

European Network for Accreditation of
Engineering Education

2nd ENAEE Conference

**EUR-ACE®, the European Quality Label for Engineering Degree Programmes:
Impact and Perspectives**

DEVELOPING PROGRAMME ACCREDITATION AND EUR-ACE IN SPAIN

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Manuel Moreu, IIE



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- The starting point: The agreement ANECA-IIE
- The context of Engineering in Spain
- The Spanish accreditation system
- The planned procedure for EURACE label in Spain



1. The starting point: the Agreement ANECA-IIE



CONVENIO MARCO DE COLABORACIÓN ENTRE LA AGENCIA
NACIONAL DE EVALUACIÓN DE LA CALIDAD Y ACREDITACIÓN Y EL
INSTITUTO DE LA INGENIERÍA DE ESPAÑA

En Madrid, a 25 de julio de 2013

De una parte, D. Rafael van Grieken Salvador, en su calidad de Director de la Agencia Nacional de Evaluación de la Calidad y Acreditación (en adelante ANECA), fundación constituida en escritura pública otorgada ante el notario de Madrid, D. Inocencio Figaredo de la Mora el día 31 de julio de 2002 bajo el número 2981 de su protocolo, con domicilio en Madrid, calle Orense nº 11-8º, C.I.F. G-83381822, inscrita en el Registro de Fundaciones del Ministerio de Educación con el núm. 631. Interviene en su condición de Director de la Fundación, haciendo uso del poder concedido a su favor en Escritura Pública autorizada el día 3 de julio de 2012, por el notario de Madrid Don José María García Pedraza, con el número 698 de protocolo.

Y de otra parte, D. Manuel Moreu Munaliz, en su calidad de Presidente del Instituto de la Ingeniería de España (en adelante IIE) conforme nombramiento del Consejo de Representantes en fecha 29 de marzo de 2012, con domicilio en Madrid, calle General Arrando nº 38, C.I.F. G-28316867 y actuando con poderes suficientes que le confieren sus Estatutos.

Ambas partes se reconocen, en la representación que ostentan, capacidad suficiente para formalizar el presente convenio, indicado en el encabezamiento, y de común acuerdo

EXPONEN

1º.- Que ANECA es una fundación estatal creada por acuerdo del Consejo de Ministros el 19 de julio de 2002, en cumplimiento de lo establecido en la

European
Accreditation
of Engineering
Programmes
EUR-ACE®

*Last July 25th, **ANECA** and
the **Institute of
Engineering of Spain (IIE)**
signed an **AGREEMENT FOR
COLLABORATION** in
developing the **EUR-ACE**
quality label in Spain.*

The starting point



*This agreement puts **together** the National
Accreditation Agency and the main
representative body of the **engineering
profession** in Spain.*





Why this agreement



IIE is a member of ENAEE, but has not develop a full model for the implementation of the EUR-ACE accreditation



ANECA accredits programmes in all disciplines, including engineering, but hitherto is not able to provide the EUR-ACE seal to those accredited programmes asking for it.



Additional Motivations:

1. Both organisations look for **quality improvement** as a core part of their mission and activities.
2. Both organisations would like to provide to Spanish universities an organized and effective way to **obtain the EUR-ACE accreditation** for their engineering programmes at Bachelor and Master level.





Some **hints** about both organizations...



AGENCIA NACIONAL DE EVALUACIÓN
DE LA CALIDAD Y ACREDITACIÓN



INSTITUTO DE LA INGENIERÍA DE ESPAÑA

- Founded on 1905
- **Private** and totally **independent** not-for-profit Association
- Is the Spanish legal **federation** of the following official long-cycle **engineering associations**:
 1. Aeronautical Engineers Association of Spain;
 2. National Agronomist Engineers Association;
 3. Spanish Civil Engineers Association;
 4. Federation of Industrial Engineer Associations of Spain;
 5. National Association of I.C.A.I. Engineers;
 6. National Mining Engineers Association;
 7. Forestry Engineers Association;
 8. Naval and Oceanic Engineers Association of Spain;
 9. Spanish Association of Telecommunications Engineers.



INSTITUTO DE LA INGENIERÍA DE ESPAÑA

- Brings together more than **100,000** long cycle engineers from the various specialities
- Member of
 - ✓ World Federation of Engineering Organizations (**WFEO**),
 - ✓ European Federation of National Engineering Associations (**FEANI**),
 - ✓ Pan-American Union of Engineering Associations (**UPADI**)
 - ✓ European Council of Associations of long cycle Engineers (**CLAIU-EU**),
 - ✓ European Network for Accreditation of Engineering Education (**ENAE**).



