

Question	Answer
In SPT mostly people used the drilling rod, as in standard Rod specification mentioned. but in UAE the federal accreditation recommended the solid rod.. please specify drilling rod we can used in SPT.	This is not something that Eurocode 7 covers. This is a matter for the geotechnical testing standard for the SPT
What does NCCI stand for?	Non contradictory complementary information
If you use a higher level of technical delivery (say red) for a lower consequence class, can you apply lower factors of safety?	The partial factors now include the consequence factors. So their values go up or down depending on which CC is assigned to the structure
If you are very confident that your parameters are reliable (e.g. due to lots of data or experience on a site), how will this work with confidence factors, irrespective of the importance of the structure being built?	The confidence factors take account of the importance of the structure - not the confidence of your ground parameters. However, confidence in your ground parameters will be reflected in the characteristic value - the more data you have and the more consistent it is, the higher the characteristic value will be
Consequence classes - is there an intention to publish recommendations for elements of infrastructure based on risk. I understand the difference between a stadium grandstand and a farm yard barn, but my day job relates to the difference between the West coast Mail Line and a quarry ballast siding. Are the users going to be left to define risks	No plans AFAIK. Maybe some papers will come out giving general advice but I'm not expecting anything from national or European authorities
Anticipated scope and timing of national Annexes?	We hope to have them ready when EN 1997-1 and -2 are published, so April-August 2024
Are the National Annexes to be abandoned?	No. We will be publishing NAs for the new codes hopefully at the same time they are made publicly available
Will there be an opportunity to comment on the draft versions of EN1997-1 and 2? Despite doing away with the Design Approaches, presumably there are still National Annexes with Nationally Determined Parameters?	No. You have missed this. But Part 3 will be available again. Note that you can download FprEN versions now from the AGS website, so you can look at the current drafts.
With the Ground Model definition, is there any alignment with IAEG C25 Guidelines for the development and application of engineering geological models on projects?	The IAEG guidelines were consulted when we first considered adding the Ground Model into Eurocode 7. However, we couldn't adopt the models given in the guidelines since they didn't cover both geological and geotechnical aspects in the way we needed
Why there is no limits suggested for total settlement?	Damage is usually caused by angular distortion, Absolute movement might not contribute to that - depending on the nature of the project. So the limit for total settlement will have to be project specific
Are you going to allow using partial factors for resistance and materials in the same time as well or only one of them?	In many cases, only one of them will be used (MFA or RFA). However, when looking at joint verifications of foundations and structures, you might use a mix of MFA for the structural elements and RFA for the geotechnical aspects. (e.g. pile design).
Parts of the original EC7 were a poor fit for rock engineering design. Could you say something about what has been done to address this in the second generation of the codes?	Very significant changes have been made to cover rock engineering. More needs to be done, but it is a major step forwards.
How are designs involving geosynthetics in 'soft' and often complex geotechnical structures going to be covered in the 2nd generation of Eurocode, noting structures such as hazardous waste landfills can be of a grave failure consequence.	This comes under the scope of reinforced fill structures, although the advice there is generic
When will the national annex be ready for the UK	Hopefully at the same time as BSI makes EN 1997-1 and -2 available, so April-August 2024
Is there a clear definition for inferior and superior values of geotechnical parameters in the new generation of Eurocodes?	Yes - fully defined in EN 1990
What does the Eurocode say about the selection of the geotechnical parameters such as the stiffness?	EN 1997-2 has a whole clause dedicated to determining stiffness
Is the new code prescriptive on MFA or RFA method for specific structures or does it allow the user to select for individual situations?	For some structures, there is no choice - e.g. for slopes, MFA only; for piles, RFA only. However, for spread foundations, there is national choice between MFA and RFA (so our NA will decide). I don't imagine that the decision will be left to the engineer.
Consequence classes assume from your description single or few risk of death is 10-4 is current risk of this not 10-5 or 10-6 depending on current or proposed scenarios	Where do you get those numbers from? EN 1990 is very non specific about the number of deaths involved. There is, however, an ISO standard that gives more details, including number of deaths and current HSE guidance
Sorry I missed part of the webinar. Is tunnelling covered by the new EC7?	No. Might be included in the Third Generation, but no plans.
Firstly, somebody else asked if the single source principle will be retained in the second generation of EC7.  Secondly, will NCCI such as BS 8002 or BS 8004 need to be amended to adapt to the second generation of EC7, or were these documents written to be forward compatible with the second generation of the codes?	Single source principle is now explicitly defined in EN 1990. BSs 8002 and 8004 will need to be updated, if only to reflect the reorganization of Eurocode 7. However, both of those standards were rewritten in 2015 in anticipation of the changes that were planned for Eurocode 7. So, the technical changes will be minimal. More significant changes will need to be made to BS 8006, since the new Eurocode 7 Part 3 will cover reinforced fill and soil nailed structures.
Does the single source principle still exist in the new code?	Yes, it is now explicitly defined and better explained
Slight after thought on AB's presentation but what if anything is said about the use of worse credible parameters in design?	The term is not used in the Eurocodes (1st of 2nd generation). It is a UK-specific concept, formally introduced in CIRIA 104 made in the 1980s. Its equivalent in the Eurocode system would be a directly selected design value .
