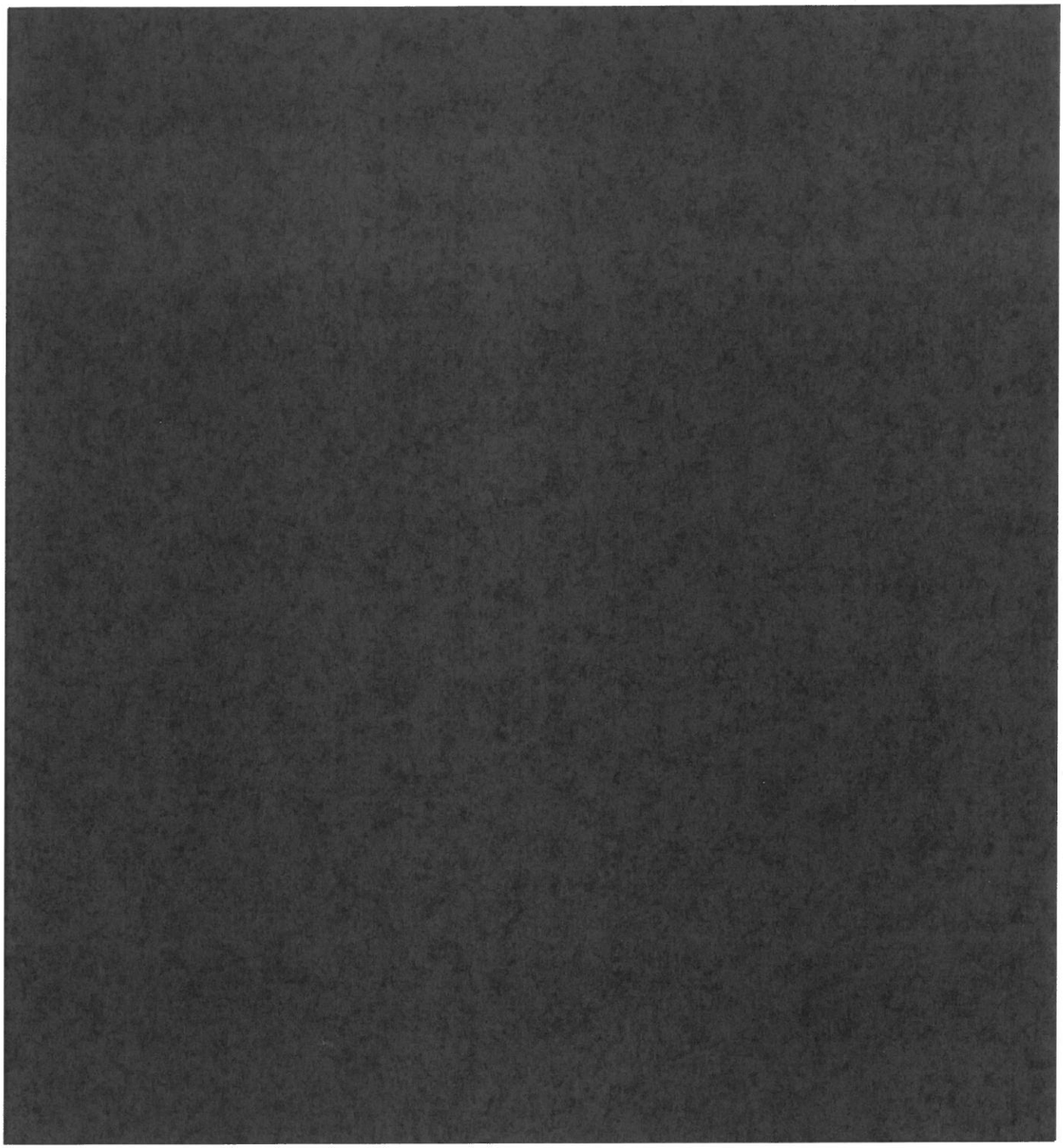
This page and the subsequent 6 pages have been redacted on the basis that they are irrelevant to this FOI request.



3. Comparison of AS/NZS 1754:2013 and new UN Regulation on enhanced child restraint system requirements for ISOFIX child restraints

I have attached a comparison of the AS/NZS 1754:2013 and the new UN child restraint Regulation requirements for ISOFIX child restraints. This is a high level summary/overview and as such does not necessarily capture all differences, including finer details. You will see I have highlighted (in red in the attachment) the following key points of difference:

