Neutral citation [2025] CAT 9

Case No: 1435/5/7/22 (T)

IN THE COMPETITION APPEAL TRIBUNAL

Salisbury Square House
8 Salisbury Square
London EC4Y 8AP

21 February 2025

Before:

JUSTIN TURNER KC
Chair of the Competition Appeal Tribunal
SIR IAIN McMILLAN CBE FRSE DL
PROFESSOR ANTHONY NEUBERGER

Sitting as a Tribunal in England and Wales

BETWEEN:

(1) STELLANTIS AUTO SAS
(2) GIE PSA TRESORERIE
(3) STELLANTIS NV
(4) OPEL AUTOMOBILE GMBH
(5) STELLANTIS EUROPE SPA
(6) FCA SRBIJA D.O.O. KRAGUJEVAC
(7) FCA POLAND SP.ZO.O
(8) MASERATI SPA
~~**(9) SOCIETA EUROPEA VEICOLI LEGGERI (SEVEL) SPA**~~
(10) VAUXHALL MOTORS LTD
(11) STELLANTIS ESPAÑA SLU

Claimants

- v -

(1) AUTOLIV AB
(2) AUTOLIV, INC.
(3) AUTOLIV JAPAN LTD
(4) AUTOLIV B.V. & CO. KG
(5) AIRBAGS INTERNATIONAL LTD
~~**(6) ZF TRW AUTOMOTIVE HOLDINGS CORP.**~~

~~**(7) ZF AUTOMOTIVE SAFETY GERMANY GMBH**~~
~~**(8) ZF AUTOMOTIVE GERMANY GMBH**~~
~~**(9) TRW SYSTEMS LTD**~~
~~**(10) ZF AUTOMOTIVE UK LTD**~~
~~**(11) TOKAI RIKA CO., LTD**~~
~~**(12) TOYODA GOSEI CO., LTD**~~

Defendants

Heard at Salisbury Square House on 1-2, 4, 7-10, 14-16, 21, and 28-29 October 2024

JUDGMENT

APPEARANCES

Colin West KC and Sean Butler (instructed by Hausfeld & Co. LLP) appeared on behalf of the Claimants.

David Scannell KC and Derek Spitz (instructed by White & Case LLP) appeared on behalf of the First to Fifth Defendants.

Sarah Ford KC and Prof. David Bailey (instructed by Macfarlanes LLP) appeared on behalf of the former Sixth to Tenth Defendants.

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A. INTRODUCTION

1. This is a claim for damages arising from the Defendants' alleged involvement in one or more cartels in the market for occupant safety systems components ("OSS"), beginning in either 2002 or 2004 and ending at least as late as 30 March 2011 (the "Cartel Period"), in breach of Article 101 of the Treaty on the Functioning of the European Union ("TFEU") and Article 53 of the Agreement on the European Economic Area ("EEA Agreement"). The OSS in issue in these proceedings are seatbelts, airbags and steering wheels.

2. All of the Claimant companies are now part of the Stellantis group, which was formed in early 2021 following the merger of Peugeot SA and Fiat Chrysler Automobiles NV. The First and Second Claimants were, during the Cartel Period, part of the PSA Group which manufactured vehicles under the brand names Peugeot and Citroen ("PSA"). The Fourth, Tenth and Eleventh Claimants became members of PSA in 2017. During the Cartel Period they manufactured vehicles under the names Vauxhall/Opel ("VO") and were owned by General Motors ("GM"). The Fifth to Eighth Claimants were formerly members of the Fiat Chrysler Automobiles group and manufactured cars inter alia under the brand names Chrysler, Dodge, Fiat, Jeep, Lancia and Maserati ("FCA"). The Second and Third Claimants are concerned with raising finance for other companies within the Stellantis group. We refer to all the Claimants collectively as "Stellantis" or by reference to the respective groups, PSA, VO and FCA. The car manufacturers are also referred to in these proceedings as Original Equipment Manufacturers ("OEMs").

3. Nothing is said to turn on the detailed corporate relationships between the Claimant companies save that it is necessary to keep in mind that during the periods of the alleged cartels the PSA, FCA and VO groups were independent of one another. One of the criticisms made of Stellantis by the Defendants is that when analysing the evidence of alleged cartel activity it fails to distinguish between the Claimant groups.

4. At the commencement of trial, the Defendants were members of two corporate

groups engaged in the business of manufacturing OSS. The First to Fifth Defendants are companies in the Autoliv group. The Sixth to Tenth Defendants were referred to as the ZF/TRW group or sometimes just TRW. On Day 10 of the trial, TRW reached a settlement with Stellantis and played no further part in the proceedings. They nevertheless remain an important presence in these proceedings because it is alleged, in Stellantis's direct case, that Autoliv's cartel involved TRW at all times.

5. Over the course of the Cartel Period, PSA, VO and FCA purchased substantial quantities of OSS for incorporation into the vehicles they manufactured and sold. A large proportion of the OSS components purchased by the Claimants were supplied by one or other of Autoliv or TRW.

6. Although this is not a follow-on claim, the starting point for the complaint is that Autoliv and TRW were found by the European Commission (the "Commission") to have been involved in anti-competitive cartel conduct in the OSS market in relation to supplies to a number of other car manufacturers including BMW, Volkswagen ("VW"), Toyota and Honda. The Commission issued two settlement Decisions, AT.39881 of 22 November 2017 and AT.40481 of 5 March 2019 (referred to as "OSS1" and "OSS2") by which it found that Autoliv and TRW, along with other undertakings, had cartelised supplies of OSS to a number of these and other car manufacturers between 2006 and 2011.

7. In its OSS1 Decision, the Commission found four cartels in relation to the following named manufacturers:

	Supplies	**Participating undertakings**	**Period of participation**
1.	Sale of seatbelts to Toyota	Tokai Rika	06/07/2004 – 11/02/2010
		Takata	06/07/2004 – 25/03/2010
		Autoliv	**18/12/2006 – 25/03/2010**
		Marutaka	06/07/2004 – 15/04/2009
2.		Takata	14/06/2005 – 26/07/2010

	Sale of airbags to Toyota	**Autoliv**	**18/07/2006 – 26/07/2010**
		Toyoda Gosei	14/06/2005 – 15/07/2009
3.	Sale of seatbelts to Suzuki	Takata	14/02/2008 – 18/03/2010
		Tokai Rika	14/02/2008 – 18/03/2010
4.	Sale of seatbelts, airbags and steering wheels to Honda	Takata	28/03/2006 – 22/05/2010
		Autoliv	**28/03/2006 – 22/05/2010**

8. In its OSS2 Decision, the Commission found two further cartels as follows, again targeting supplies to the following car manufacturers:

	Supplies	**Participating undertakings**	**Period of participation**
1.	Sales of seatbelts, airbags and steering wheels to VW/Porsche	**Autoliv**	**04/01/2007 – 30/03/2011**
		Takata	04/01/2007 – 30/03/2011
		TRW	**04/01/2007 – 28/03/2011**
2.	Sales of seatbelts, airbags and steering wheels to BMW/Mini	**Autoliv**	**28/02/2008 – 16/09/2010**
		Takata	28/02/2008 – 17/02/2011
		TRW	**05/06/2008 – 17/02/2011**

9. Autoliv and TRW were found to have participated in both of the OSS2 cartels for their entire duration (between 2007 and 2011). The Autoliv addressees of the OSS2 Decision were the Second and Fourth Defendants. The TRW addressees were the former Sixth, Seventh and Eighth Defendants.