What is meant by "chemical properties"?	pH, carbonate content, etc. Needed for assessing durability of concrete, steel, etc
What is the rationale behind the decision that it isn't a requirement ('shall') for the Ground Model to be documented in the GIR? (As it's a recommendation using 'should' so no mandatory).	This was a regrettable change forced upon us to cater for Italian and Swedish practice. The UK NA will most likely restate that clause as a 'shall' so the GM is documented in the GIR

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Minor comment: Will the European comma "," decimal separator be replaced by the dot "." decimal separator when the Eurocodes are published as a British Standard version?	It is the editorial style of CEN, used for all European standards. Unfortunately, BSI has no possibility of changing that ;-(
The inclusion of the ground model in the GIR appears to cut across the current/usual boundaries between a Factual Report & Interpretative Report. What do the GI contractors think? Will they do the additional work?	UK practice (aligned to the 1st Generation Eurocode 7) uses the GIR and GDR. There is no "factual report" per se - the facts are part of the "presentation of data"! in the GIR. Likewise, there is no "interpretive report" per se - interpretation of the data can appear in the GIR and the GDR. The Ground Model is meant to be structure agnostic, hence it is best including in the GIR. The GDR adds the loading, risk, and design calculations. Different GDRs can be produced for different structures, all using the same GM.
This is where actual practice differs from what the code does/will say. I can't see GI contractors (or even clients) straying off into giving what they interpret as 'interpretative' information. An example of where practice differs from what the code says. So it appears a conforming GIR will be required (as well as a GDR) in addition to what hitherto, in practice, has been called a Factual Report.	No response needed
Why is the GM often assumed on a single scale should it not be better to include a number of scales as default	In the new document there is no presumption of scale. the designer can select a scale or scales to suit their design
How prescriptive is the new 1997-2 on the definition of "the Designer"? In Germany they are defining two entities a "Designer" and a "Geotechnical Expert" generally the Ground Model and GIR sit with the Geotechnical Expert	The Eurocodes do not define the "Designer" (or any other role, in fact). It merely states what "shall", "should", or "may" be done (by persons unspecified)
Will the new British Standard version of EC7 include references to publications in other languages? If they do, could they be replaced with links to English language versions of those references instead for the British Standard version? Will references also include DOI hyperlinks?	BSI cannot change the text of the Eurocode, so this would have to be done in our NA. Thanks for the suggestion - we will keep this in mind when we write the NAs.
Is there an expectation to undertake ground investigation across entire the 'Zone of Influence'? Clearly that won't be viable in practice	There is an expectation that the ground conditions will be understood across the whole ZOI. This doesn't have to be via intrusive GI, but a ground model and ZOI do need to be produced that show the ground properties
Will the new EN1997-2 cover the thermal properties of soils?	Yes
Will the ULS for groundwater comply with clauses of Foundation code or will FC be changed/superseded	I'm not sure what you mean by "ULS for groundwater" By FC do you mean BS 8004? BS 8004 defers to Eurocode 7, so ULSs involving groundwater will be defined in Eurocode 7.
In my experience undrained shear strength cannot be inferred from SPT N with reliability for soft NC soils and where $N < 8$ say. One of Matthew's tables seemed to provide range of $c_u$ for $N < 8$ up to 80 kPa? 80 kPa seems too optimistic for $N < 8$ , and I would expect that soft soil techniques such as CPTs should be recommended in these soils rather than advocating the use of SPTs.	I was showing what some designers currently do with the SPT. I don't claim that this is good practice! What we accept as derived values should be subject to due process.
For the accidental design situation reduced geotechnical material partial factors are used (sqrt of the value as per UK NA). Is this retained in the 2nd gen?	It is now included in Eurocode 7 Part 1. So UK practice has been spread to the rest of Europe and we can take that out of the UK NA
Why don't the consequence factors include environmental loss?	I don't see why you couldn't included environmental loss in your assessment of CC
Why does it seem to be implied that the Ground Model and ZOI may have different boundaries (or am I getting the wrong end of the stick)? Would they not need to have the same coverage and therefore a separate ZOI is redundant (if we need to understand the nature and behaviour of the ground within the ZOI?)	You might have a Ground Model that covers the geology of a much large area/volume than necessary for a specific design. The ZOI is specific to a particular limit state/design situation, hence you might have several ZOIs to consider. The ZOI defined the volumes of ground your need data about
What happens if a 3 x retained height of investigation for a cantilever structure is not provided to the designer? (For example).	If the designer thinks they do not have enough information to design the wall, then they should recommend additional GI.
Have the new Eurocodes (and all standards referred to) been written to cover structures (geotechnical and building etc.) not located in the European climate? e.g. desert or tropical	No. Although most of the principles apply, there is nothing specific for those environments
For an embedded wall design will the bending & shear force outputs from the worst of the VC3 or VC4 calculation be directly taken across to the pile structural design (i.e. no further factoring or modification of forces) - as is the case now?	There is an additional model factor that needs to be applied - this is specified in the Eurocode and its values will be given in the UK NA. The outcome will be in line with the rules in BS 8002:2015
Are model factors still a thing?	Yes, very much so - especially for piles and prop loads for retaining structures
"piles on competent rock" - what's "competent" mean	There has been push-back from several countries about this. I believe the term 'competent rock' is not to be used and this particular model factor will be deleted. The argument is that model factors relate to the model [modified by experience and testing] and have nothing to do with the type of ground.
