

How EU expertise can develop into worldwide market leadership: A Report from the fixing industry

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Chairman Construction Fixing Europe

Safe and reliable fastenings are vital for many constructions

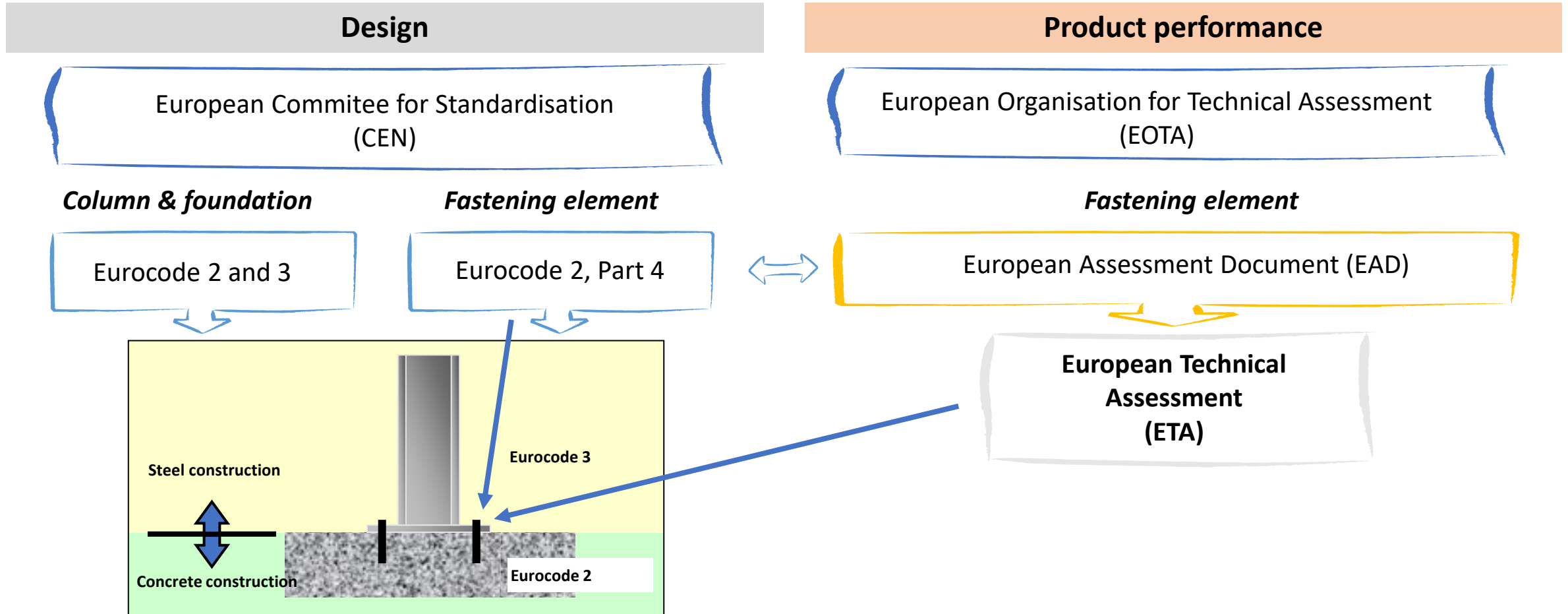


Failure of Fastenings may have dramatic consequences



Failure of a ceiling in an indoor swimming pool
(Uster, 1985)

Strong need to provide transparent rules to the fundamental balance of safety and economic solutions