10. The Commission was not the only competition regulator to have investigated allegations of cartel conduct in the OSS sector over a period which coincides or overlaps with the cartels found in the OSS1 and OSS2 Decisions. Such conduct was also investigated by the US Department of Justice ("DoJ"); the South African Competition Commission ("SACC"); and Brazil's competition regulator, known as the Administrative Council for Economic Defence ("CADE"). Autoliv entered into a plea agreement with the DoJ in June 2012. TRW likewise entered into a plea agreement with the DoJ in July 2012. Autoliv

settled the SACC's complaint in or around 2017. The CADE's investigation into the domestic Brazilian market was dropped in 2017 following settlement with Autoliv. The CADE's investigation in relation to the international market is pending.

B. THE PLEADED ALLEGATIONS

11. Stellantis's case is that PSA, VO and FCA have each suffered losses arising from their purchases of OSS, under contracts concluded in the Cartel Period, by reason of unlawful anti-competitive conduct in the OSS market to which the Defendants were parties. It is said that the anti-competitive conduct caused the prices charged to the Stellantis groups to be higher than they otherwise would have been if no such activity had taken place, and that Autoliv is liable in tort to compensate Stellantis for that overcharge.

12. Stellantis put the case three different ways in their Particulars of Claim.[1] The primary case was at paragraphs 39 and 40:

> "39. Over a period which extended from as early as 6 November 2002 and in any event from 6 July 2004 until at least as late as 30 March 2011…a group of undertakings which at all times included Autoliv and ZF/TRW (together, at times, with one or more of the other Undertakings to which the Addressees of the Decisions belonged, entered into (and thereafter implemented) an agreements or concerted practice to prevent, restrict or distort competition in the supply of OSS products to automotive OEMs including PSA, FCA and Vauxhall/Opel (or any of them) as well as Toyota, Honda, Suzuki, Subaru, BMW/Mini and VW/Porsche.
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> 40. The said agreement or concerted practice, involved the following anti-competitive elements:
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> (i) The exchange of confidential information between competing undertakings, including information on costs and prices;
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> (ii) The allocation of customers and supplies; and
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> (iii) Co-ordination on pricing."

13. This case contemplates only cartels in which Autoliv and TRW were participants irrespective of the involvement of other participants. Further, it contemplates

[1] In fact, the Fifth Amended Particulars of Claim. In this judgment, all references to the Claimants' "Particulars of Claim" can be assumed to be a reference to their Fifth Amended Particulars of Claim.

agreements or concerted practices which extend to PSA, FCA and VO. It is of note that the OSS Decisions did not identify any cartels which encompassed more than one car manufacturer but rather they identified separate cartels in respect of each car manufacturer (and in the case of Toyota, separate cartels for seatbelts and airbags). The OSS Decisions do not explain why the cartels they have identified were separate.

14. The first alternative case is at paragraph 43 of the Particulars of Claim. It states:

> "43. Alternatively, if (for reasons of which the Claimants are currently unaware) any cartels concerning OSS products had to be or were in fact limited to supplies to individual customers, PSA and FCA contend that there were separate cartels with the same membership as pleaded at paragraph 39 above concerning supplies of OSS products to PSA, FCA and Vauxhall/Opel (or any of them), with the same features as pleaded above in relation to the Claimants' primary case."

15. This first alternative case mirrors the approach taken by the Commission of identifying separate cartels with respect to different car manufacturers.

16. In their submissions, the parties generally do not distinguish between Stellantis's primary case and its first alternative case and we refer to these as the "Direct Case". In its submissions, Stellantis emphasised, by reference to the OSS Decisions, that the cartel operation included the principle of incumbency whereby the cartelists aimed to ensure that a contract for supply of a particular component would be awarded to a company which was already supplying that component for a predecessor model.

17. The second alternative case is however materially different and is referred to alternatively as the "spillover" or "umbrella" case. It is put in the following terms:

> "44. In the further alternative, even if there was no cartel concerning supplies of OSS to PSA, FCA or Vauxhall/Opel, the effect of the cartels established in the Commission Decisions (and the findings of the other regulators pleaded above, so far as relevant) would have been to increase the prices charged by the cartelists of supplies to OEMs other than those which were the targets of those particular cartels, by tending to lessen the degree of competition in the market in general and thereby to increase prices in the market. Further

particulars of the mechanism by which prices were thereby increased are set out at paragraphs 44A-44F, below. Autoliv is liable for the losses resulting to the Claimants by reason of such increased prices even in the absence of any cartel concerning supplies to PSA (or Vauxhall/Opel) or FCA specifically. The Claimants contend that the cartelists' conduct caused the prices charged to the Claimants to be increased as follows."

18. In essence it is alleged that even if there was no cartel against PSA, FCA or VO, Stellantis may nevertheless have suffered loss due to the market distortion arising from the cartels identified by the Commission which has resulted in each of the groups paying higher prices. It is acknowledged there is no precedent for this type of claim in a cartel case. Autoliv do not contend that the claim is bad in law, but submits that it fails on the facts. We refer to this as the "Indirect Case".

19. The claimed overcharge is set out below:

OSS Component	Early Period	Main Period
Airbags	**25.5% overcharge**	**10.8% overcharge**
Seatbelts	**no claim**	**15.0% overcharge**
Steering wheels	**25.9% overcharge**	**22.3% overcharge**

20. There is some complexity in understanding these periods, which we address in more detail below. Essentially the "Main Period" commences around the dates identified in the OSS1 Decision for the earliest cartel activity recorded in that Decision (for airbags February 2005, for seatbelts July 2004, for steering wheels April 2006). These are not the dates when it is said by the Commission that Autoliv first became involved in cartel activity in respect of these components, nor are they the dates when it is recorded that Autoliv first became involved in cartel activity with TRW (which was not until 2007). The Main Period ends in March 2011. The "Early Period" predates the Main Period (starting for airbags commencing in February 2003 and for steering wheels May 2004) and falls outside the Commission's findings. It is identified by reference to documents which are said to evidence cartel activity before the Main Period.

21. It is of note that the overcharges are said to be substantial ranging from 10.8% to 25.9%. This is the mean overcharge over the Cartel Period and is not

necessarily the overcharge on any particular contract.

