

A stylized graphic of a globe is positioned on the left side of the slide. It consists of several overlapping, light blue curved lines that represent the latitude and longitude of a globe, with a semi-circular arc on the left side.

Regulator' use of standards

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Regulators examined

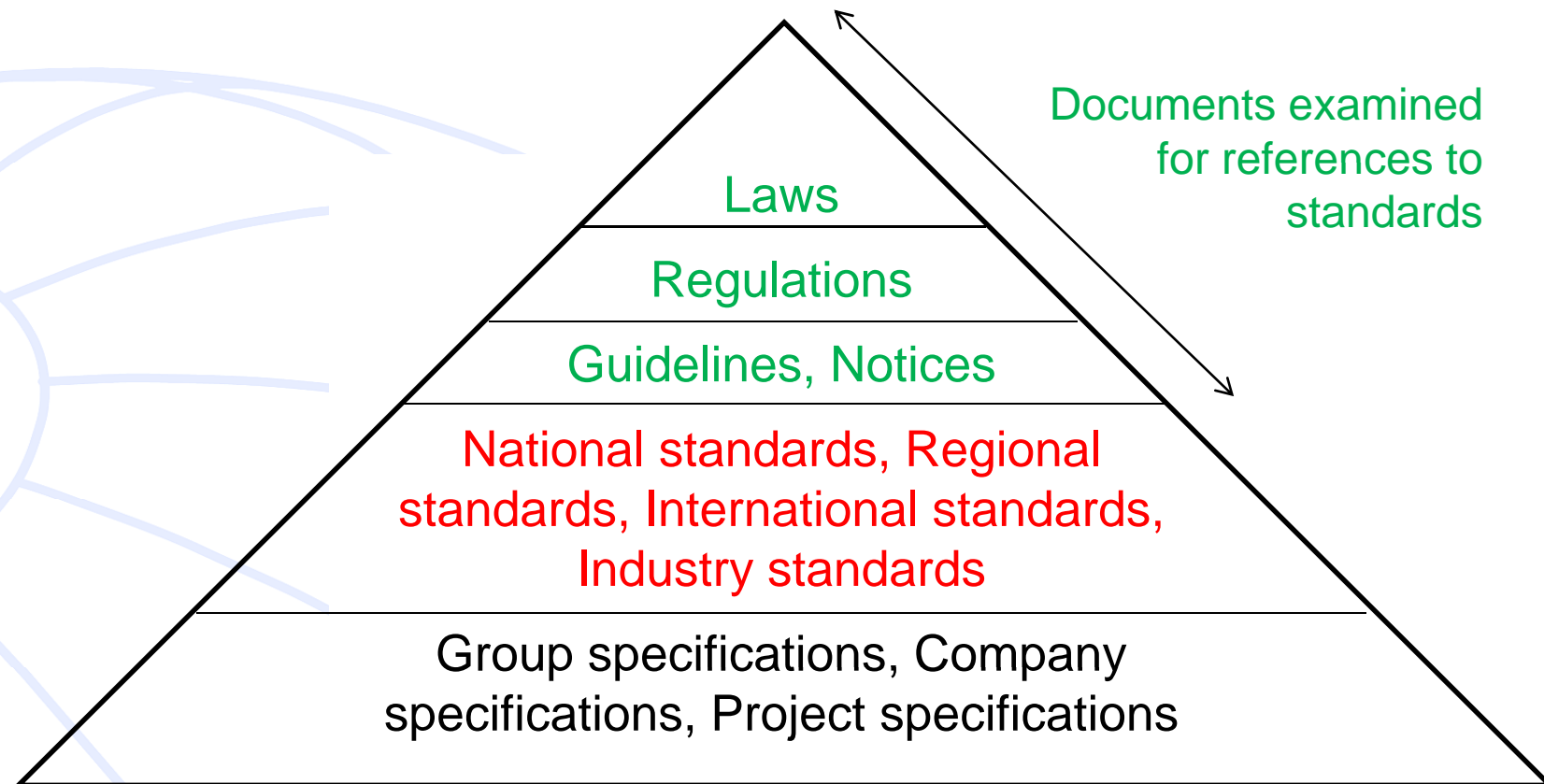
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Thirteen national regulators' examined with focus on the offshore petroleum industry.

