Question 1: To what extent do you think our proposed approach to providing national-scale existing information about geology relevant to long-term safety is appropriate? Please give your reasons.

For screening purposes the proposals are adequate. They are also cost effective because to undertake more investigation would be very expensive to the tax payer and time consuming. Personally I don't agree with carte blanche screening across the UK. It should be focussed on the areas that may wish or are minded to volunteer. At the early stage I don't believe the geology has a great influence on a community's intention to volunteer. More detailed geological assessments could then take place with those volunteering communities and the surrounding geology. Making a safety case involving the rock or geology as a barrier is always going to be a challenge no matter what the rock type or rock structure. The biggest influence on decision making will be groundwater movement, especially bearing in mind that the construction of the repository will disturb the natural in situ state. We do not have homogenous geology in the UK that will wholly support a nuclear safety case other than for shielding, security particularly bearing in mind Carbon14 off gassing as Carbon dioxide, inter-alia. Obviously then entering the biosphere and potentially plant life, etc.

Question 2: To what extent do you think that the proposed national information sources are appropriate and sufficient for this exercise? Please give your reasons.

For screening purposes they are adequate. I would repeat my point above that a more focussed approach should be taken with minded communities and then more detail could be pursued in those areas from whatever source. For instance the major utility companies and certain government departments (e.g.MoD) have detailed geological knowledge in support of their current and historic undertakings. Similarly the geological and civil engineering consulting firms that have been practising in the UK for a very long time

Question 3: To what extent do you agree or disagree with the proposed form of the outputs from geological screening? What additional outputs would you find useful?

No comment on outputs as proposed. 3D animation would support....particularly water flow. Also a layman's perspective should be provided on nuclear waste disposal the safety case and the impact on the environment e.g. negligible but it needs to be articulated in a way that people can understand.

Question 4: Do you have any other views on the matters presented in the draft Guidance?

The report produced by CoRWM circa10years ago advocated leaving the repository open i.e. not backfilled for 500 years to enable package inspection and/or retrieval. Clearly this is impractical for numerous engineering, scientific and moreover societal reasons. The reason for raising this issue it will have an enormous influence on the required geology and hydrogeology to support the safety case. Not to mention volunteering for such a proposal. The proposals particularly the output proposals should be trialled on some communities first to receive their input and advice. Who will peer review and independantly vet this work other than the recently appointed panel?

Name: **David M Nichols**

Email address: [REDACTED]

Telephone number: [REDACTED]

Organisation/affiliation: self

Q6: Do you agree to your responses to this consultation being published? Yes