22. The issues which fall to be determined are as follows.

(1) **The Direct Case**: was there infringement of Article 101(1) TFEU by Autoliv in a cartel which included TRW concerning the supply of OSS products to one or more of the Claimant groups during the Cartel Period, and if so, did the Claimants (or any of them) incur an overcharge as a result of the infringement?

(2) **The Indirect Case**: did the Claimants (or any of them) incur an overcharge by reason of the OSS1 and/or OSS2 infringements?

(3) **Quantum**: if there was an overcharge under issue 1 or issue 2, what was the amount of the overcharge?

(4) **Pass-on**: was any part of the overcharge passed on by the Claimants in the prices charged for vehicles in such a way that any loss resulting from any overcharge was mitigated or avoided?

(5) **Financing losses and interest:** did the Claimants suffer additional losses by having to finance over time the principal losses suffered in this case, and/or are they entitled to interest. If so, what was the amount of such additional financing losses?

23. Although we have heard cross-examination in relation to financing losses, we have not yet heard detailed submissions on this issue. The Tribunal directed that this issue should be adjourned for further argument when the size of any overcharge had been determined.

C. THE LAW

24. Article 101(1) states:

> "The following shall be prohibited as incompatible with the internal market: all agreements between undertakings, decisions by associations of

undertakings and concerted practices which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the internal market, and in particular those which:

(a) directly or indirectly fix purchase or selling prices or any other trading conditions;

(b) limit or control production, markets, technical development, or investment;

(c) share markets or sources of supply;

(d) apply dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage;

(e) make the conclusion of contracts subject to acceptance by the other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts."

25. In *Argos Limited & Another v Office of Fair Trading* [2006] EWCA 1318 [2006] UKCLR 1135 at [21] the Court of Appeal set out some essential propositions of law in relation to concerted practices:

"21. The Chapter I prohibition applies to agreements and also to concerted practices which do not have the formality or certainty of agreements. It is not legally necessary to distinguish between agreements and concerted practices, and references by the Tribunal in its judgments to agreements included concerted practices. We will differentiate between them only so far as seems necessary or appropriate. The Tribunal set out a summary of the relevant law which, in itself, is not controversial at paragraphs 150 to 163 of its judgment in the Football Shirts appeals and similarly at paragraphs 145 to 156 of its judgment in the Toys and Games appeals, drawing in each case on judgments of the European Court of Justice and the Court of First Instance. We will set out here the essential propositions, with references but not full quotations.

(i) The object of the inclusion of concerted practices in the prohibition is to bring within Article 81 a form of coordination between undertakings which, short of the conclusion of an agreement properly so-called, knowingly substitutes practical co-operation between the undertakings for the risks of competition. A concerted practice does not have all the elements of an agreement but may arise out of co-ordination which becomes apparent from the behaviour of the participants. Parallel behaviour may amount to strong evidence of a concerted practice if it leads to conditions of competition which do not correspond to the normal conditions of the market: *ICI v Commission* [1972] ECR 619 ('*Dyestuffs*').

(ii) The requirement of independent determination of policy on the market on the part of competitors strictly precludes any direct or indirect contacts between competing undertakings, the object or effect of which is either to influence the conduct on the market of an actual or potential competitor or to disclose to such a competitor the course of conduct which the undertaking has decided to adopt or contemplates adopting on the market: *Suiker Unie v Commission* [1975] ECR 1663.

(iii) The prohibition on concerted practices applies to all collusion between undertakings whatever the form it takes. An agreement arises from the expression by the participating undertakings of their joint intention to conduct themselves in a specific way. Concerted practices include forms of collusion having the same nature as agreements which are distinguishable from agreements by their intensity and the forms in which they manifest themselves: *Commission v Anic Partecipazioni* [1999] ECR I-4125.

(iv) A decision on the part of a manufacturer which constitutes unilateral conduct of that undertaking escapes the Chapter I prohibition (though if the undertaking has a dominant position, it might be caught by the Chapter I I prohibition). The concept of an agreement centres around the existence of a concurrence of wills between at least two parties, the form in which it is manifested being unimportant so long as it constitutes the faithful expression of the parties' intention: *Bayer v Commission* [2000] ECR II-3383, upheld by the European Court of Justice, Joined Cases C-2 and 3/01 P, 6 January 2004.

(v) Although the concept of a concerted practice implies the existence of reciprocal contacts, that requirement may be met where one competitor discloses its future intentions or conduct on the market to another when the latter requests it or, at the very least, accepts it: *Cimenteries v Commission* [2000] ECR II-491.

(vi) The fact that only one of a number of competing undertakings present at a meeting reveals its intentions is not sufficient to exclude the possibility of an agreement or concerted practice: *Tate & Lyle v Commission* [2001] ECR II-2035."

26. The Commission will identify a breach of Article 101(1) if it finds evidence of concerted practices with the object of distorting competition regardless of the effect of such practices. However, in a private action for damages, it is not sufficient to show an intention to engage in concerted practices; there must be actionable harm suffered by the claimants. See *BritNed Development Limited v ABB AB & Another* [2018] EWHC 2616 (Ch), [2018] 5 CMLR 37 at [10]:

> "In English law, competition law infringements are vindicated as statutory torts. To establish a claim, two things must be shown: (i) an infringement of competition law; and (ii) actionable harm or damage, caused by that infringement. As has been stated in the context of the tort of negligence – but the point holds good for breach of statutory duty – '[i]t is a truism that a fundamental requirement for a claim in negligence is that the plaintiff has suffered some past "damage". A breach of duty by the defendant is not enough. The cause of action will not accrue until actionable damage occurs. The damage is said to form the gist of the action. Recovery is not limited to this threshold "gist damage", but without it there is no cause of action.' Proving actionable damage inevitably involves demonstrating a causal link between the infringement and the damage, generally using the 'but for' test of causation."

27. See also the Court of Appeal in *Royal Mail Group Limited v DAF Trucks and Others* [2024] EWCA Civ 181 at [9]:

> "The CAT considered the general principles of law at Section H. It dealt with causation and quantum at [167] to [175]. As to causation, it explained that the Claimants' cause of action is in tort and damages are compensatory, referring to S*ainsbury's Supermarkets Ltd v Mastercard Incorporated* [2020] UKSC 24 ('*Sainsbury's SC*') at [194]. The Claimants must establish both (a) a breach of competition law and (b) actionable harm or damage caused by that breach. In this case, the former 'is established by the findings of the Infringement in the Settlement Decision', but the latter must also be proved by the Claimants, which 'will not accrue until there has been actionable damage'. They 'must satisfy the test for causation before there can be consideration of the quantification of their actual loss' ([168]). The CAT cited the explanation of Marcus Smith J at [424]-[427] of *BritNed Development Ltd v ABB AB and ors* [2018] EWHC 2616 ('*BritNed*') as to what a claimant has to prove in terms of actionable damage ([169]). It concluded at [172] that the Claimants 'are required to establish that they suffered monetary harm as a result of the Infringement and they must do so on the balance of probabilities'."

