to better understand the different criteria.



Dimension 1: teaching and learning profile

Criteria/Definition	Rationale	Data elements / Source	Specific threshold criteria	Remarks
1.1 Degree level focus DEF: The number of degrees awarded in the reference year, by level of degree	The relative size of the various degree levels gives an indication of the focus of the profile of the HEI. Degrees are counted and not enrolment to avoid double counting and the biasing effect of 'eternal students'.	N° of degrees awarded in Advanced Diploma programs; Bachelor programs; Graduate Diploma programs; Master programs; Higher Graduate Diploma programs; Doctor/PhD programs. Source: □ OHEC general data □ OHEC CHE QA □ HEI	In order to determine the focus of the HEI define the ratio of awarded degrees in relation to all qualifications for all the 9 levels in the Thai system. For example: Doctorate focus: >= 5% PhD; Master focus >= 25% M; Bachelor focus: >= 40% B	Qualifications comprise all 9 levels including and other diplomas and certificates. The categories are chosen to avoid a hierarchical connotation
1.2 Range of subjects DEF: The number of field of studies defined by TQF in which qualifications are awarded	The mix of subject offerings is an indicator of the width of the scope of activities of the HEI	Degrees awarded in education; Degrees awarded in humanities and arts; Degrees awarded in social sciences, journalism and information; Degrees awarded in business, administration and law; Degrees awarded in natural sciences and mathematics and statistics; Degrees awarded in Information and Communication Technologies	For example: fields covered <= 3 specialised; 3< fields covered <= 6 broad; fields covered > 6 comprehensive.	I have used the UNESCO ISCED97 classification to define the broad subject areas or fields of education (10 fields). These broad areas are likely to be used at the national level, for reporting to UNESCO. The Thai reporting agency usually has to have 'conversion tables' converting the national names into the broad international groups. I could not find it. A field of studies is counted if a







		(ICTs); Degrees awarded in engineering, manufacturing and construction; Degrees awarded in agriculture forestry, fisheries and veterinary; Degrees awarded in health and welfare; Degrees awarded in services. Source: OHEC general data OHEC CHE QA HEI Other:		least five percent of the qualifications offered are in that subject area.
1.3 Orientation of degrees DEF: The proportion of graduates (all levels combined) in three types of programs: general formative programs, programs leading to licensed/regulated professions, and other career-oriented programs	Programs leading to certified/ regulated professions as assumed to have a clear professional orientation. Professional orientation thus can be described as having a direct link to the needs of the labourmarket.	Qualifications awarded in career oriented programmes; Qualifications awarded in programmes leading to licens; Qualifications awarded in general formative programm. Source: OHEC general data OHEC CHE QA HEI Other:	More than one third of graduates in general formative programs: general formative focus More than one third of graduates in programs leading to licensed/regulated professions: licensed/regulated professional orientation More than one third of graduates in other career-oriented programs: other career-oriented focus. More than one third of graduates in two categories: mixed orientation	General formative programs do not have a direct relation to a specific profession or specific (line of) jobs. These programs are in line with the Humboldtian tradition of Bildung and the American Liberal art programs. An example of this category would be a program leading to a Bachelor of Arts in Law (or: Bachelor of Laws, LLB) Lists of regulated professions: medical doctor, nurse, midwife, pharmacist, dentist, or veterinary surgeon, and also postsecondary programs to become an architect or





				barrister Other career oriented programs refer to programs that have a direct relation to a specific profession or specific (line of) jobs, others than the programs described in the previous item. Professional masters, research masters and professional doctorates should be counted here as well (if not counted under the previous item). An example of the third category would be a Bachelor in Business Administration in Tourism Management.
1.4 Expenditure on teaching DEF: The percentage of the institution's total expenditure dedicated to the teaching activities in the reference year	This indicator highlights the priority given to teaching activities, in relation to research and knowledge exchange.	Expenditure on teaching as % of the total budget of the HEI. Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 40%: major between 20 and 40:substantial between 5 and 20: some between 0 and 5: none	Including expenditure on instruction in teaching hospitals and expenditure on services indirectly related to instruction (e.g. educational services, curriculum development, administration, capital expenditure). The expenditure on management and organization of teaching is to be included. Excluding expenditure on CPD activities, the university hospitals' expenditure on patient care and other





			non-education related general expenditure. Some institutions are engaged in teaching as well as research. This makes it difficult to single out teaching-related expenditure. In this case we only request an estimate of the share of teaching in the total activity.
Add here other criteria you think it will be relevant in this dimension.	Source: OHEC general data OHEC CHE QA HEI Other:	For example:	