The European industry is the uncontested WW leader in fastening technology

Product Qualification

- ETAG 001 → EAD
- New EADs
- New TR

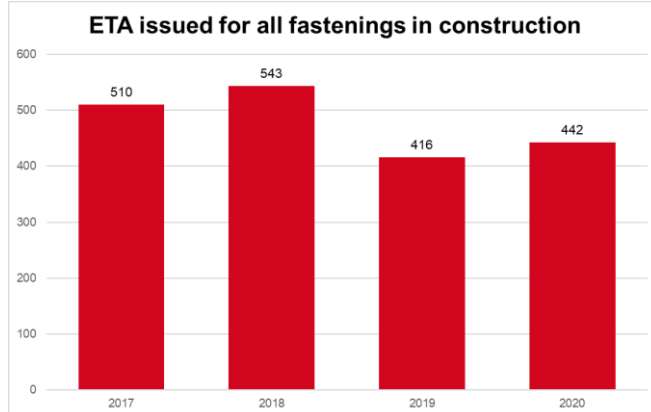


Design rules

- EN 1992-4



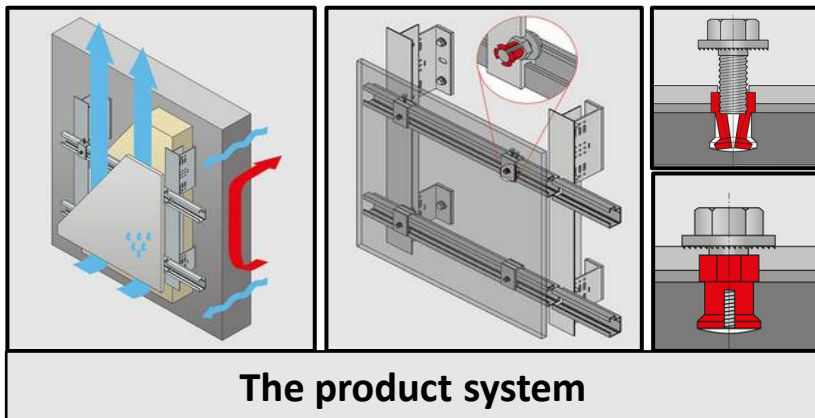
- Technical Basis created by > 40 PhD Thesis
- Major part financed by industry over more than 25 years of joint research



- More than 2000 ETAs issued for fastening products in 5 years time

Continuous innovation and investment in product qualification: The KEIL success story

- 2004 first ETA – CUAP / ETAG 034
- 2015 first ETA – EAD 330030-00-0601
- Holder of: 33 ETAs, 1 ICC – ESR
- More than 600 manufacturer of facade panel make use Keil undercut technology
 - Products with ETA sold in 82 countries worldwide
 - Family business, 3rd generation

