

FAO: Margaret Coaster, Smart Metering Team, Ofgem E-Serv.

I have responsibility for tracking the Smart Metering and Smart Grid programmes on behalf of the Engineering Policy Committee of the Royal Academy of Engineering - the UK's National Academy for all branches of engineering.

The Academy has not prepared a detailed response to your consultation (due today) as we have agreed that the Institution of Engineering and Technology (IET) will take the lead on this occasion and our Fellows have been heavily involved in their response. I believe that it is nevertheless important that you know of our serious concerns about the proposed timescales for the Smart Metering Programme.

In our view, the business case for Smart Metering, considered independently of the Smart Grid, is not clear. We believe that the Smart Grid is strategically important, that Smart Meters are an essential component of a Smart Grid, and that the Smart Grid must be properly specified and designed before the technical specification for the Meters and the Communications Architecture is finalised. This is a matter of professional Systems Engineering and, if it is ignored, the risks to the programme will be very great. In our opinion, it is unlikely that sufficient flexibility could be built into the Meters to enable the required specifications to be retrofitted through a software upgrade.

We are particularly concerned about security, which is a system-level property that in general cannot be retrofitted to an insecure system.

The Smart Meter Programme has four characteristics that have accompanied major failures of Government IT Projects in the past:

- a) the timescales are being driven by politics rather than coming out of a professional engineering assessment of realistic plans;
- b) the technical specifications are being developed too late in the overall process;
- c) DECC/Ofgem are relying too heavily on advice from companies that have a financial interest in the programme going ahead quickly, and paying too little attention to independent professional institutions;
- d) Systems Engineering responsibility and accountability is unclear, leading to unresolved issues about security and privacy.

The same issues were at the heart of the problems with the National Programme for IT in the NHS (NPfIT / Connecting for Health) for example.

We would be happy to discuss our concerns with you in more detail - ideally alongside our colleagues in the IET.

Yours sincerely