28. The acts complained of in these proceedings take place in various EU Member States. Article 101(1) was at the relevant time a provision of direct effect. No dispute has arisen in relation to governing law save in respect of a limitation defence which was said to arise under German law. That defence was abandoned by Autoliv following the Claimants settling with ZF/TRW.

29. Stellantis and Autoliv both addressed the court at some length on the burden of proof. They accept that the standard of proof is the balance of probabilities, but both parties sought to qualify this test. Autoliv contends that there is a requirement for there to be "strong and compelling" evidence to prove a serious allegation of cartel conduct. In the past some authorities have supported that position. This Tribunal in *JJB Sports PLC v Office of Fair Trading* [2004] CAT 17, [205] Comp AR 29 stated in the context of an appeal from the Office of Fair Trading ("OFT"), that:

> "199. Secondly, in our judgment it is important to distinguish between two different things: what the test is, on the one hand, and what is the nature of the evidence necessary to satisfy the test, on the other. As regards the test, the civil standard is the balance of probabilities. As regards the nature of the evidence, the authorities cited above show that where serious matters are in issue, for example conduct akin to dishonesty, the quality and weight of the evidence needs to be stronger than it would need to be if the allegations were less serious. As we understand *Re H [(Minors) (Sexual Abuse: Standard of Proof)* [1996] AC 563], the law in effect presumes that conduct akin to dishonesty, or capable

> of attracting penalties, is less likely than honest conduct. In addition, in a case such as the present, the presumption of innocence applies.
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> 200. In these circumstances, in applying the balance of probabilities in a case involving penalties, the Tribunal must be satisfied that the quality and weight of the evidence is sufficiently strong to overcome the presumption that the party in question has not engaged in unlawful conduct. For example, if in a borderline case the decision is finely balanced and the Tribunal finds itself to-ing and fro-ing, the correct analysis is that the evidence is not sufficiently strong to satisfy the Tribunal on the balance of probabilities that the infringement occurred.
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> 201. In other words, the Tribunal will not apply what Lord Bingham described in *B v Chief Constable* [[2001] 1 WLR 640] at [31] as a 'bare balance of probabilities' but will direct itself in accordance with the speech of Lord Nicholls in *Re H* at p. 586, that '…even in civil proceedings a court should be more sure before finding serious allegations proved than when deciding less serious or trivial matters'. We take the reference to 'more sure' in the speech of Lord Nicholls to be a reference to the quality and weight of the evidence to which the test is to be applied: the more serious the allegation, the more cogent should be the evidence before the court concludes that the allegation is established on the preponderance of probabilities. Among many examples in the civil courts, we note in particular that this approach applies in cases involving the disqualification of directors, which is now one of the possible consequences of a finding of infringement under the Act, as mentioned above: see notably the judgment of Neuburger J as he then was in *Re Verby Print* [1998] 2 BCLC 23 [1998] BCC 652 under the heading 'The burden and standard of proof.'
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> 202. The Tribunal in *Napp* at [108] expressed the view that whether the Tribunal applied a civil standard based on strong and convincing evidence, or the criminal standard of beyond reasonable doubt 'in practice the result is likely to be the same. We find it difficult to imagine, for example, this Tribunal upholding a penalty if there were a reasonable doubt in our minds, or if we were anything less than sure that the Decision was soundly based'."

30. An action brought by a regulator may be described as quasi-criminal. *Chester City Council v Arriva Plc* [2007] EWHC 1373 (Ch), [2007] UKCLR 1582 was a civil claim in which Rimer J made reference to a requirement of "strong and compelling" evidence:

> "10. Mr Sharpe QC, for Arriva, emphasised that the burden is on the claimants to prove every element of their case. It is not for Arriva to disprove any of them. That burden is one according to the balance of probabilities. In applying that standard it is, however, settled that it is necessary to factor into the assessment the seriousness of the particular allegation being considered, the short point being that the more serious the allegation, the less probable it is that it is well founded and therefore the stronger must be the evidence to make it good (*Re H and Others* [1996] AC 563, at 586, per Lord Nicholls of Birkenhead). The Court of Appeal, in *R (on the application of AN) v. Mental Health Review Tribunal (Northern Region)* [2005] EWCA Civ 1605, at paragraph 64, went further and referred to cases in which 'proof of an allegation may have serious

> consequences even though it cannot be said that the matter alleged is inherently improbable.' The court's view was that a like approach to the application of the standard of proof applies in that situation too so that '[t]he more serious the consequences, the stronger the evidence required in practice to prove the matter on the balance of probabilities.' I confess to a personal difficulty as to how, in the ordinary run of cases, that principle is supposed to operate. Is stronger evidence required to make good a £100,000 claim than a £10,000 one? It is, however, fairly said by Mr Sharpe that the allegations levelled by the claimants against Arriva include the assertion that its intent behind the September registrations was a predatory one directed at wiping CCT out, which is a serious allegation, and I accept that I must take due account of that in deciding whether that allegation is made good. I accept also that the consideration of whether Arriva occupies a dominant position requires a careful and detailed inquiry. I further accept that as the essence of the claim is that Arriva has infringed the prohibition in Part II of the Competition Act 1998 in a manner which could, in another arena, attract severe financial penalties, I should only find the case proved if it is supported by strong and compelling evidence. This is in line with the approach adopted by Blackburne J in *Ineos Vinyls Limited and Others v. Huntsman Petrochemicals (UK) Limited* [2006] EWHC 1241, paragraphs 210 and 211, applying the principle explained by the Competition Appeal Tribunal in *Napp Pharmaceutical Holdings Ltd v. Director General of Fair Trading* [2002] CAT paragraph 109. Mr Brealey QC, for the claimants, did not question this approach as to the application of the standard of proof."

31. It is said by Autoliv that these authorities support the position that "strong and compelling" evidence is required to prove the existence of a cartel. A difficulty with this suggested double requirement – applying the test of balance of probabilities in combination with a requirement for "strong and compelling evidence" – is that one can end up with a case which is proven on balance of probabilities but in respect of which the evidence falls short of being "strong", in which case the standard of balance of probabilities is effectively replaced with an alternative higher standard. It is also difficult to reconcile the requirement for "strong and compelling" evidence with a recognition by the courts that it is in the nature of cartel cases that evidence is likely to be fragmentary.