- Public Foundation created in 2002 by the Ministry of Education
- **Accreditation agency** with authority throughout the Spanish **national** territory.
- Main responsibility:
 - ✓ Evaluation of individual academic staff (civil servants and non-civil servants),
 - ✓ Evaluation and accreditation of study programmes **in all disciplinary/professional areas** – not only engineering programmes – **at all levels** (Bachelor, Master and PhD).



- ANECA **fulfils the Standards and Guidelines** for Quality Assurance in the **EHEA**
 - Externally reviewed by ENQA in 2007 and 2012
- ANECA belongs to the European Quality Assurance **Register** for Higher Education.
- Member of **all International networks** for quality assurance, being present in most of their Boards of Directors:
 - European Association for Quality Assurance in Higher Education (**ENQA**),
 - European Consortium for Accreditation, (**ECA**),
 - Ibero-American Network for Accreditation of the Quality of Higher Education (**RIACES**)
 - International Network for Quality Assurance Agencies in Higher Education (**INQAAHE**).





Specific aspects :

1. Completion of an engineering degree confers **full professional status** to the degree holder.
2. Hence, engineering education in Spain is also shaped through the dialogue with **professional bodies**.
3. Engineering studies are a high **prestige branch** in Spanish Higher Education system; it attracts some of the best graduates of secondary education.



Specific aspects :

Before Bologna

2 types of engineering degrees

- ***Ingeniero Técnico***
 - ✓ 3 years of studies at Technical Engineering Schools (Short cycle)
- ***Ingeniero Superior***
 - ✓ 5 years of study provided at Higher Engineering Schools (Long cycle)

After Bologna

2 levels of engineering degrees

- ***Bachelor-level degrees***
 - ✓ Give access to the "Ingeniero Técnico" profession
- ***Master-level degrees***
 - ✓ Allow the performance as "Ingeniero Superior".



The Spanish accreditation system



■ **In Spain:**

Accreditation of
programmes



Accreditation of
institutions





■ Programme accreditation in Spain is organized as a 3-step process

STEP 1

Ex-ante accreditation



STEP 2

Follow-up procedure



STEP 3

Ex-post accreditation



STAGE 1

Ex-ante accreditation



called "Verification"

- To verify that the **design** of the programme includes the criteria established by the Ministry.
- **Compulsory** before a new programme may be started





STAGE 2

Follow-up procedure



called "Monitoring"

- To check, by non-intrusive means, that the institution is **implementing** the programme according to the design.





STAGE 3

Ex-post accreditation



*called
"Re-accreditation"*

- Certifies that the programme has been **accomplished according to the already approved conditions** in the ex-ante accreditation process.
- Corresponds actually to the **accreditation concept** in other national systems.



Accreditation in Spain



ANECA has assessed through the **verification process** over 5,000 study programmes

- 2,110 Bachelor,
- 2,860 Master
- 400 Doctoral programmes.

The first formal **accreditation** decisions will be made in 2014





The planned
procedure for
EURACE label in
Spain

Once an engineering programme asks for accreditation, **two options** will be provided:

- a) Ask **for compulsory national accreditation**, or
- b) submit the application for (compulsory) national accreditation **together with the EURACE label request.**



If this is the option, then...

The two procedures (national accreditation and ENAEE accreditation) will be **developed in the same assessment process**, although **several differences** will be met regarding

- a) the specific procedure
- b) the assessment committees that will consider the programme and its composition,
- c) the extension of the site visit,
- d) the focus of the assessment.