Document hierarchy

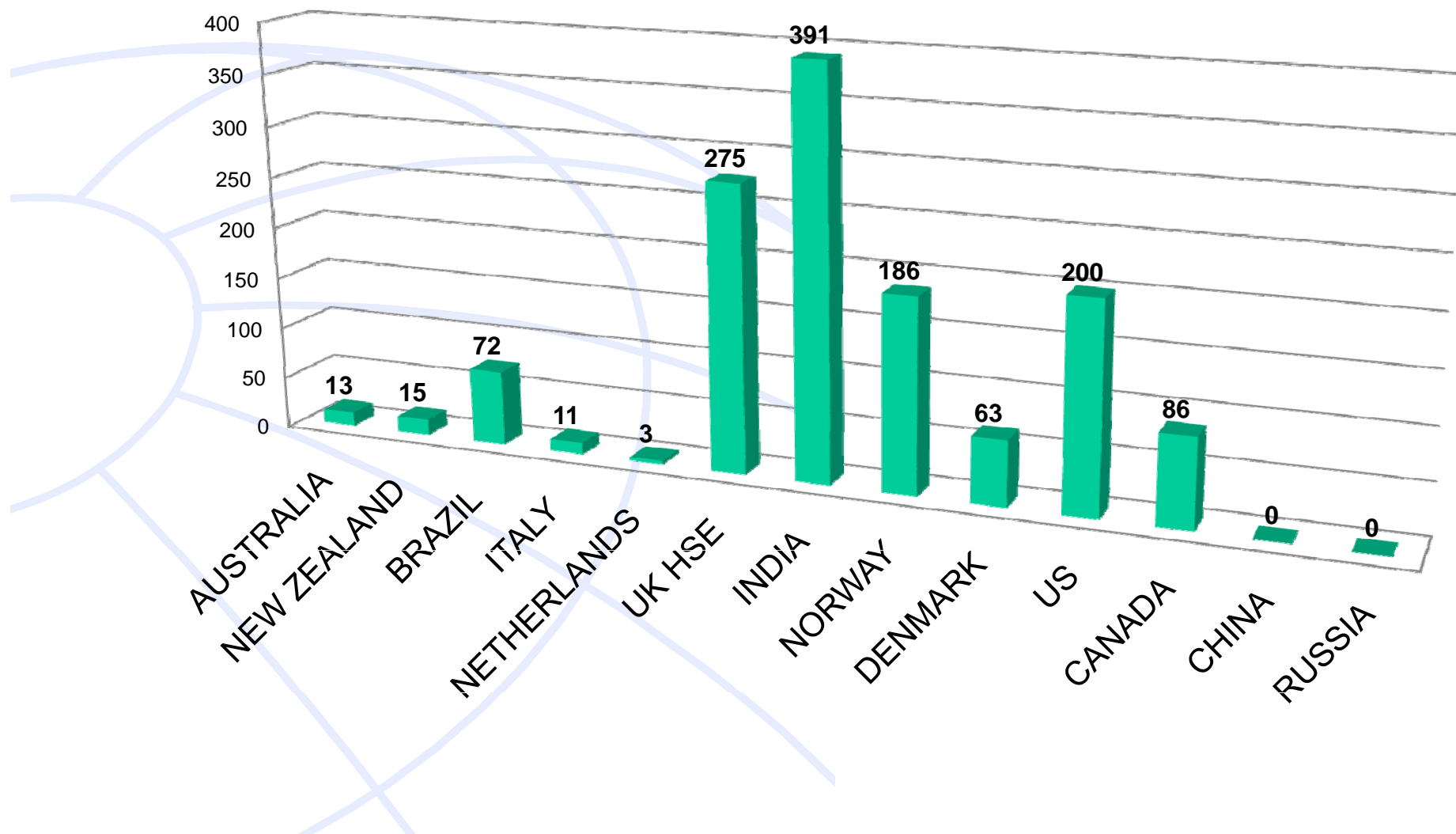
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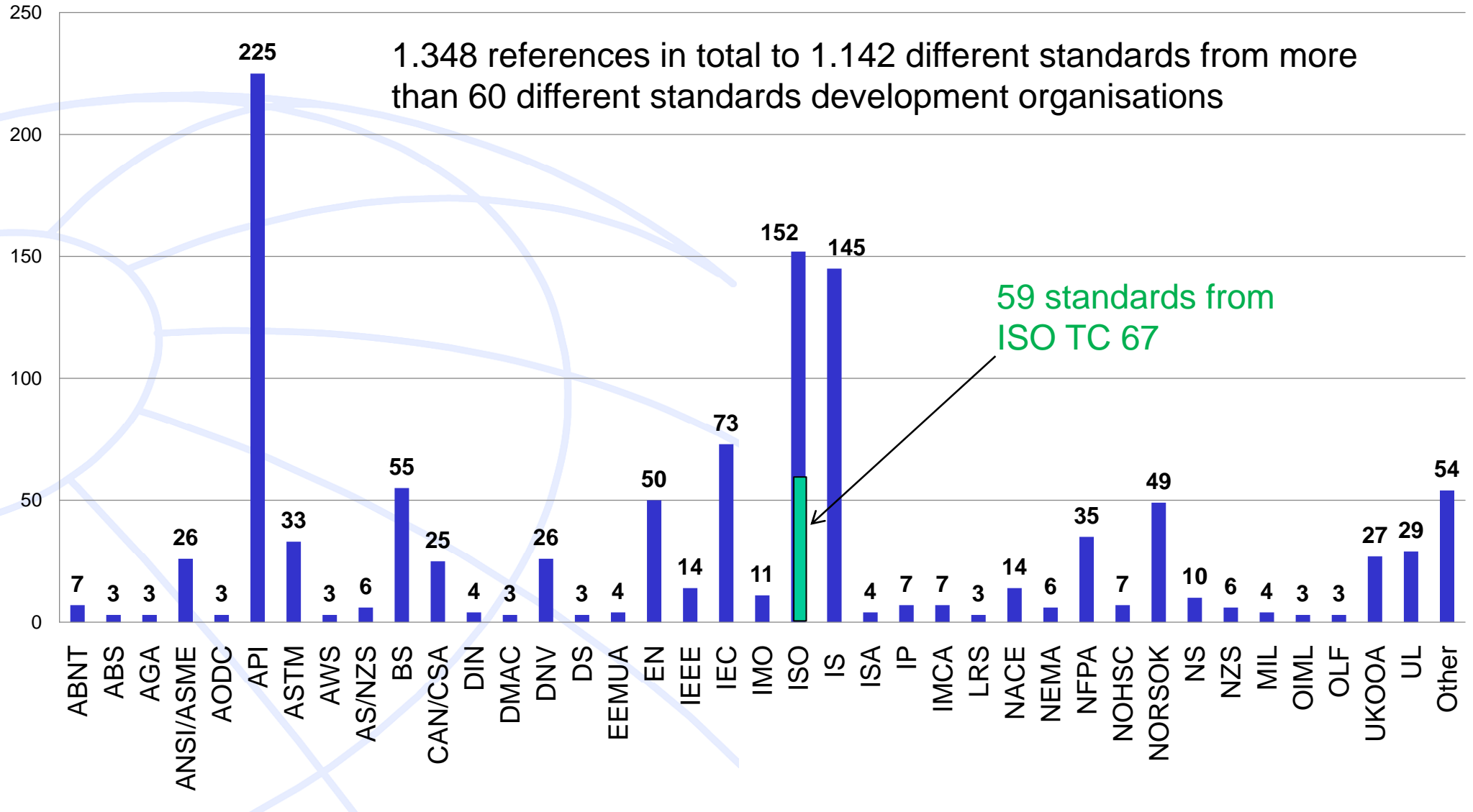
Number of standards referenced by regulators