32. Similar matters have been considered in context of family law. In *In re B (Children) (Care Proceedings: Standard of Proof)* [2008] UKHL 35, [2009] 1 AC 11 it was made clear that there is one test, which is preponderance of probabilities. See the speech of Lord Hoffmann at [13], and Lady Hale at [64]-[72], in particular [70]-[72] as follows:

> "70. My Lords, for that reason I would go further and announce loud and clear that the standard of proof in finding the facts necessary to establish the threshold under section 31(2) or the welfare considerations in section 1 of the

> 1989 Act is the simple balance of probabilities, neither more nor less. Neither the seriousness of the allegation nor the seriousness of the consequences should make any difference to the standard of proof to be applied in determining the facts. The inherent probabilities are simply something to be taken into account, where relevant, in deciding where the truth lies.
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> 71. As to the seriousness of the consequences, they are serious either way. A child may find her relationship with her family seriously disrupted; or she may find herself still at risk of suffering serious harm. A parent may find his relationship with his child seriously disrupted; or he may find himself still at liberty to maltreat this or other children in the future.
>
> 72. As to the seriousness of the allegation, there is no logical or necessary connection between seriousness and probability. Some seriously harmful behaviour, such as murder, is sufficiently rare to be inherently improbable in most circumstances. Even then there are circumstances, such as a body with its throat cut and no weapon to hand, where it is not at all improbable. Other seriously harmful behaviour, such as alcohol or drug abuse, is regrettably all too common and not at all improbable. Nor are serious allegations made in a vacuum. Consider the famous example of the animal seen in Regent's Park. If it is seen outside the zoo on a stretch of greensward regularly used for walking dogs, then of course it is more likely to be a dog than a lion. If it is seen in the zoo next to the lions' enclosure when the door is open, then it may well be more likely to be a lion than a dog."

33. Roth J in *Phones 4U Limited (In Administration) v EE Limited and Others* [2023] EWHC 2826 (Ch) rejected the idea that there was a higher standard of proof in cartel cases having regard to *In re B*. He then went on to recognise the practical problems of obtaining documentary evidence in cartel cases referring to the well-known "*Cement*" case (Cases C-204/00P *Aalborg Portland v Commission* EU:C:2004:6). See [84]-[86]:

> "84. When undertakings are parties to an unlawful agreement or concerted practice, they are in general unlikely to make a clear and full record of what they are doing. In its landmark judgment in Cases C-204/00P etc *Aalborg Portland v Commission* ('*Cement*'), EU:C:2004:6, the CJEU observed:
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> > '55. Since the prohibition on participating in anti-competitive agreements and the penalties which offenders may incur are well known, it is normal for the activities which those practices and those agreements entail to take place in a clandestine fashion, for meetings to be held in secret, most frequently in a non-member country, and for the associated documentation to be reduced to a minimum.
> >
> > 56. Even if the Commission discovers evidence explicitly showing unlawful contact between traders, such as the minutes of a meeting, it will normally be only fragmentary and sparse, so that it is often necessary to reconstitute certain details by deduction.
> >
> > 57. In most cases, the existence of an anti-competitive practice or agreement must be inferred from a number of coincidences and indicia which, taken

> together, may in the absence of another plausible explanation, constitute evidence of an infringement of the competition rules.'
>
> 85. *Cement* concerned a hard-core cartel, but the same approach was directed as regards a looser form of concerted practice in Case C-74/14 *Eturas v Lietuvos Respublikos konkutencijos taryba,* EU:C:2016:42, where the CJEU stated:
>
> > '36. … it must be recalled that, according to the case law of the Court, in most cases the existence of a concerted practice or an agreement must be inferred from a number of coincidences and indicia which, taken together, may, in the absence of another plausible explanation, constitute evidence of an infringement of the competition rules (see, to that effect, judgment in *Total Marketing Services SA v European Commission* (C-634/13 P) EU:C:2015:614 at para 26 and the case law cited).
> >
> > 37. Consequently, the principle of effectiveness requires that an infringement of EU competition law may be proven not only by direct evidence, but also through indicia, provided that they are objective and consistent.'
>
> See also per Kokott AG in [Case C-8/08] *T-Mobile Netherlands* [EU:C:2009:110] at paras 87-89, stating that it would be incompatible with the EU principle of effectiveness for national courts to impose on competition authorities or private litigants criteria for proof of an infringement of art 101 or 102 'that are so onerous as to render such proof impossible in practice or excessively difficult.'
>
> 86. At the same time, before drawing inferences the Court must be careful to ensure that there is no equally plausible and innocent explanation for the fragmentary evidence on which reliance is being placed. To do otherwise would be to reverse the burden of proof as regards serious allegations. Altogether, I consider that the Court has to consider the evidence in the round, looking at the particular items of evidence relied on in context."

34. In these proceedings we have applied the standard of balance of probabilities and have not required the additional standard of "strong and compelling" evidence. We are mindful of the fact that in a cartel case documentary evidence may be fragmentary but that does not mean that the case does not have to be proven. We have had regard to Roth J's observation that before drawing inferences the Court must be careful to ensure there are not equally plausible alternative explanations.

35. In opening, the Defendants drew our attention to *Bord Na Móna Horticulture Limited and Others v British Polythene Industries and Others* [2012] EWHC 3346 (Comm), [2013] UKCLR 50. This concerned an application to strike out a cartel claim which extended beyond the territory in which infringement had

been found by the Commission. Flaux J stated at [43]:

> "43. In my judgment, this must also be correct as a matter of principle. Of course, where the Commission has conducted a detailed enquiry into all the available evidence and has concluded that there was no infringement or that infringement was limited to certain markets, it will be difficult for a claimant to seek to contend or prove the contrary. However, there may be cases where the evidence before the Commission is limited or where its investigations only encompass certain markets so that it finds infringement in those markets but does not go on to find infringement in other markets due to lack of evidence. In principle, in the latter case, if the claimant obtains further evidence which was not before the Commission, it should be open to the claimant to prove at trial infringement in those other markets."

36. Recital (37) of the relevant Decision (AT.38354 of 30 November 2005) stated that the Commission did not have any evidence in its possession suggesting that arrangements concerning other countries were anything but isolated instances. Autoliv (adopting the submissions of TRW) emphasises Flaux J's reference to it being difficult for a claimant to prove that which the Commission has investigated and found to be absent. That raises the question of the scope of the Commission's investigation.

37. Mr West KC, who represents Stellantis, in seeking to persuade us that we should not place reliance on the OSS Decisions to identify the limits of cartel activity, cited *Crehan v Inntrepreneur Pub Co and Another* [2006] UKHL 38, [2007] 1 AC 333. This concerned whether a UK court was required to follow a decision of the Commission involving a different party. It was suggested that the judge, who determined to decide matters for himself, should have followed the Commission in their Decision relating to Whitbread (IV/35.079/F3 of 24 February 1999) in reaching a conclusion that the UK market was foreclosed, notwithstanding that it was Courage, not Whitbread, which was a party to the current proceedings. Lord Hoffmann stated:

> "69. There was a good deal of discussion, both before the Court of Appeal and in argument before the House, about the degree of 'deference' which a national court should show to a decision of the Commission. Mr Vaughan QC is recorded (in para 96 of the judgment of the Court of Appeal) as having constructed a scheme of three degrees of deference (absolute deference, very great deference and deference) which might have to be paid to a decision of the Commission. For my part, I do not find deference in this context a very helpful expression. It is commonly (if not altogether happily) used in administrative law when a court decides that the decision-making power on a

> particular question properly belongs to someone else and that the court should not substitute its own view. But the decision-making power on whether article 81(1) applies plainly belonged to the English court, exercising concurrent jurisdiction, and I find it difficult to see how the exercise of this power can be combined with 'deference' to the decision of someone else. The correct position is that, when there is no question of a conflict of decisions in the sense which I have discussed, the decision of the Commission is simply evidence properly admissible before the English court which, given the expertise of the Commission, may well be regarded by that court as highly persuasive. As a matter of law, however, it is only part of the evidence which the court will take into account. If, upon an assessment of all the evidence, the judge comes to the conclusion that the view of the Commission was wrong, I do not see how, consistently with his judicial oath, he can say that as a matter of deference he proposes nevertheless to follow the Commission. Only a rule of law, in the nature of an issue estoppel which obliges him to do so, could produce such a result and the Court of Appeal accepted that there was no such rule."

