Comment				Comment summary	Suggested resolution	Comment is an observation or is a suggestion	Comment is substantive or is an objection	EASA comment disposition	EASA response
NR	Author	Section, table, figure	Page						
1	*Sylvain Pouillard, Safran*			Speed limitation (reduced VNE) cannot be considered as a sufficient measure to ensure that the aircraft is free of flutter. There are examples of CS22 airplanes with T-tail that experience nearly unstable vibration mode coupling at low speed with the damping increasing at higher speeds.	We suggest to at least evaluate the flutter criteria described in Air Frame and Equipment Engineering Report No. 45 – Simplified Flutter Prevention Criteria (referenced in the early versions of CS23) In addition, proper control surfaces balancing is advisable. Some basic flutter characteristics like the one described above can be very simply evaluated based on a simplified Ground Vibration Test with only one accelerometer and the modes being manually excited. The flutter analysis can then be based on a simple one degree-of-freedom model (comparison of the control surface frequency, calculated with aerodynamic stiffness and inertia to the structural frequency measured with a simplified GVT). We experienced at Safran that this simplified method was fairly well in accordance with both the “full” GVT and flutter analysis and the flight test.	suggestion	substantive	partially agreed	It is agreed that only a speed limitation is not sufficient to ensure free of flutter. Hence, the deviation does not allow to deviate from CS 22.629 (a). Therefore the applicant has to demonstrate free of flutter by an aeroelastic modelling or other acceptable means, e.g. a simplified ground vibration test , as suggested. The scope of the suggested “Engineering Report No. 45 – Simplified Flutter Prevention Criteria” is not very well applicable to long wingspan and T-tail configurations. However, the section “Identifaction of Issue” has been amended by adding that good design practices shall be in place. In particular the text is amended as follows (grey text is added): *The intent of this deviation is to allow flexibility regarding the free of flutter demonstration in conjunction with good design practices and to mitigate the risk by operational limitations. This would allow to achieve the same level of safety as previously with FC and PtF but by means of a TC, issued with a certification basis including a deviation.*

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