Any specific rules for laterally loaded piles?	Yes. Please refer to the current draft prEN 1997-3 Clause 6.
When there is an option to carry out an RFA or MFA is there a significant difference between the design outcomes?	In some cases there will be - hence it is likely that the UK NA will narrow the choice so the engineer does not have to make it
There is a provision to decrease pile diameter for structural design in EC2, does that mean we should change the steel bars locations as well and does this still exist in the new Eurocodes?	Eurocode 2 has been amended to avoid this issue
Any guidance included on dynamic pile load testing and pile integrity testing, re. testing percentages and how test quantities improve confidence / reliability.	Yes. Please refer to the current draft prEN 1997-3 Clause 6. The guidance will be tightened up in the UK NA to Part 3.
Is there any provision for Temporary Works?	There is really no difference between design necessary for temporary works and that required for permanent structures.

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Are rigid inclusions to be treated as piles or left as ground improvement? Any attempt to regulate type of tests and frequency for such technique?	UK had hoped to allow design of RIs as piles, but with lower resistance factors. This had a lot of push-back from other countries so that it was easier to go with the flow and treat as ground improvement. If there is sufficient UK industry opinion that RIs should be designed as piles, this could be included in the UK NA. But B/526 needs sufficient support for this. Guidance for testing was in, then out, then in but now finally out again. Probably another aspect for the UK NA.
With the UK NDPs, would it be fair to (perhaps cynically) say that we are not to expect much difference than the 1st gen values in the UK NA or is the opportunity going to be used to revise them (and potentially make them less conservative) in light of UK experience with the 1st gen? (And nice to see some of the UK NA filter through to apply across Europe).	I think rather than NDPs, you are referring to partial model and resistance factors. Main changes will affect pile design, but it is believed that the final impact on safety and reliability will be minimal compared to the existing published BS EN 1997 and the UK NA. A lot of urban myth that the current UK NA partial factors have resulted in more conservative designs compared to the previous BS 8004:1986 designs. If anyone actually has any detailed comparisons that show this, B/526 would be very interested to see the data.
What sort of guidance on re-use of foundations please?	Nothing. This is an engineering matter and any design checks necessary to re-use existing foundations should follow the same guidelines.
In the pile design example without comparable experience and testing, the 1.6 model factor seems disproportionate particularly for piles designed primarily as shaft resistance piles. This would indicate an overall "FOS" of over 3 on shaft resistance.	Possibly. But are you and your PI insurer really comfortable to carry out a design where you have no comparable experience and no proposed testing? Remember that comparable experience can relate to works on other sites in similar ground conditions using similar piles. It would be very unusual to have absolutely no information.
Is the additional concrete material partial factor Kf of 1.1 applied to gamma_C in RC design for foundations (piles) exist in the 2nd gen?	Yes. But following the guidance given in the relevant execution codes allows this requirement to be relaxed. This might need to be included in the UK NA.
Will there be any guidance on vibration risk and quantification from piling within EC format?	No. This is an execution matter and should therefore be included in relevant Execution Standards.
Will there be any guidance on design of piled raft foundation?	Yes. Please refer to the current draft prEN 1997-3 Clause 6.
Can you please clarify why only RFA is being recommended for Single Pile - Axially Loaded?	There was Europe-wide consensus that this was the best approach for axially loaded single piles.
Can you when these standards will become mandatory. Last time we had 3 years to implement from publication.	2027 or 2028
Has the spacing of investigation points changed within the new EC7-2?	More guidance has now been included. UK NA may or may not make this mandatory. To be agreed by B/526
More for NA but would have concerns over geotechnical designers determining partial factors using the terms Extensive / Experience etc. without a clear definition.	There is some guidance in the Eurocodes, but this will probably be addressed in the UK NA
Where can we find a copy of the latest 1997-3 draft? I can only find the one from October 2022 with tracked changes online, the tracked changes copy is awkward to read.	This is the latest version currently available.
I understand that choosing the consequence classes should be done according to judgement on descriptions which is then project specific. Do we need to perform sensitivity checks on this factor if we are not completely sure about the best fitted consequence class? How major would the effects be if we do not choose the best fitted consequence class for the design?	You are the designer, so need to carry out all due diligence checks
Is there any updated advice going into the new Eurocode on the presence of gypsum and other salts in soils?	No. There are generic statements that the Designer needs to be aware and take account.
With respect to stats where do we stand with a Bayesian approach	Can be used
Did the most recent BS5930 republication have any effect on the new EC, or will there be a new 5930 based on these EC changes?	BS 5930 will need to be reviewed to ensure compliance with the new EC7
If partial factors are/were considered universally sufficient / suitable to provide adequate safety factor in design , why bother with consequence factors ?	It is an improvement in dealing with safety and reliability