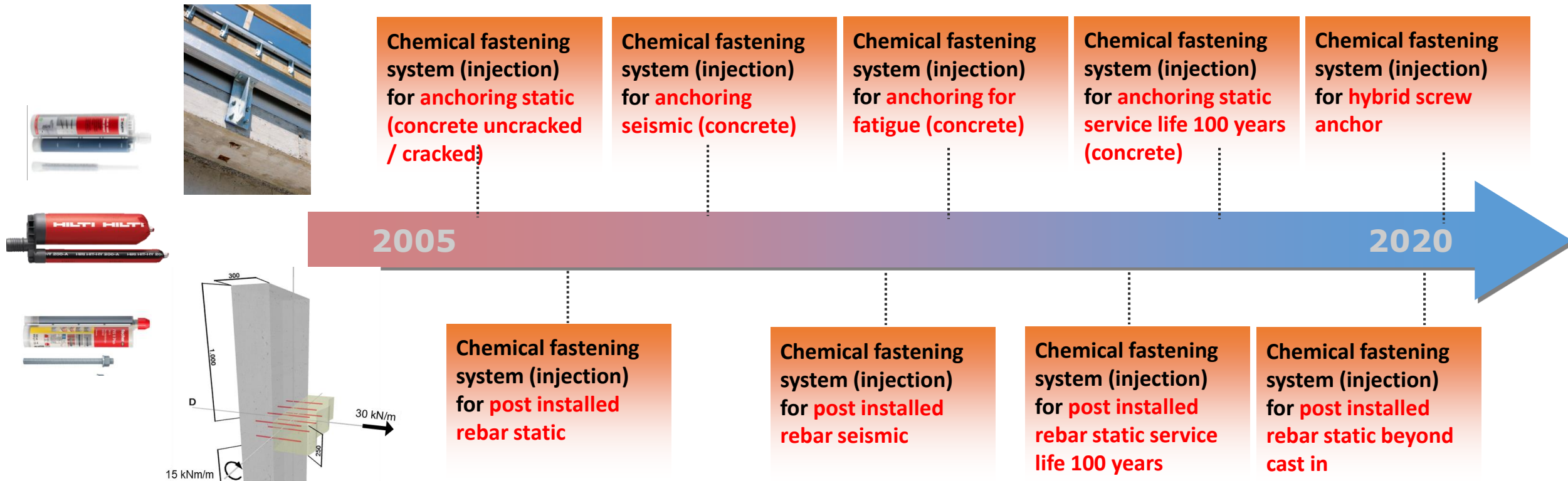


→ Ensure safe applications / drive productivity



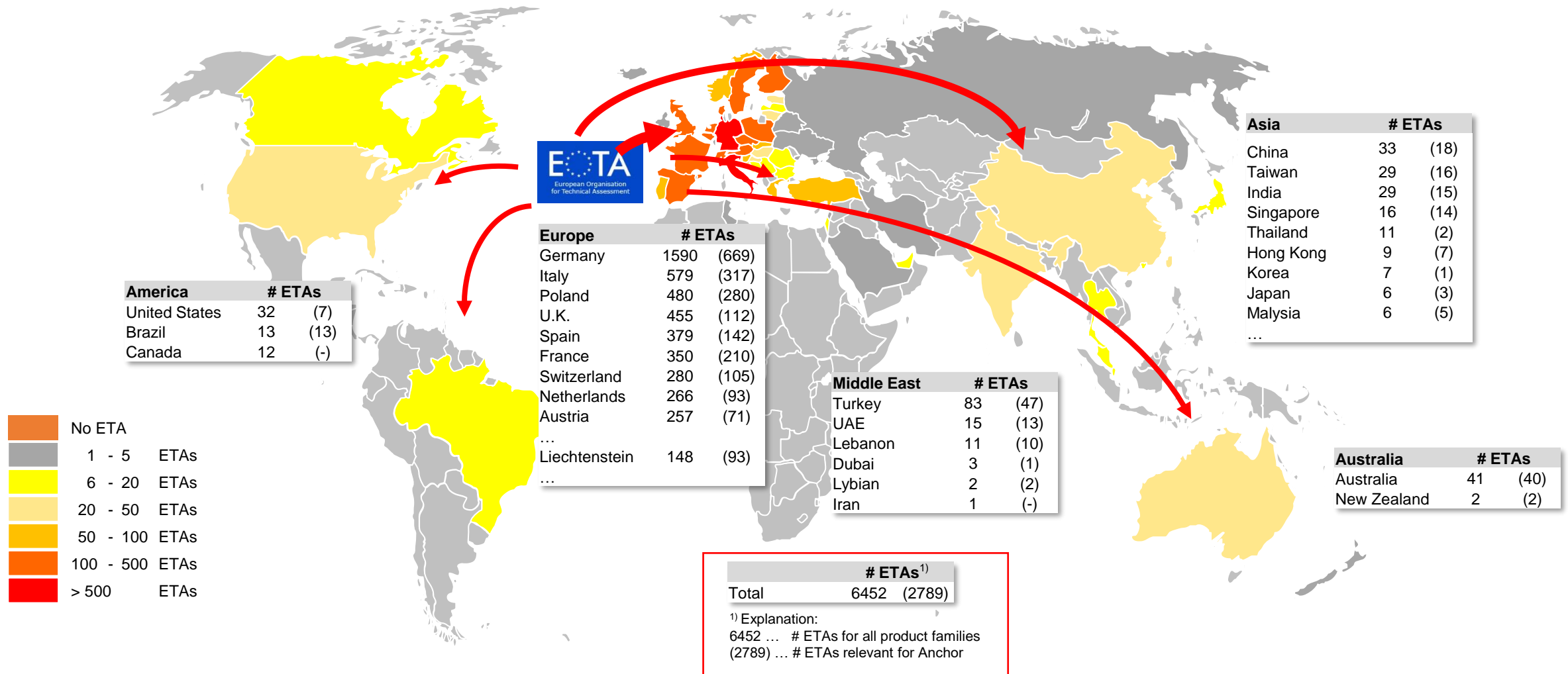
Key applications of undercut anchoring for facades

ETAs are about «products» AND «intended use» to provide safety in construction



The performance of chemical anchor products in concrete has doubled over 15 years time