Dimension 2: Student profile

Criteria/Definition	Rationale	Data elements / Source	Specific threshold criteria	Remarks
2.1 Mature students DEF: The number of students aged for example 30 years or older (headcount, all levels combined) as a percentage of total number of students enrolled (headcount, all levels combined)	The proportion of adult learners is seen both as an indicator for the involvement in life-long learning as for the age distribution of the student body.	Students aged 30+; Total enrolment Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 20%: predominant between 10 and 20% substantial between 5 and 10% some less than 5% none	
2.2 Part-time students DEF: The number of students enroled in part-time programs (headcount) as a % of total enrolment (headcount)	Part time programs are a distinct characteristic of the way the programs are offered to students. An institution that has relatively many part time students enrolled is likely to have an opener attitude to its environment/ stakeholders.	Part time students; Total enrolement Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 20%: predominant between 10 and 20% substantial between 5 and 10% some less than 5% none	The approach taken here differs slightly with the approach taken by OECD; At the tertiary level, an individual is considered part-time if he or she is taking a course load or educational programme that requires less than 75 per cent of a full-time commitment of time and resources. Full time students who are de facto part time students (taking much more time to complete than the standard time) are not to be counted here.
2.3 Distance learning students DEF: Students enrolled in distance learning programs as a	Distance learning programs is a distinct characteristics of the way the programs are offered	Students in distance learning; Total enrolement	For example: more than 20%: predominant between 10 and 20% substantial	All levels combined





percentage of total number of students enrolled. Distant learning programs provide courses not requiring students physical on-site presence to receive their education	to students. An institution that has relatively many students enrolled in distance learning programs is likely to have an opener attitude to its environment/ stakeholders	Source: OHEC general data OHEC CHE QA HEI Other:	between 5 and 10% some less than 5% none	
2.4 Size of student body DEF: The headcount number of students enrolled in all types of degrees and certificate programs	A basic size indicator	Total enrolement Source: OHEC general data OHEC CHE QA HEI Other:	For example: very large: more than 30,000; large: between 15,000 and 30,000; medium sized: between 5,000 and 15,000; small: less than 5,000	We consider all students registered at the reporting institution who follow courses that lead to the award of a qualification(s) (degree seeking students), excluding those registered as studying completely abroad. Data should reflect the number of students enrolled at the beginning of the academic year. Preferably, the end (or near-end) of the first month of the school / academic year should be chosen. If the enrolment of students is not stable at the beginning of the academic year, a count at a later point may be preferable. Included are students studying for Associate degrees (short first cycle), Bachelor degrees (first cycle), Master degrees, as well as students in pre-Bologna degree programs (second cycle), as well as doctoral students and other third cycle





			students. The number of students enrolled only refers to students for which the institution is their principle institution of enrollment. Therefore, simultaneous enrollments should be excluded here (Each student enrolled is counted only once.)
Add here other criteria you think it will be relevant in this dimension.	Source: OHEC general data OHEC CHE QA HEI Other:	For example:	





Dimension 3: Research involvement

Criteria/Definition	Rationale	Data elements / Source	Specific threshold criteria	Remarks
3.1 Peer reviewed academic publications DEF: Annual number of peer reviewed academic publications relative to the total number of academic staff (FTE)	The number of publications is seen as an important indicator for the involvement in research	Academic staff (FTE); Peer reviewed academic publications. Source: OHEC general data OHEC CHE QA HEI SCOPUS Thai Journal Citation Index Centre (TCI) database OHEC:	For example: more than 1.5: major between 0.75 and 1.5: substantial between 0,1 and 0.75 some less than 0,1 none	This includes PhD dissertations and books. Peer review (also known as refereeing) is a process of subjecting an author's scholarly work, research, or ideas to the scrutiny of others who are experts in the same field, before a paper describing this work is published in a journal, book or conference proceedings. You may use your database where national journals and other academic peer reviewed publications (that do not appear in the existing databases) are counted as well, like for example the Thai Journal Citation Index Centre (TCI) database.
3.2 Professional publications DEF: All publications published in journals/ books/ proceedings that are addressed to a professional audience and that can be traced bibliographically per FTE academic staff.	This indicator points at the more professional oriented research activities of an institution	Academic staff (FTE); Professional publications. Source: OHEC general data	For example: more than 7.5: major between 3.75 and 7,5: substantial between 0,5 and 3.75 some less than 0,5 none	These publications are not peer reviewed as in the category academic publications. A count of all publications published in journals/ books/ proceedings that are addressed to a professional audience and