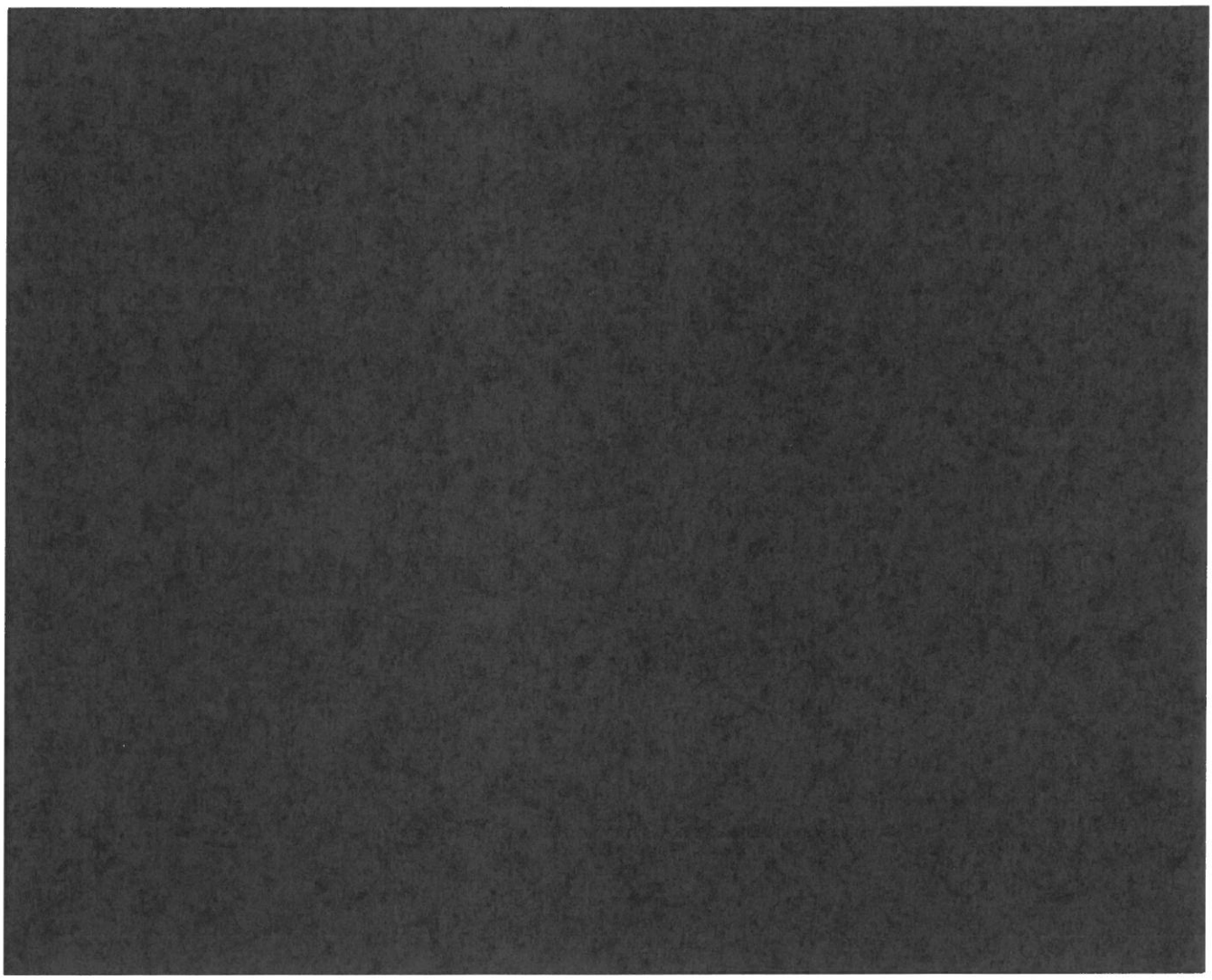
(a) AS/NZS 1754:2013 ISOFIX compatible restraints will be required to withstand a higher deceleration (24-34g) in frontal impact testing than will be required by the new UN child restraint Regulation (20-28g).
(b) AS/NZS 1754:2013 specifies an inverted impact test for rearward facing restraints which the new UN child restraint Regulation does not.

(c) The new UN child restraint Regulation allows for shields to be used as an alternative to integrated (i.e. in-built) harnesses – child dummies have been ejected from some shield type systems in rollover sled tests.

(d) AS/NZS 1754:2013 requires all ISOFIX compatible child restraints to be fitted with a top tether and prohibits the fitment of foot props (support legs). The new UN child restraint Regulation allows either a top tether or a support leg (i.e. foot prop) to be used as the anti-rotation device. Vehicle Safety Standards (VSS) research tests have shown the ISOFIX lower anchorage loads generated by ISOFIX restraints with support legs are typically 50% higher than comparable size/mass ISOFIX restraints with top tethers. This is important because it is necessary to ensure the loads imposed on ISOFIX low anchorages in crashes will not be too excessive given the loads ISOFIX anchorages must be certified to withstand in accordance with vehicle Regulations. The loads imposed by ISOFIX child restraints with top tethers more appropriately match the loads the ISOFIX lower anchorages in vehicles must be certified to withstand.

(e) AS/NZS 1754:2013 allows either flexible or rigid lower attachment connectors. The new UN child restraint Regulation only applies to rigid ISOFIX.

(f) AS/NZS 1754:2013 requires all ISOFIX compatible child restraints to also be provided with a means of attaching the child restraint to the vehicle using a seatbelt. This ensures these child restraints will be useable in the majority of vehicles currently in-service in Australia and can be interchanged between vehicles with/without ISOFIX. The new UN child restraint Regulation does not require a seatbelt mounting to be provided for ISOFIX child restraints (i.e. restraints can be ISOFIX only restraints, not suitable for use in a vehicle without ISOFIX). ISOFIX anchorages are not compulsory for vehicles supplied to the market in Australia and even with high voluntary fitment rates it will be many years before all vehicles in service have ISOFIX anchorages.



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