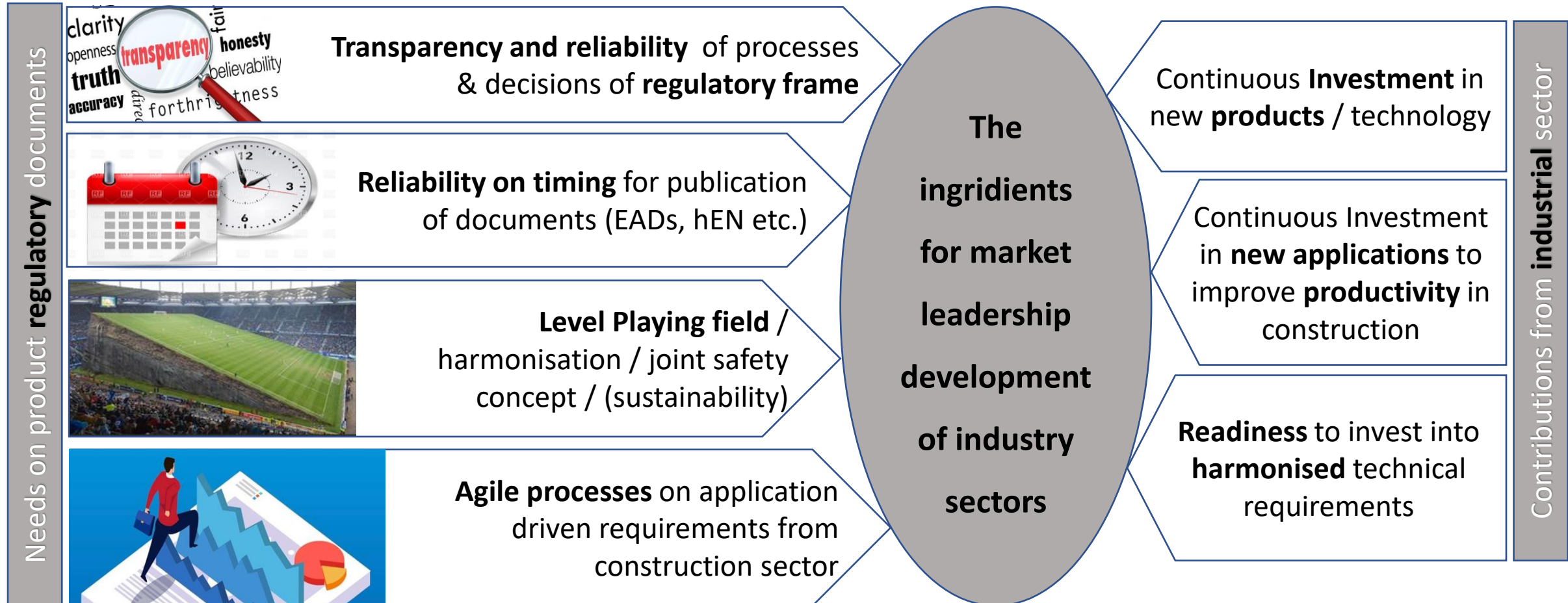
ETAs for fastenings are hold by manufacturers around the world



Major countries adopt EAD / ETA / EC2 fastening regulations



The way to technological leadership is driven by few essential parameters



Standardisation (hEN) and Assessment(ETA) – two options for product- and application performance qualification.

	«hEN» Standardization route	«ETA» Assessment route
Initiation / Mandate	Mandate is provided by the European Commission	Manufacturer can apply for a CE mark and performance assessment of a product in a respective application.
Time to develop final document	From 3 to 7 years	For new EADs fro 12 bis 15 months
Impact & Implementation	mandatory CE marking	Voluntary CE marking of respective product in combination with the intended use.

Both routes are needed in Europe for harmonisation of construction product qualification (safety, productivity, digitisation, sustainability)

What is needed from the future legal framework CPR ?

Needs on product regulatory documents

Key driver for hEN / EAD development should be: Ensure **safety** in construction, support **productivity** gain in all construction process.



Strong support for technical **harmonisation** in construction.



Do not eliminate respected and successful existing documents / allow **continuity from past** technical achievements and successes.



Improve **cooperation / communication** of EU administration for the benefit of generating solutions.



Establish real reliable, **predictable** and transparent **processes** for harmonized technical specifications (timing, decisions).



Stimulate **innovation**



Allow **agile** processes and documents to undergo changes as technology progresses (modulare concept EAD, **change management** concepts)



Manufacturer



National associations
in France, Germany
and UK



Thank you very much for your attention !