referenced by

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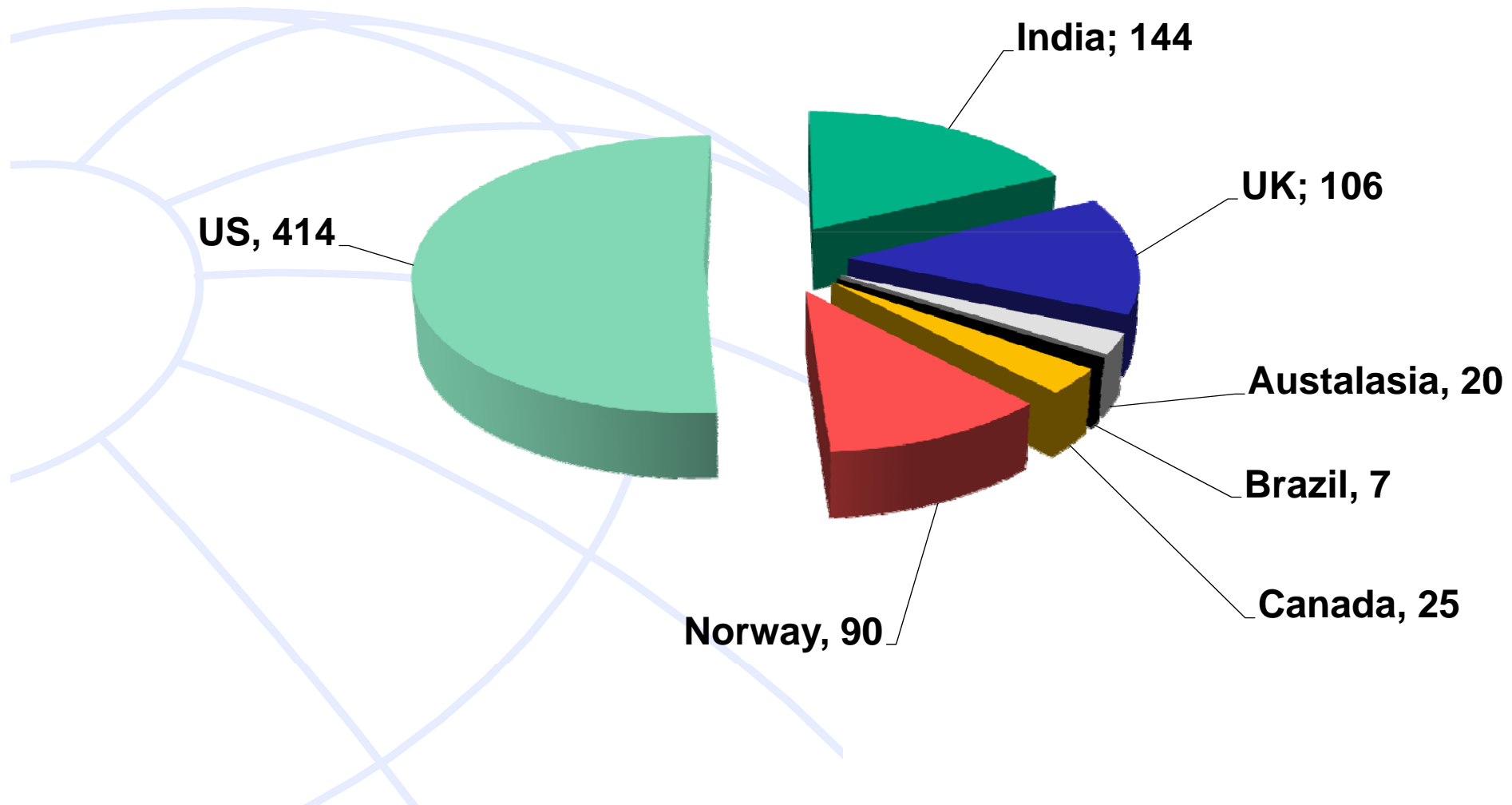
Standards referenced by regulators



