The Rev Dr Brendan McCarthy, the Church of England’s national adviser on medical ethics, said: “The Church of England is aware of the complex ethical issues raised over the possibility of mitochondrial replacement therapy and the extensive scientific research that has been carried out in this field over the years.

“Changing the human germline represents an ethical watershed; it is right to be cautious, requiring a comprehensive debate and degree of consensus with regard to the ethics, safety and efficacy of these techniques before any change to the current provisions are made.

“We accept in certain circumstances that embryo research is permissible as long as it is undertaken to alleviate human suffering and embryos are treated with respect. We have great sympathy for families affected by mitochondrial disease and are not opposed in principle to mitochondrial replacement.

“A wide number of questions remain to be answered before it would be wise to proceed. For example, the two proposed techniques involved in MRT are not ethically identical - little debate has been given to this. The Church has participated in the debate at every stage, making submissions to consultations run by the Nuffield Council on Bioethics, the HFEA and the Department of Health as well as participating in relevant seminars and workshops.

“Our view, however, remains that we believe that the law should not be changed until there has been further scientific study and informed debate into the ethics, safety and efficacy of mitochondrial replacement therapy.”

Read the Mission and Public Affairs Council submission from December 2012 to the Human Fertilisation and Embryology Authority consultation on mitochondria replacement here

Read the Mission and Public Affairs Council submission from May 2014 on mitochondrial replacement to the Department of Health consultation on draft regulations to permit the use of new treatment techniques to prevent the transmission of a serious mitochondrial disease from mother to child here