Canterbury Earthquakes
Royal Commission
Te Komihana Rūwhenua o Waitaha

## UNDER <br> THE COMMISSIONS OF INQUIRY ACT 1908 <br> IN THE MATTER OF <br> THE CANTERBURY EARTHQUAKES ROYAL COMMISSION

## AND IN THE MATTER OF

THE CTV BUILDING COLLAPSE

## ORDER AS TO DIRECTIONS IN RELATION TO ELASTIC RESPONSE SPECTRA ANALYSIS EVIDENCE

Dated: 18 June 2012

## ORDER AS TO DIRECTIONS IN RELATION TO ELASTIC RESPONSE SPECTRA ANALYSIS EVIDENCE

1. The Royal Commission directs that the expert witnesses whose evidence will relate to Elastic Response Spectra Analysis (ERSA) of the response of the CTV Building are to confer.
2. These witnesses are:

### 2.1. Clark Hyland

2.2. Ashley Smith.
2.3. Professor Athol Carr.
2.4. Professor John Mander.
2.5. Professor Robin Shepherd.
2.6. Douglas Latham.
2.7. Brendon Bradley.
2.8. Graeme McVerry.
3. The Royal Commission appoints Professor Athol Carr as a facilitator with authority to take the steps necessary to achieve the purposes of this order.
4. The purposes of the experts conferring are:
4.1. To endeavour to reach agreement on the input data to be used to conduct an ERSA of the response of the CTV Building to determine whether the design of the building was consistent with the provisions of NZS 3101:1982 and NZS 4203:1984.
4.2. Where agreement cannot be reached on the inputs, to identify:
4.2.1. The inputs which cannot be agreed.
4.2.2. The reasons for the disagreement.
4.3. To produce ERSA results which provide the most reliable model for the purposes set out in clause 4.1, and which can then be analysed and interpreted. In this respect:
4.3.1. Compusoft has already conducted an ERSA ('the Compusoft ERSA').
4.3.2. The experts are to consider whether the Compusoft ERSA provides the most reliable model for the purposes set out in clause 4.1.
4.3.3. If the experts cannot agree about whether the Compusoft ERSA provides the most reliable model, the experts are to identify the reasons for their disagreement.
4.4. If the experts do not reach agreement that the Compusoft ERSA provides the most reliable model for the purposes set out in clause 4.1, a further ERSA is to be carried out. In this case:
4.4.1. The experts are to agree on the inputs to be used. If agreement is not reached, they are to identify their reasons for disagreement.
4.4.2. If agreement is not reached, or in the opinion of the facilitator is not likely to be reached, the facilitator is to report to the Royal Commission on the areas of disagreement and their significance so that the Commission can consider whether any further orders are required.
5. These directions apply to ERSA input data and ERSA results, but not to any evidence relating to subsequent interpretation of ERSA results, which shall be a matter for individual parties to address.
6. The experts are to take all necessary steps to achieve the purposes described above, including:
6.1. All input data used in the Compusoft ERSA and any other ERSA are to be made available to every other expert.
6.2. The data is to be provided in a form suitable for use in an alternative model.
7. The input data used in the Compusoft ERSA:
7.1. Is confidential to the persons listed in paragraph 2 of this order.
7.2. Must not be used by any person for any purpose other than those described in these directions.
7.3. Must be returned to Compusoft following the conclusion of the CTV hearing.
7.4. Must not be copied or retained.
8. All other information shared between experts:
8.1. Remains confidential to the parties, their legal advisors and the experts except where it is included in the joint report.
8.2. Must not be used by any person for any purpose other than those described in these directions.
8.3. Must be returned to the provider following the conclusion of the CTV hearing.
8.4. Must not be copied or retained.
9. The experts are to produce a joint report for the Royal Commission which identifies the following:
9.1. All areas of agreement.
9.2. All areas of disagreement, including the reasons for the disagreement.
9.3. The results of any further ERSA/s.
10. The experts are to comply with the Code of Conduct for Expert Witnesses set out in schedule 4 to the High Court Rules. In particular the experts are to:
10.1. Attempt to reach agreement about the matters set out above.
10.2. Exercise independent and professional judgement and not to act on the instructions or directions of any person to withhold or avoid agreement.
11. The joint report is to be provided to the Royal Commission by 2 July 2012. If this date cannot be met, the Royal Commission is to be advised immediately this becomes apparent.
12. The Royal Commission reserves the right to alter these directions.
13. Any matters of dispute about the processes to be followed must be raised with the Royal Commission forthwith.
14. The experts may be required to participate in a 'hot tub' in the course of the CTV hearing during which they will be called upon to give evidence and answer questions about the matters set out in these directions.
15. These directions are made in the exercise of powers of the Chair of the Royal Commission as a Judge of the High Court of New Zealand under section 13 of the Commissions of Inquiry Act 1908.

Dated: 18 June 2012

The Honourable Justice Cooper
Chair of the Royal Commission
A Judge of the High Court of New Zealand