Origin of standards referenced dominance

US

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Standards most frequently used

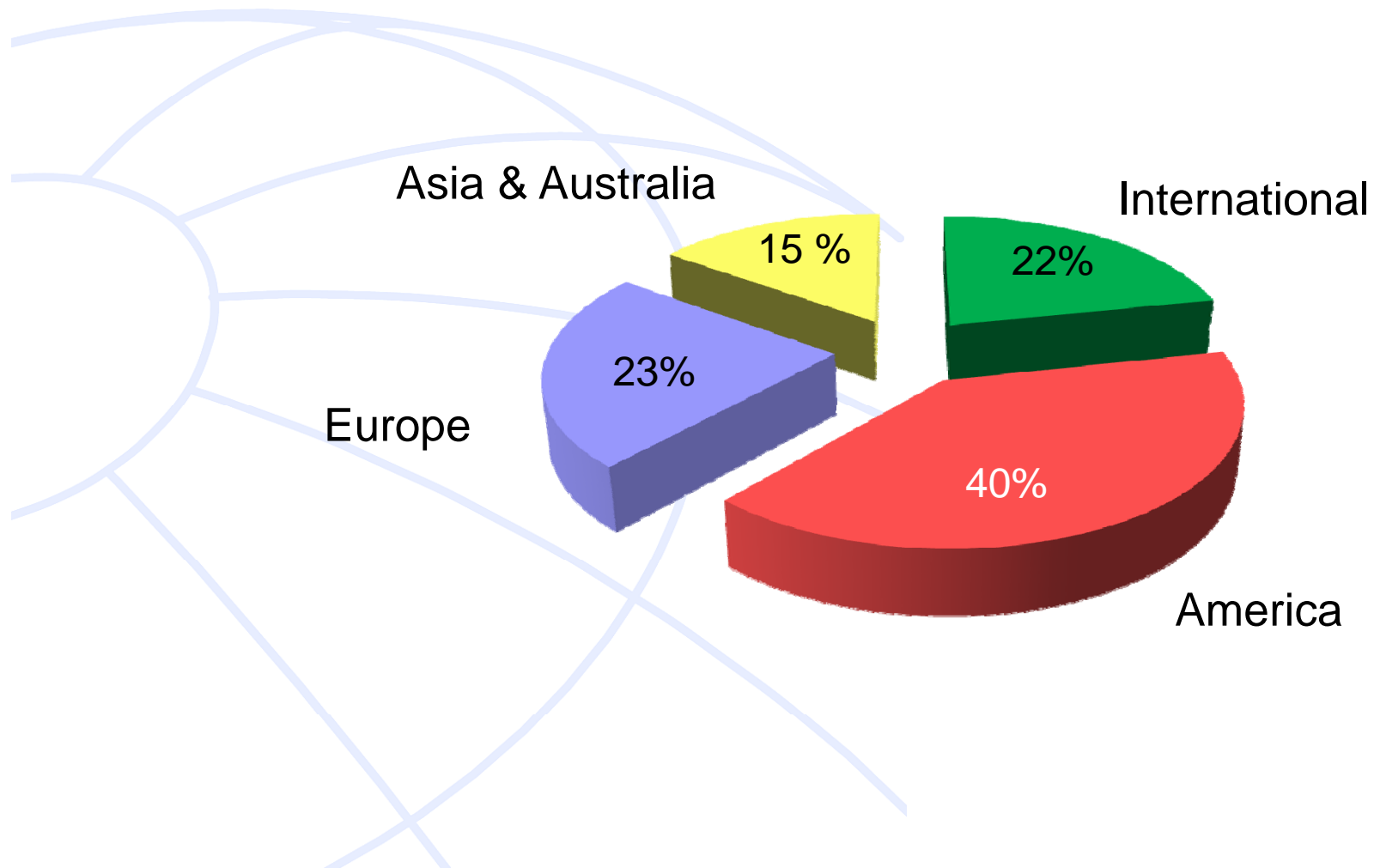


- 5. API Spec 6A Wellhead and Christmas Tree Equipment (ISO 10423)
IMO Mobile Offshore Drilling Units (MODU) Code
- 4. API RP 14B Design, Installation, Repair and Operation of Subsurface Safety Valve Systems (ISO 10417)
API Spec 17J Unbonded Flexible Pipe (ISO 13628-10)
IEC 60331-11 Fire resisting characteristics of electric cables
API RP 14C Analysis, Design, Installation, and Testing of Basic Surface Safety Systems for Offshore Production Platforms (ISO 10418)
API RP 521 Guide for Pressure-Relieving and Depressuring Systems (ISO 23251)
API Spec 14A Subsurface safety valves (ISO 10432)
NFPA 13 Installation of sprinkler systems
ANSI/ASME VIII-1 Pressure Vessels
NACE MR 01-75 Standard Material Requirements, Metals for Sulphide Stress Cracking and Stress Corrosion Cracking Resistance in Sour Oilfield Environments (ISO 15156)

Origin of referenced standards

American dominance

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Duplicating standards – Pipeline transportation systems

