



Environmental Science

# The replacement of **BSI 377** has begun



It has been 25 years Since **BSI 377** was last updated. In this time technical innovations and our knowledge on how best to perform some tests have moved on.

The **CEN** and **ISO** identified an urgent need for a set of European testing methods when **BSEN 1997 – 1** and **BSEN 1997 – 2 (Eurocode 7)** were being drafted. Laboratory testing is an integral part of **Eurocode 7**, therefore laboratories and engineers need to comply with **EC7** requirements. The drive is also to be part of a Europe wide process of harmonising Standards to remove trade barriers.

## Where are we now

**BS EN ISO 17892 – 1 Water Content** and **BS EN ISO 17892 – 2 Bulk Density** were both published by BSI on 31st December 2014. On the same day **BS 1377 – 2:1990 Clause 3.2 Moisture Content** and **BS 1377 – 2:1990 Clause 7.1 to 7.4 Density** were withdrawn.

## What is replacing **BSI 377**

**BSEN ISO 17892** will consist of an initial 12 geotechnical laboratory test methods.

- Part 1 – Water Content
- Part 2 – Bulk Density
- Part 3 – Particle Density
- Part 4 – Particle Size Distribution
- Part 5 – Incremental Oedometer
- Part 6 – Fall – Cone Test
- Part 7 – UCS Test
- Part 8 – UU “Quick” Triaxial Test
- Part 9 – Consolidated Triaxial tests in Compression
- Part 10 – Shear Box and Ring Shear Test
- Part 11 – Permeability Test
- Part 12 – Plastic and Liquid Limit Test





## So what stage are we at

**BSEN ISO 17892 – 3 Particle Density** is expected to be published around the end of 2015. It will supersede **BSI377 Part 2: 1990 Clauses 8.3 and 8.4**

**BSEN ISO 17892 – 4 Particle Size Distribution** is expected to be published around March 2016. It will supersede **BSI377 Part 2: 1990 Clauses 9.1 to 9.5**

**BSEN ISO 17892 – 5 Incremental Oedometer** is expected to be published around the middle of 2016. It will supersede **BSI377 Part 5: 1990 Clauses 3.1 to 3.7**

**BSEN ISO 17892 – 6 Fall Cone.** There is no **Fall Cone** in **BSI377**

**BSEN ISO 17892 – 7 UCS Test**

**BSEN ISO 17892 – 8 UU Triaxial Test**

**BSEN ISO 17892 – 9 CD/CU Triaxial Test**

**BSEN ISO 17892 – 12 Plasticity Test**

The above 4 are expected to be published by early 2017. They will supersede parts of **BSI377 Part 2** large parts of **BSI377 Part 7** and all of **BSI377 Part 8**

**BSEN ISO 17892 – 10 Shear Box and Ring Shear Test**

**BSEN ISO 17892 – 11 Permeability Test**

The above 2 are expected to be published by the end of 2017. They will supersede large parts of **BSI377 Part 5**, **BSI377 Part 6** and **BSI377 Part 7**



## Where does this leave you?

At the moment there are only a small selection of laboratories who are accredited to the **BSEN ISO 17892** tests? Until all the changes are implemented engineers have a choice of scheduling to **BSI377** or to **BSEN ISO 17892**.

**i2 Analytical** is moving towards integration to these new standards and will inform clients as and when these have been implemented to our accreditation status

These changes affect companies within the geotechnical industry and **i2** are here to assist you in this journey.



For more information please contact:-

Terry Stafford (Geotechnical Manager) i2 Geotechnical

✉ [t.stafford@i2analytical.com](mailto:t.stafford@i2analytical.com)

☎ 07741 312010

☎ 01923 225404 [www.i2analytical.com](http://www.i2analytical.com)

📍 7 Woodshots Meadow, Croxley Business Park, Watford. WD18 8YS



Environmental Science