3.3 Peer revied other research output DEF: The number of research	This indicator points at the more professional oriented research activities of an institution.	☐ OHEC CHE QA ☐ HEI ☐ Other:	For example: more than 1.5: major; between 0.75 and 1.5:	that can be traced bibliographically These outputs may be found through bibliographical searches and have been documented officially. This
outputs other than peer- reviewed publications and professional publications per FTE academic staff		Source: OHEC general data OHEC CHE QA HEI Other:	substantial between 0,1 and 0.75; some less than 0,1 none	category includes exhibition catalogues, musical compositions, designs, and other artifacts that underwent a process of peer review.
3.4 Doctorate production DEF: The number of doctorate degrees awarded as a percentage of the number of academic staff (FTE)	In many higher education systems the 'production' of a doctorate degree is seen as a research intensive activity of a higher education institution. The doctorate thesis is in most cases a significant research publication	Doctorate degrees awarded Academic staff (FTE) Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 0,15:major; between 0,05 and 0,15: substantial; between 0 and 0,15 some 0 none	Doctorate degrees comprise PhD degrees as well as professional doctorate degrees. Academic staff includes teaching and research staff! In the Thai system there is no expression for "academic" staff.
3.5 Expenditure on research DEF: The amount of money spent on research activities in the reference year as a percentage of total expenditure	Research expenditure is seen as a strong indicator for involvement in research	Total expenditure; Expenditure on research. Source: OHEC general data	For example: more than 40%:major; between 20 and 40%: substantial	Including expenditure on R&D at academic hospitals and including expenditure on services indirectly related to research (e.g. management and organisation of research,





☐ OHEC CHE QA	between 5 and 20%: some	administration, capital expenditure).
□ HEI	between 0 and 5%: none	
□ Other:		Excluding the academic hospitals' expenditure on patient care and other non-research-related general expenditure
		All expenditure on research is included, regardless of whether the research is funded from general institutional funds or through separate grants or contracts from public or private sponsors. This includes all research institutes and experimental stations operating under the direct control of, or administered by, or associated with, the higher education institution.
		Some institutions are engaged in teaching as well as research. This makes it difficult to single out research-related expenditure. In this case we only request an estimate of the share of research in the total activity. Please indicate the percentage of the institution's total expenditure dedicated to the research activity.





Add here other criteria you think it will be relevant in this dimension.		For example:	
	Source:		
	☐ OHEC general data		
	☐ OHEC CHE QA		
	□ HEI		
	☐ Other:		





Dimension 4: Involvement in knowledge exchange





4.2 Patent applications filed DEF: The number of patents filed related to the total FTE of academic staff x 1000	The number of patents filed is a traditional indicator of innovativeness.	Source: OHEC general data OHEC CHE QA HEI Thai Patent Office Other:	For example: more than 10: major between 5 and 10: substantial between 1 and 5: some	I propose to use the following three criteria for spin-offs: 1. New firms founded by employees of a university or another higher education institution (including staff, professors or post-docs) to transfer and commercialise inventions resulting from the R&D efforts of the HEI's departments. 2. New firms that have received a license to use technology (or broader: Intellectual Property) created in the university/HEI. 3. Firms where the university/HEI participates in the equity (i.e. share) capital or that have been started directly by the university/HEI. A patent is a set of exclusive rights for a fixed period of time in exchange for a disclosure of an invention. The exclusive right granted is the right to prevent of exclude others from making, using, selling or offering to sell or importing the invention. In order to be patented an invention must be novel, useful and not of an obvious nature. Applications for patents are filed to national states or
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				application agencies. Most patents and applications for patents are listed in national and international electronic databases.
4.3 Cultural activities DEF: The number of official exhibitions, official concerts and performances, (co)-organised by the institution or a department of it, that are registered as such and that are open to the general public, per 100 FTE academic staff	The number of exhibitions, concerts and performances in arts and architecture a generally accepted indicator of the level of their activities	Exhibitions Concerts and performances Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 100: major between 50 and 100: substantial between 0 and 50: some	An exhibition is an event organised by the higher education institution where the academic staff or the students of the institution display their work (products, services, design, prototype, audiovisual/musical output) to the general public. There should be some evidence of the event in terms of a bibliographically traceable catalogue, or similar evidence that the event took place.
4.4 4 Income from knowledge exchange activities DEF: Sum of income from licensing agreements, income from 'private' research contracts with business and public sector organisations, income from copy righted products and income from CPD activities as a percentage of total income.	If a HEI gets relatively much of its income from 'knowledge exchange activities it is assumed to be more involved in those activities.	Total income; Licensing income; Income from CPD; Volume of privately funded research contracts; Income from copyright protected products. Source: OHEC general data OHEC CHE QA	For example: more than 10% major between 1 and 10% substantial between 0 and 1% some	





	☐ Other:		
Add here other criteria you think it will be relevant in this dimension.	Source: OHEC general data OHEC CHE QA HEI Other:	For example:	