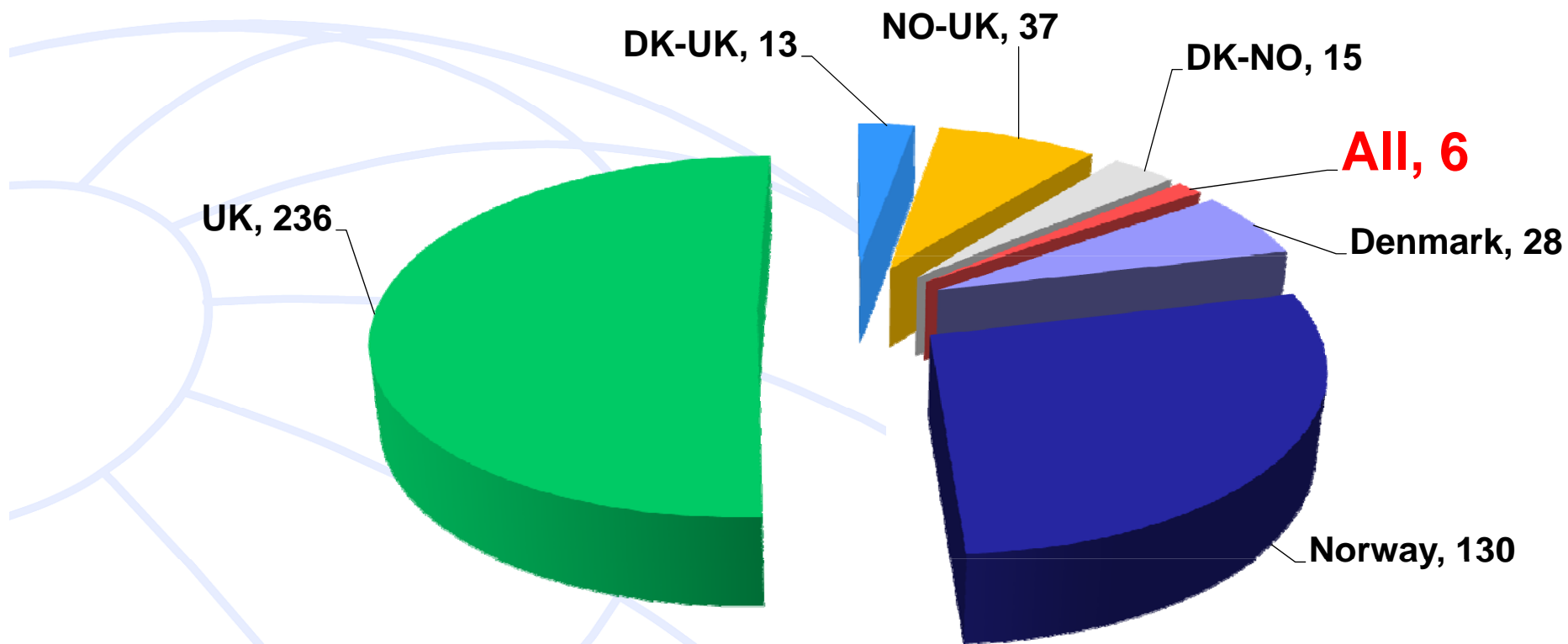


- ANSI/ASME B31.4 Liquid Transportation Systems for Hydrocarbons
- ANSI/ASME B31.8 Gas Transmission and Distribution Piping Systems
- API RP 1102 Liquid Petr. Pipelines Crossing Railroads and Highways
- API RP 1111 Offshore Hydrocarbon Pipelines
- CAN/CSA-Z184-92, Gas Pipeline Systems;
- CAN/CSA-Z187-M87 Offshore Pipelines (replaced by Z662-07)
- DNV OS-F101 Submarine Pipeline Systems