EURACE label in Spain



**OBTAINS NATIONAL
ACCREDITATION +**



EUR-ACE Committee



**OBTAINS (OR NOT)
NATIONAL
ACCREDITATION**

Does not ask for
the label



If national accreditation is awarded
and **ASKS** for the label



**National Accreditation
Committees**



**Assessment
Panel**

4

If the degree does **NOT** ask for the label



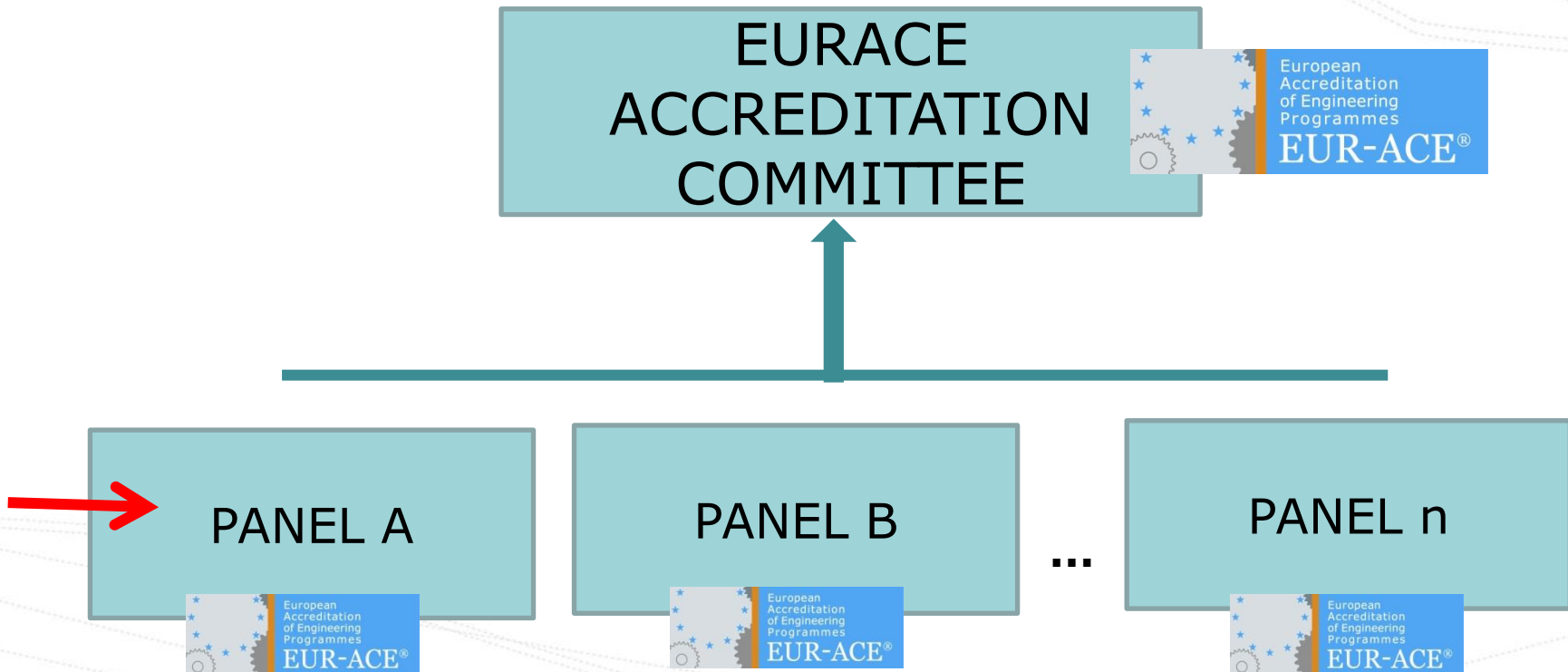
**Assessment
Panel**

4 + 1

If the degree **ASKS** for the label



ASSESSMENT COMMITTEES



COMPOSITION

PANELS