38. It is common ground in this case that the OSS Decisions are binding on Autoliv. What is outside the scope of the OSS Decisions is any express finding as to whether there was cartel activity against Stellantis. In the light of these cases, it is plainly open for Stellantis to argue that there was. We address below the extent to which inferences can be drawn as to the scope of the Commission's investigation and the evidential weight to be attached to those inferences.

39. In support of the contention that we are entitled to draw inferences from the failure of Autoliv to call relevant witnesses, Mr West KC relies on *Wisniewski v Central Manchester Health Authority* [1998] EWCA Civ 598, [1998] PIQR P324 and *Herrington v British Railways Board* [1972] AC 877 where Lord Diplock stated, at page 930:

> "The appellants, who are a public corporation, elected to call no witnesses, thus depriving the court of any positive evidence as to whether the condition of the fence and the adjacent terrain had been noticed by any particular servant of theirs or as to what he or any other of their servants either thought or did about it. This is a legitimate tactical move under our adversarial system of litigation. But a defendant who adopts it cannot complain if the court draws from the facts which have been disclosed all reasonable inferences as to what are the facts which the defendant has chosen to withhold."

40. Stellantis also points to other cartel cases where relevant witnesses have been called including *BritNed* and *Phones 4U*.

D. THE DIRECT CASE

41. The Claimants' Direct Case is that Autoliv, with TRW, was a participant in a cartel or cartels concerning the supply of OSS to PSA, FCA and VO. Stellantis relies on the following matters individually and collectively to support this case:

- **First**, Stellantis draws inferences from the OSS Decisions. It submits that in the light of those Decisions it is inherently unlikely that such cartel activity would have been limited to supplies to some particular OEMs and not others. It says that once it is recognised that Autoliv and TRW have succumbed to the temptation to communicate with each other, and avoid or limit price competition on the merits in relation to supplies to German car manufacturers, it is implausible that, in relation to supplies to PSA, FCA or VO, they would have avoided such contact and engaged in competition on the merits. It also observes that key employees at the Defendants, involved in the OSS1 and OSS2 cartels, as identified in the requests for information sent by the Commission, have not been called to give evidence. It asks, forensically, why have none of the relevant people been called to explain the limits of the cartel activity if it is indeed limited to the Japanese and German car manufacturers?

- **Second**, Stellantis relies on documents produced in disclosure which, it says, on their face, show that Autoliv's cartel activity targeted supplies to car manufacturers other than those named in the OSS Decisions, including Stellantis. It makes a similar observation that there was a failure by Autoliv to call relevant witnesses who could have given context to the documents and who could explain a credible alternative, other than cartel activity, if one exists.

- **Third**, Stellantis relies upon its econometric evidence which it says shows that the prices charged to PSA over the Cartel Period for OSS were higher than during a later "clean" period. It then extrapolates the evidence of overcharge to PSA to FCA and VO.

42. Autoliv relies upon the OSS Decisions in support of its case that cartel activity against the Stellantis groups did not take place. It contends that the Commission would have investigated these matters and that we can infer that it found an absence of relevant cartel activity. Autoliv takes a robust position in relation to the evidence produced by Stellantis. It submits that the documents that have been produced do not evidence cartel activity against Stellantis. In closing, it pointed to four factors which it says make the Direct Case implausible:

- The *first* relates to the broad way in which the case has been put – that there was a cartel or cartels operating over the whole of the Cartel Period. It says this would require there to have been coordination by scores of individuals and that such coordination is materially different to the isolated and infrequent infringements of competition law identified by the Commission in the OSS Decisions.

- The *second* factor Autoliv identifies is that the broad allegations of cartel activity have to be seen in the context of bespoke products. Autoliv says this makes coordination more difficult and that it would require regular uninterrupted coordination which is not supported by the evidence.

- The *third* factor is the observation that there were many considerations which went in to determining a supply agreement for a particular platform and that these various considerations could not be anticipated in advance, thereby making effective cartel activity less probable.

- The *fourth* factor is that each of the Claimant groups were in a position to exert significant buying power which also is said to make an effective cartel less likely.

43. As to the failure to call what are said to be relevant witnesses, Autoliv brushes this off with the contention that many of the witnesses are no longer employed by it and that in any event it is unrealistic to suggest that they would have memories which go beyond the documentary material available to the Tribunal, given that the documents are historic.

44. Autoliv is critical of the econometric modelling deployed in support of the existence and effect of the alleged cartel activity.

(1) The OSS Decisions

45. Autoliv accepts that the operative parts of the OSS Decisions, insofar as they relate to Autoliv, including the recitals, are binding upon Autoliv and that to contend otherwise would be an abuse of process (following *AB Volvo v Ryder* [2020] EWCA Civ 1475, [2021] 3 All ER 621). The OSS Decisions are not legally binding on Stellantis but they are embraced by Stellantis and form part of its positive case.

46. At the pre-trial review, we invited the parties to address the Tribunal on the relevance of the OSS Decisions to the matters we had to decide on the direct case. Each of the parties made clear that they wished to rely upon the OSS Decisions to support their respective positions. Stellantis contends that the OSS Decisions evidence the type of conduct of which complaint is made in these proceedings, and that if Autoliv and TRW are prepared to form cartels in respect of sales to certain manufacturers there is no reason to expect different behaviours in relation to manufacturers within the Stellantis group.

47. Autoliv (and, prior to settlement, TRW) is equally enthusiastic to embrace the findings in the OSS Decisions but invite the Tribunal to draw different inferences from them. It contends that the OSS Decisions evidence the limit of the cartel activity in which Autoliv was engaged. It submits that the Commission must have conducted thorough, no-stone-unturned, investigations into its cartel activities and the fact that it has made no reference to cartel activity against any of the Claimant groups supports the absence of such cartel activity. Autoliv observes that the Commission had not only seized numerous documents, but that it had received responses to requests for information and received leniency submissions and that it was likely in a better position to determine whether there had been cartel activity in respect of Stellantis than this Tribunal. Autoliv therefore submits that in these circumstances the starting point for this Tribunal is that it is extremely unlikely that there is evidence

supportive of cartel activity against the Stellantis group otherwise than that which was the subject of findings by the Commission.