- EN 14161 Pipeline Transportation Systems (EN adoption of ISO 13623)
- **ISO 13623 PNGI – Pipeline transportation systems**
- NEN 3650 Requirements for pipeline systems
- NZS 5223 Code of Practice for HP Gas and Petroleum Liquids Pipelines
- PD 8010-2 Code of practice for pipelines: Subsea pipelines

Danish-Norwegian-UK references

Few common references

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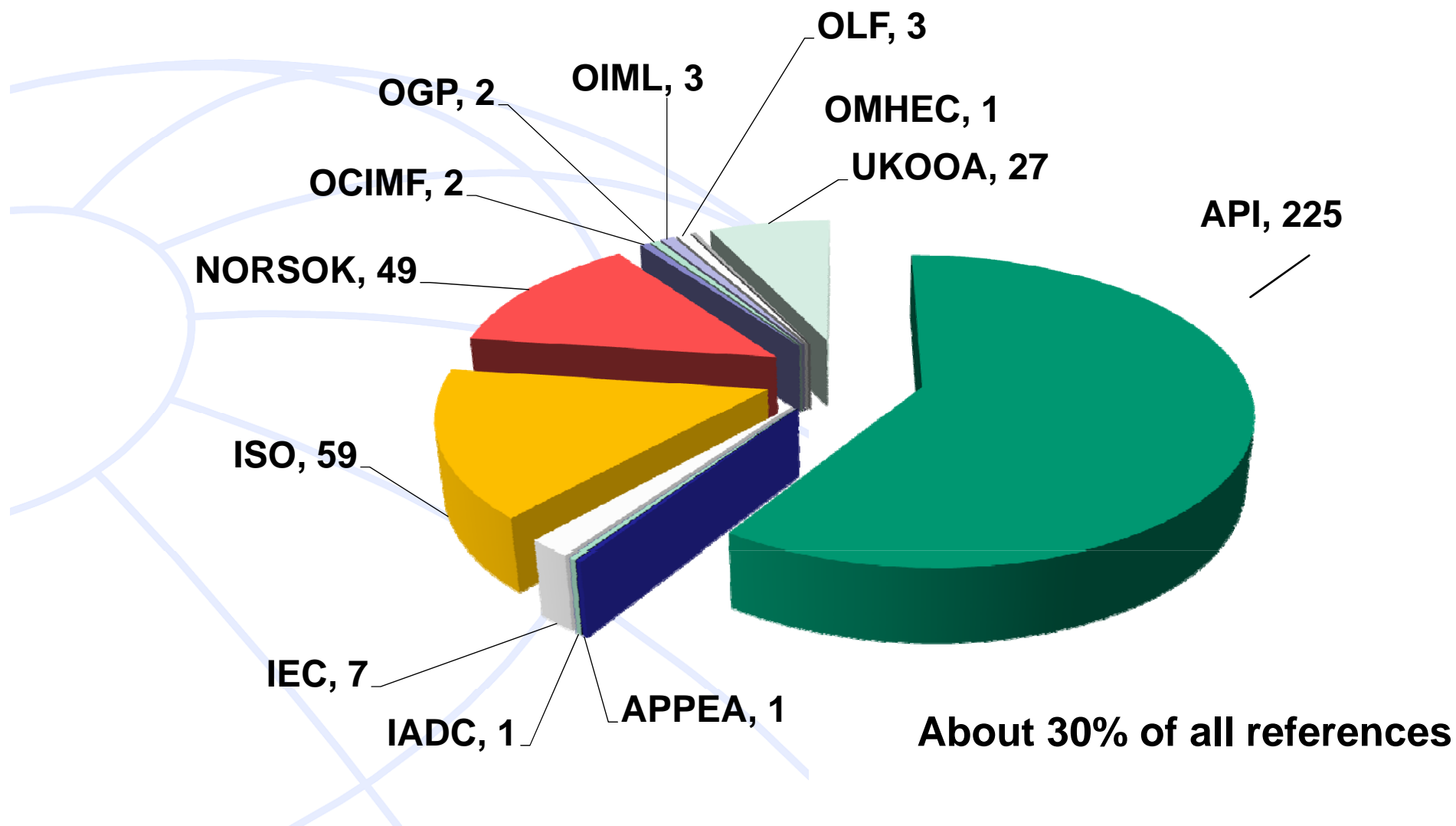