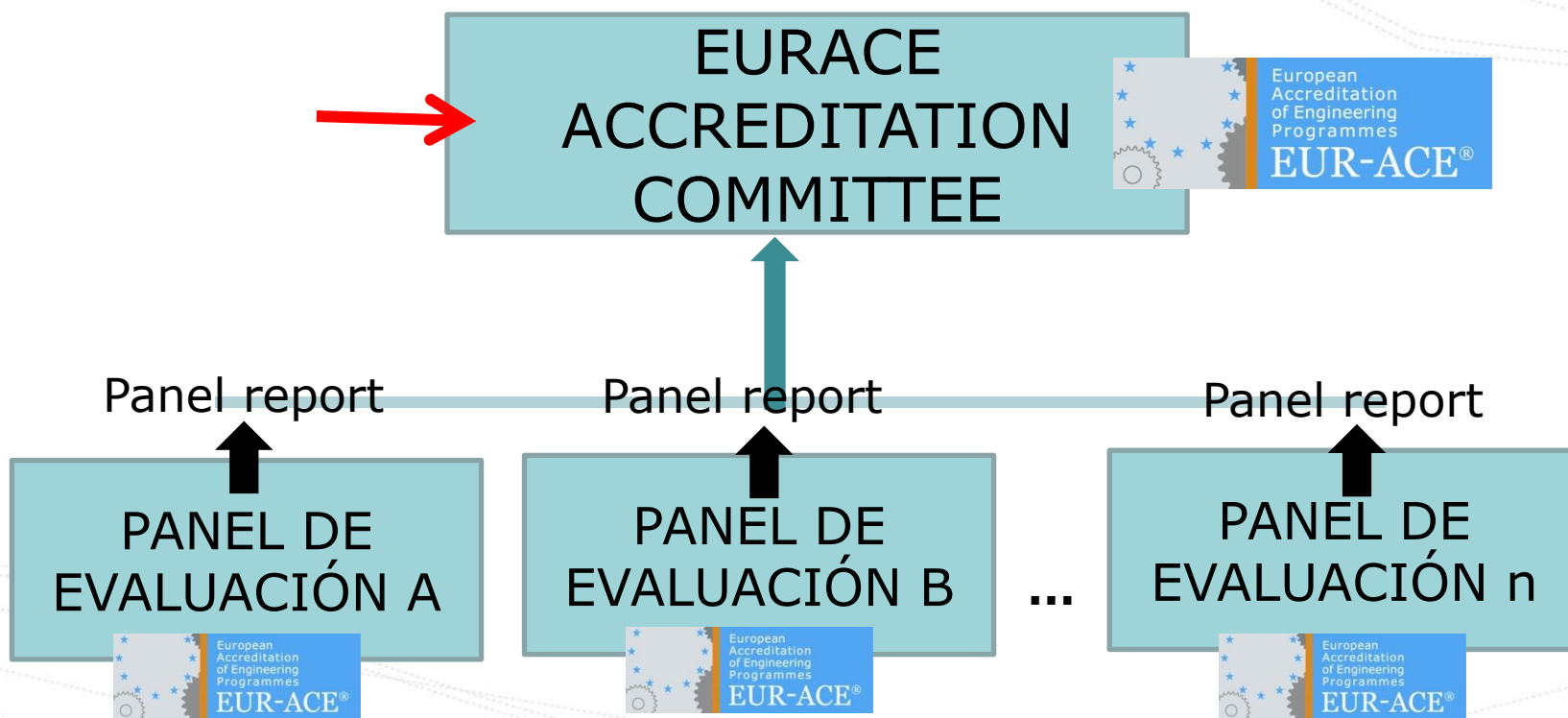


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(not compulsory for the
programmes asking for
national accreditation only)

- an academic with experience in ANECA programmes, who will act as **president** of the panel,
- another **academic** from the specific field of the programme being assessed,
- a **professional** from the specific field of the programme being assessed,
- a **student** with expertise in assessment procedures,
- a **secretary** who will be a person from ANECA staff.