48. The OSS2 Decision of 5 March 2019 found two cartels against VW/Porsche and BMW/Mini each involving both Autoliv and TRW. In each case the cartels concerned seatbelts, airbags and steering wheels. They were single continuous infringements of Article 101 TFEU and Article 53 of the EEA Agreement. Takata also participated in the two cartels.

49. The written Decision arises out of leniency notices applied for by each of the participants following which there were settlements. The introduction explains:

> "(1) This Decision concerns two single and continuous infringements of Article 101 [TFEU] and Article 53 [EEA Agreement]. The infringements consisted of exchanging commercially sensitive information and, in some instances price coordination, in respect of supplies of occupants safety systems products for certain passenger cars to companies belonging to the [VW/Porsche] and to [BMW/Mini]. The infringements took place between [...] with respect to the VW Group, and between [...] with respect to the BMW Group.
>
> […]
>
> (3) The products concerned by the conduct are **seatbelts**, **airbags** and/or **steering wheels (Occupants Safety Systems ('OSS'))** for certain passenger cars supplied to companies belonging to the VW Group and to the BMW Group."

50. The procedure the Commission followed is set out in section 3 of OSS2:

> "(15) On 24 March 2011, TAKATA applied for immunity under the Commission Notice on immunity from fines and reduction of fines in cartel cases ('the Leniency Notice') in relation, among others, to collusive contacts related to the supplies of OSS to the VW Group and the BMW Group. On 13 May 2011 the Commission granted TAKATA conditional immunity as regards the supply of OSS to the VW and BMW Groups, pursuant to point 8(a) of the Leniency Notice.
>
> (16) Between 7 and 9 June 2011, the Commission carried out unannounced inspections under Article 20(4) of Regulation 1/2003 at the premises of AUTOLIV and TRW in Germany.
>
> (17) On 10 June 2011, TRW applied for immunity from fines or, in the alternative, for a reduction of the fine under the Leniency Notice.
>
> (18) On 4 July 2011, AUTOLIV applied for immunity from fines or, in the alternative, for a reduction of the fine under the Leniency Notice.

> (19) On 7 July 2017, the Commission initiated proceedings pursuant to Article 11(6) of Regulation (EC) No 1/2003 against AUTOLIV, TAKATA AND TRW (collectively referred to as the 'parties' or, for each undertaking separately, as 'party') with a view to engaging in settlement discussions with them under the Commission Notice on the conduct of settlement procedures in view of the adoption of Decisions pursuant to Article 7 and Article 23 of Council Regulation (EC) No 1/2003 in cartel cases11 (the 'Settlement Notice'). On 7 July 2017, the Commission adopted decisions in which it preliminarily concluded that Autoliv and TRW had met the conditions of point 27 of the Leniency Notice and established the applicable ranges of the reductions in the level of fines that each of the undertakings would receive in respect of the two infringements, provided that they continued to meet the conditions of point 12 of the Leniency Notice.
>
> (20) After each party had confirmed its willingness to engage in settlement discussions, settlement meetings and contacts took place between November 2017 and November 2018."

51. Autoliv is recorded as having met the requirements of the leniency notice by 7 July 2017 (see recital (125)). The process of granting leniency is governed by the *Commission Notice on Immunity from fines and reduction of fines in cartel cases* (OJ C 298, 8.12.2006, page 17). It requires inter alia the following conditions to be met (see paragraph (12)(a)):

> "The undertaking cooperates genuinely, fully, on a continuous basis and expeditiously from the time it submits its application throughout the Commission's administrative procedure. This includes:
>
> — providing the Commission promptly with all relevant information and evidence relating to the alleged cartel that comes into its possession or is available to it;
> — remaining at the Commission's disposal to answer promptly to any request that may contribute to the establishment of the facts;
> — making current (and, if possible former) employees and directors available for interviews with the Commission;
> — not destroying, falsifying or concealing relevant information or evidence relating to the alleged cartel; and
> — not disclosing the fact or any of the content of its application before the Commission has issued a statement of objections in the case, unless otherwise agreed;"

52. Autoliv observes that the leniency investigation took place over a period of six years and that it would have required full and frank disclosure of all relevant activities, which would necessarily have included cartel activities against different car manufacturers. Autoliv's counsel went further in submissions and contended that the process would have included a full internal audit by a third party and that external counsel were appointed to do this. We have, however,

been provided with no evidence to support the fact that an internal audit took place, nor the terms of reference and scope of any such audit, nor any conclusions reached by the auditors.

53. Mr West KC submits that there is no reason to assume that the Commission's investigations were exhaustive. He submits that the Commission is pragmatic and may be content to make findings in relation to the "low-hanging fruit" rather than pursue all avenues of enquiry.

54. OSS2 provides little detail in relation to the information which was provided under the leniency notices other than in recitals (118) and (119). Recital (119) records:

> "Pursuant to recital (18), AUTOLIV applied for leniency at an early stage in the procedure, one month after having been inspected and submitted evidence of Infringement I which represents significant added value with respect to the evidence already in the Commission's possession. In particular, AUTOLIV described the recollection of some of its employees regarding certain contacts with competitors and provided evidence which was relevant for the Commission to prove the duration and the scope of the infringement. AUTOLIV supported its employees' recollection by providing contemporaneous evidence (internal e-mails, calendar entries, minutes of cartel meetings and direct e-mail exchanges) corroborating its participation in the infringement with TAKATA and TRW. AUTOLIV is therefore granted a reduction of 30% of the fine that would otherwise have been imposed for Infringement I."

55. The inquiry by the Commission was apparently prompted by Takata with the focus being principally on cartel activity against BMW and VW (see recital (15)), but it seems likely that the Commission's enquiries extended beyond BMW and VW (see the reference to "among others" in recital (15) and "scope of infringement" in recital (119)). We agree that investigations having taken place over between seven and eight years would have been extensive. The nature and scope of the conduct in the OSS2 Decision is set out from recital (28) onwards:

> **"**(28) The present case comprises two single and continuous infringements which concerned the supply of certain types of OSS (namely certain seatbelts, airbags and/or steering wheels) to the VW and BMW Groups. These infringements consisted principally in exchanging commercially sensitive information but, in some instances, also extended to more concrete forms of coordination between or among AUTOLIV, TAKATA and TRW concerning

supplies of certain seatbelts, airbags and/or steering wheels to: (i) the VW Group (Infringement I) and (ii) the BMW Group (Infringement II).

(29) The overall aim of Infringement I was to maintain the status quo for some of the parties' existing business with the VW Group and, at times, to resist the VW Group's requests to reduce prices, for example when the VW Group asked for quotes for the re-sourcing of previously awarded business regarding specific OSS.