465 standard titles references in total

Standards referenced within the Gas industry responsibility

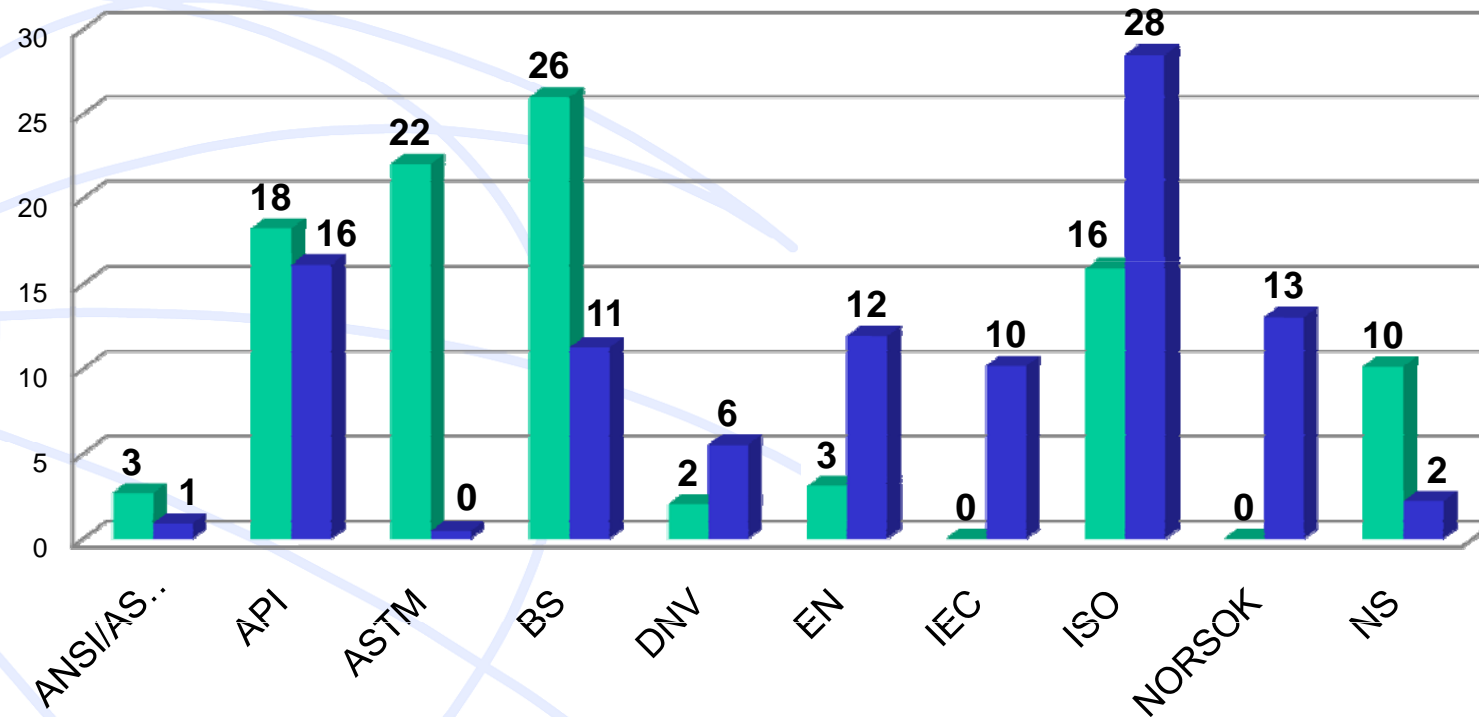
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Changes in references 1996-2009

■ Petrol96 ■ European regulators



Considering the European regulators only, the 2009 analysis compared with 1996 analysis shows an increase from 19 to 51% reference to international standards and a decrease from 39 to 14% reference to national standards.