ASSESSMENT COMMITTEES



COMPOSITION

ACCREDITATION COMMITTEE



INSTITUTO DE LA INGENIERÍA DE ESPAÑA

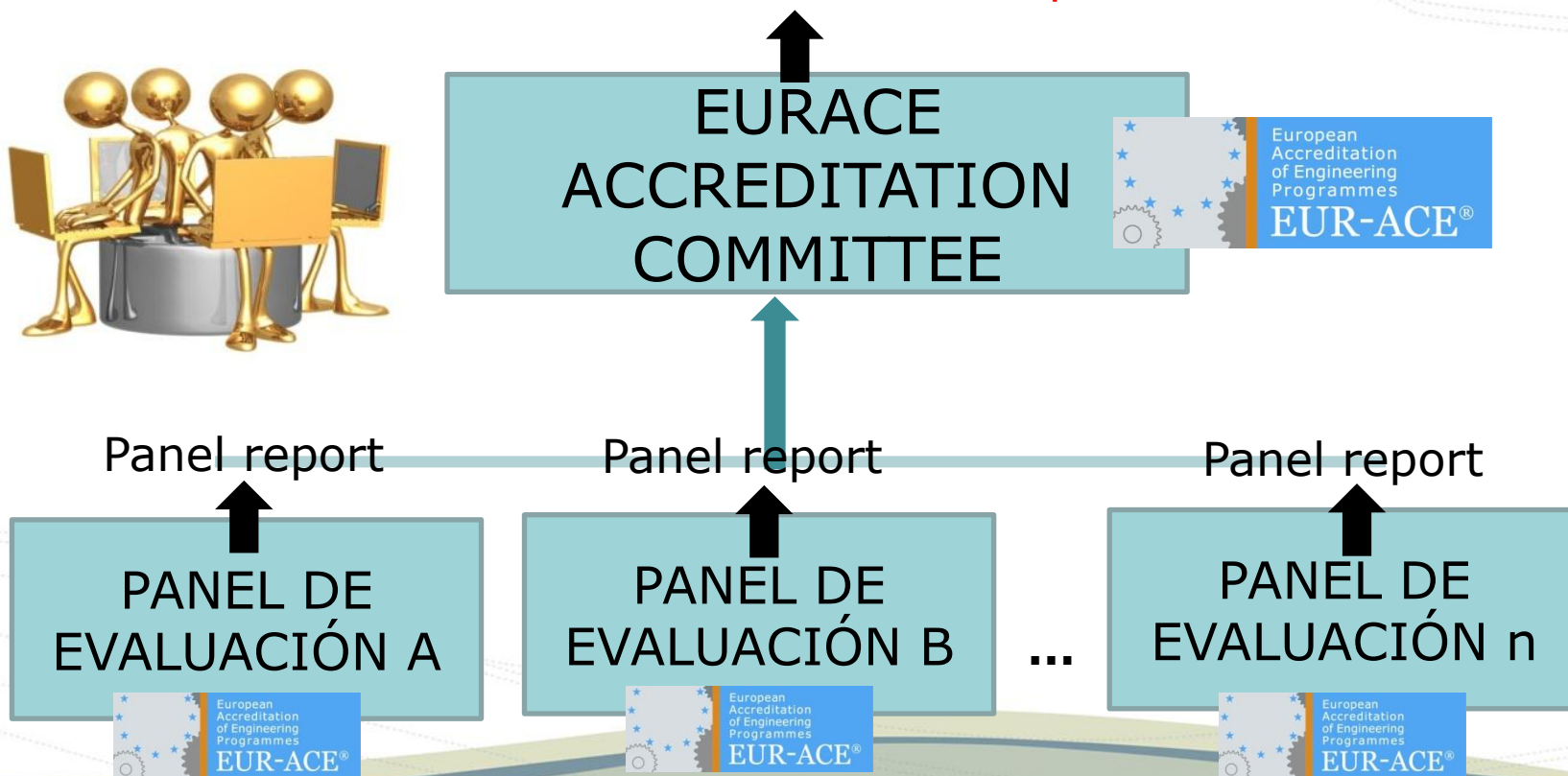
(In accordance with
ANECA-IIE agreement)

- **50%** of **professionals**; one of these will act as Chair of the Commission.
- **50%** of **academics** nominated by ANECA.
- Up to **20%** of appointed members could be **international experts** from outside Spain – ideally members of other ENAEE authorised agencies.
- **Secretary**: ANECA staff.

16 experts max.

ASSESSMENT COMMITTEES

EURACE Accreditation report



EXTENSION



SITE VISITS

National accreditation

EURACE accreditation

2 ¹/₂ days – 3 days

3 days - 3 ¹/₂ days

FOCUS



On ENAEE Learning Outcomes

EURACE accreditation

1. Knowledge and Understanding;
2. Engineering Analysis;
3. Engineering Design;
4. Investigations;
5. Engineering Practice;
6. Transferable Skills

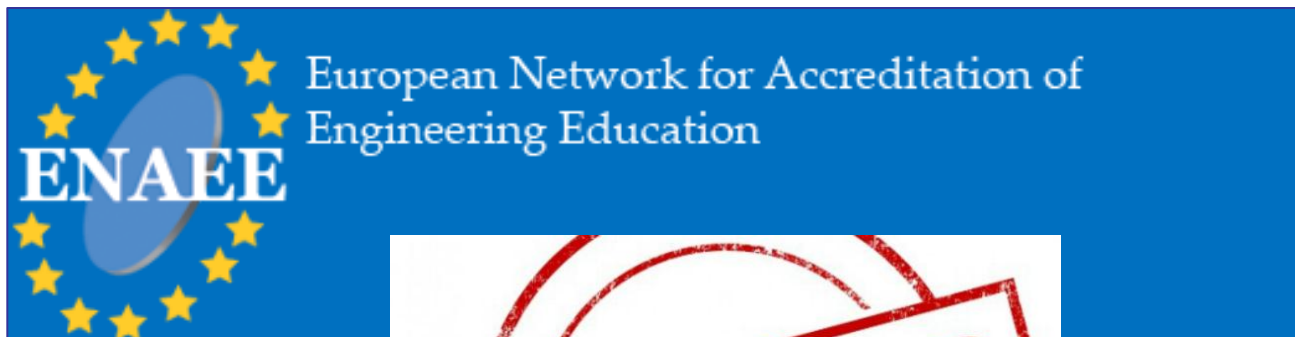


An alternative...