Dimension 5: International orientation

Criteria/Definition	Rationale	Data elements / Source	Specific threshold criteria	Remarks
5.1 Foreign degree seeking students DEF: The number of degree seeking students with a foreign diploma on entrance as % of total enrolment in degree seeking programs.	A high percentage of foreign degree seeking students reflects a high attractiveness of the HEI to international students, which is assumed to be correlated with a high degree of international orientation.	Foreign degree seeking students with foreign qualifying; Total enrolment Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 7,5%: major between 2,5 and 7,5%: substantial between 0,5 and 2,5%: some	Only full degree seeking. Exchange students are covered in one of the next questions. A degree seeking students is enrolled in a degree program with the intention to get the degree. Students enrolled for only one or two modules or on exchange basis are not considered to be degree seeking students. Students who are enrolled in programs that do not lead to degrees (but to certificates) are also not considered to be degree seeking. The fall back position is to use nationality as a foreign indication. This characteristic refers to the country of citizenship criterion. Students are non-citizens students if they do not have the citizenship of the country where the institution is located. Normally citizenship corresponds to the nationality of the passport which the student holds or would hold.





				The number of students enrolled only refers to students for which the institution is the institution of principal enrolment. Simultaneous enrolments at other institutions should be excluded here.
5.2 Incoming students in exchange programmes DEF: The number of incoming students in international exchange programmes, as a percentage of total enrolment	The indicator reflects the international orientation of the institution. The assumption is that a strong international orientation will lead to a higher proportion of students coming in.	Incoming students in international exchange programs; Total enrolment. Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 2%: major between 1 and 2%: substantial between 0,5 and 1%: some	
5.3 Students sent out in exchange programmes DEF: The number of students sent out in international exchange programs as a % of total enrolment	The indicator reflects the international orientation of the institution. The assumption is that a strong international orientation will lead to a higher proportion of students sent out.	Total enrolment Students sent out in international exchange programs Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 2%: major between 1 and 2%: substantial between 0,5 and 1%: some	
5.4 International academic staff DEF: Foreign academic staff	A high percentage of international staff flags a strong international orientation.	International academic staff Academic staff (headcount) doctoral students in staff	For example: more than 10%: major	





members (headcount) as % of total number of academic staff members (headcount). Foreign academic staff is academic staff with a foreign nationality, employed by the institution or working on an exchange base		foreign PhD students Source: OHEC general data OHEC CHE QA HEI Other:	between 5 and 10%: substantial between 1 and 5%: some	
5.5 Importance of international income sources DEF: Income from international sources, including subsidies and contracts for teaching and research, from both public and private international sources in 1000 Euros/Dollars, as a percentage of total income	If the relative size of international sources of income is large this indicates a strong international orientation.	Income from international sources Total budget Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 10% major between 5 and 10% substantial between 1 and 5% some	This indicator is based on an assessment of the relative importance of the various sources/levels of income.
Add here other criteria you think it will be relevant in this dimension.		Source: OHEC general data OHEC CHE QA HEI Other:	For example:	





Dimension 6: Regional engagement

Criteria/Definition	Rationale	Data elements / Source	Specific threshold criteria	Remarks
6.1 First year bachelor students from the region DEF: The number of first year bachelor students (headcount) from the region as a percentage of total number of first year bachelor students. The region is determined by the home address of the student.	A HEI that draws many of its students from the region has a stronger relation with the region than a HEI with only few new entrants from the region	% of first year bachelor students from the region Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 10% major between 5 and 10% substantial between 1 and 5% some 0 none	We further note that new entrants are students who, during the course of the current reporting period, enter any program leading to a recognised qualification at this level of education for the first time, irrespective of whether the students enter the program at the beginning or at an advanced stage of the program (e.g. by virtue of credits gained for work experience or courses taken at another level).
6.2 Graduates working in the region DEF: The number of the graduates from two years ago (reference year – 2), who work in the region, as a percentage of the total number of graduates from two years ago.	A high proportion of graduates working in the region indicates a close relation between the higher education institution and the region	Graduates working in the region Total N° of graduates at the reference year -2 Source: OHEC general data OHEC CHE QA HEI Other:	For example: more than 10%: major between 5 and 10% substantial between 1 and 5% some 0 none	To be asked either as exact numbers or as broad categories. What is a region will be determined in two ways: the region the HEI uses in its data reporting (needs to be specified by the HEI).
6.3 Importance of local/regional income sources DEF: Total income from	A high proportion of income from regional/local sources indicates a intens relation	more than 10% major between 5 and 10% substantial between 1 and 5% some	For example: more than 10% major between 5 and 10% substantial	





regional and local sources (both public and private), including all income from grants, subsidies and contracts for teaching and research, from both public and private regional sources public bodies, private contractors) in 10.000 baht as a percentage of total income	between the higher education institution and the region.	Source: OHEC general data OHEC CHE QA HEI Other:	between 1 and 5% some	
Add here other criteria you think it will be relevant in this dimension.		Source: OHEC general data OHEC CHE QA HEI Other:	For example:	