Main findings

- 1.348 references in total.
- 1.142 of these are to different titles.
- Standards from more than 60 organisations.
- Only 13% referenced by two or more regulators.
- Industry 44%, national 35% and international standards referenced 21%.
- Most regulators use undated references to standards, Norway and UK to dated.
- Referenced standards appear to be voluntary in most of the regulatory regimes, i.e. alternative references may be used.

Conclusion

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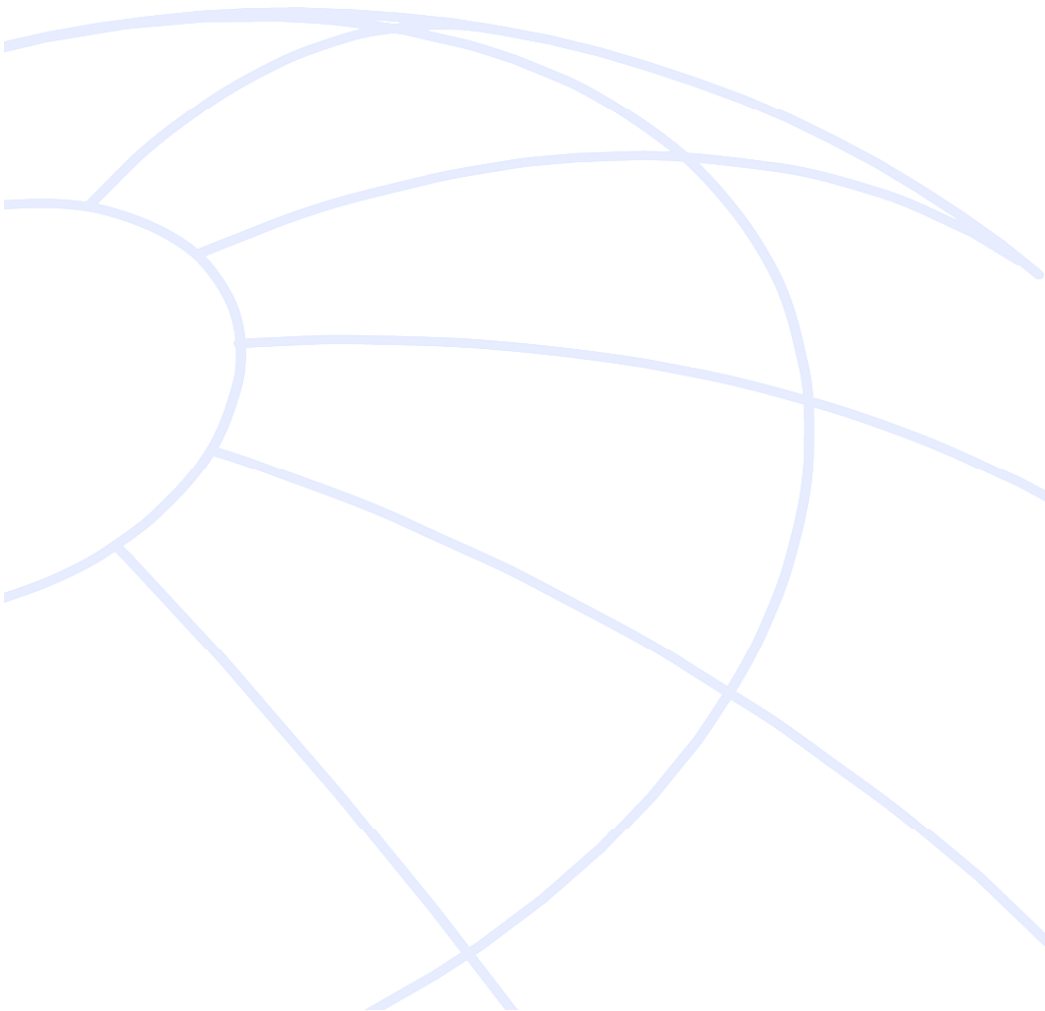
- **Regulators make good use of standards!**
- Little harmonization by regulators in their use of standards.
- Diversity of references provides additional work for global operators.
- A majority of reference standards are from US.
- Duplication of standards should be looked into.
- Regulators should be encouraged to make references to more globally relevant standards.
- References to international standards have increased compared to earlier analysis.

References

- OGP Report No. 426 (To be published soon)
- OGP Position paper on the development and use of international standards. OGP Report No. 381. May 2007.
<http://www.ogp.org.uk/pubs/381.pdf>
- ISO publication: Using and referencing ISO and IEC standards for technical regulations
http://www.standardsinfo.net/info/livelihood/link/fetch/2000/148478/6301438/docs/ISOandIEC_standards_for_technical_regulations_en.pdf
- ISO/IEC Inventory of studies on the economic and social benefits of standardization:
http://www.standardsinfo.net/info/livelihood/link/fetch/2000/148478/6301438/benefits/benefits_s1.html

Questions?

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