(not related to
national
accreditation)
Latin America?



*But...before...we need to be **authorized** as an agency able to award the EUR-ACE label*

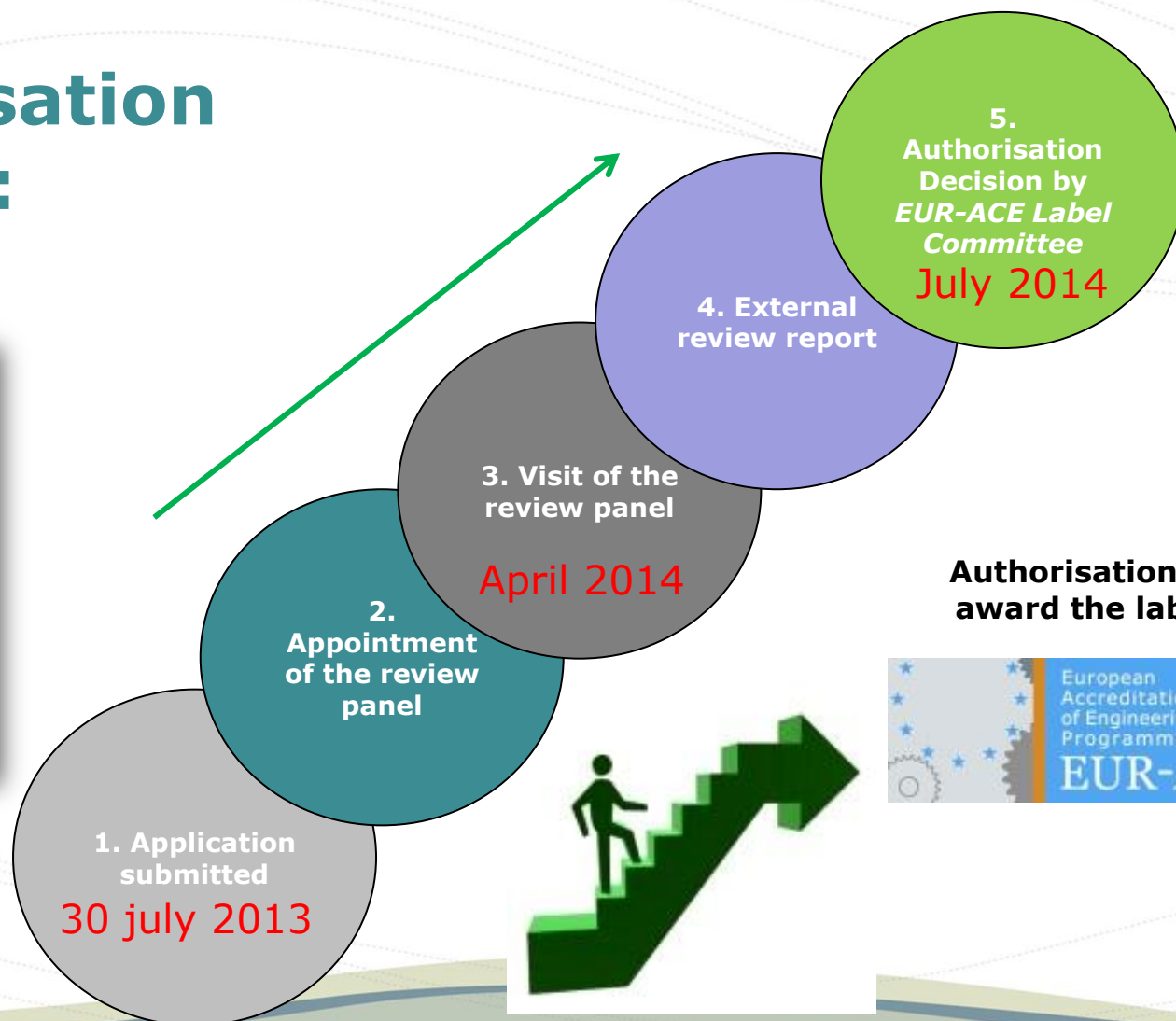


JULY 2013

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

*ANECA, together with
IIE, **submit the
application** to
ENAE with the aim
of being authorized as
an agency able to
award the EUR-ACE
label*

Authorisation Process: (Estimation)



**Authorisation to
award the label**



Thanks for your attention

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