(30) The overall aim of Infringement II was to reduce uncertainty as to the parties' individual strategies in their negotiations with the BMW Group and, at times, to resist the BMW Group's requests to reduce prices, in particular during annual price negotiations.

(31) The aims of the infringements were mainly pursued by exchanging commercially sensitive information related to pricing elements.

(32) On some occasions there was a discussion between or among the parties to try to find an agreed outcome. Although in many cases the parties were unable to reach a specific agreement or did not respect the arrangements reached, a common intention to restrict competition with respect to the relevant supplies of OSS to the VW or BMW Group governed the discussions.

(33) The timing of the collusive contacts had a connection to the relevant business cycles. The contacts had a varied frequency in the course of the overall duration of the conduct, and generally intensified when specific RFQs and/or other requests for price reductions were launched by the VW or BMW Group."

56. Insofar as the OSS Decisions inform as to the likely cartel activity against Stellantis, it is of note that the Commission focuses on activity by object rather than effect. The OSS Decisions refer to the exchange of commercially sensitive information and more concrete forms of coordination. As to effect, the Commission observes in OSS2 that "*in many cases the parties were unable to reach a specific agreement or did not respect the arrangements made*" (recital (32)).

57. As to the scope of the behaviour, it is said that the intention with respect to VW was "*to maintain the status quo for some of the parties' existing business with the VW Group and, at times, to resist the VW Group's requests to reduce prices*". For BMW the conduct seems to have been broader in that "*the overall aim of Infringement II was to reduce uncertainty as to the parties' individual strategies in their negotiations with the BMW Group and, at times, to resist the BMW Group's requests to reduce prices*".

58. The OSS1 Decision of 22 November 2017 found four cartels against Toyota,

Suzuki and Honda as set out above. The Decision offers less support for Stellantis's direct case because the cartels with which it was concerned did not involve TRW: it is relied upon for the spillover case. OSS1's introduction states as follows:

> "(1) This Decision concerns four single and continuous infringements of Article 101 [TFEU] and Article 53 of the [EEA Agreement]. The infringements concerned price coordination and market sharing in respect of the supply of occupant safety systems (OSS) products for passenger cars to a number of Japanese car manufacturers active in the European Economic Area ('EEA'). The infringements took place at various periods between 2004 and 2010.
>
> (2) This Decision is addressed to the following undertakings and legal entities, each of which participated in one or more of the four cartels described in this Decision:
>
> (a) Tokai Rika Co., Ltd. ('TOKAI RIKA');
> (b) Takata Corporation ('TAKATA');
> (c) Autoliv, Inc. and Autoliv Japan Ltd. (collectively referred to as 'AUTOLIV');
> (d) Toyoda Gosei Co., Ltd. ('TOYODA GOSEI');
> (e) Marutaka Co., Ltd. ('MARUTAKA')."

59. This inquiry was prompted by an application for immunity from Tokai Rika followed by Takata, with dawn raids taking place thereafter. Applications for leniency were made by the other parties thereafter. The procedure the Commission followed is set out in section 3:

> **"**(19) On 9 February 2011, TOKAI RIKA applied for immunity under point (14) of the Commission Notice on Immunity from fines and reduction of fines in cartel cases4 ('the Leniency Notice') in relation to collusive contacts related to the supplies of seatbelts to Toyota. On 14 April 2011, the Commission granted TOKAI RIKA conditional immunity from fines for the infringement regarding the supply of seatbelts to Toyota vehicles, pursuant to point (8)(a) of the Leniency Notice.
>
> (20) On 24 March 2011, TAKATA applied for immunity or, alternatively, for a reduction of the fine under the Leniency Notice that would otherwise have been imposed on it in respect of a number of OSS products and provided information on contacts with several competitors. On 16 January 2013 and 4 April 2016, pursuant to point 8(a) of the Leniency Notice, the Commission granted TAKATA conditional immunity from fines for the infringements regarding the supply of airbags to Toyota vehicles, the supply of seatbelts to Suzuki vehicles and the supply of seatbelts, airbags and steering wheels to Honda vehicles.
>
> (21) Between 7 and 9 June 2011, the Commission carried out unannounced inspections under Article 20(4) of Regulation (EC) No 1/2003 at the premises of AUTOLIV in Germany.

(22) On 4 July 2011 AUTOLIV applied for immunity or, alternatively, for a reduction of the fine under the Leniency Notice that would otherwise have been imposed on it.

(23) On 12 November 2013, TOYODA GOSEI applied for immunity or, alternatively, for a reduction of the fine under the Leniency Notice that would otherwise have been imposed on it.

(24) On 4 April 2016, the Commission initiated proceedings pursuant to Article 11(6) of Regulation (EC) No 1/2003 against the addressees of this Decision (collectively referred to as 'the Parties') with a view to engaging in settlement discussions with them pursuant to the Commission Notice on the conduct of settlement procedures in view of the adoption of Decisions pursuant to Article 7 and Article 23 of Council Regulation (EC) No 1/2003 in cartel cases ('the Settlement Notice'). On 4 April 2016, the Commission adopted decisions in which it preliminarily concluded that TOKAI RIKA, TAKATA, AUTOLIV and TOYODA GOSEI had met the conditions of point (27) of the Leniency Notice and established the applicable ranges of the reductions in the level of fines that each of those undertakings would receive in respect of the infringements in which they were involved, provided that they continued to meet the conditions of point (12) of the Leniency Notice."

60. The conduct focused on the maintenance of each of the competitor's incumbent commercial rights to supply OSS for a particular passenger car model. Again, there is some uncertainty around how effective the cartels were, the nature and scope of the conduct being set out from recital (33) onwards:

"(33) The Commission's investigation in this Decision covered four separate cartels which concern the supply of certain types of OSS (namely seatbelts, airbags and/or steering wheels) to Japanese OEMs. These cartels are:

I) Coordination between TOKAI RIKA, TAKATA, AUTOLIV and MARUTAKA concerning certain supplies of seatbelts to Toyota;

II) Coordination between TAKATA, AUTOLIV and TOYODA GOSEI concerning certain supplies of airbags to Toyota;

III) Coordination between TAKATA and TOKAI RIKA concerning certain supplies of seatbelts to Suzuki;

IV) Coordination between TAKATA and AUTOLIV concerning certain supplies of seatbelts, airbags and steering wheels to Honda.

(34) The essence of each of the four cartels concerned the maintenance of each competitor's incumbent 'commercial rights' to supply a specific type of OSS for a particular passenger car model. When the OEM in question developed new models of certain existing passenger vehicles, the relevant competitors coordinated in an attempt to ensure that the supplier who had won the award for supplying the relevant OSS equipment for the previous model (that is to say the incumbent supplier) would also supply the OSS for the new model.

(35) The relevant Parties also met when the OEM in question introduced certain completely new models. In the absence of pre-existing 'commercial rights', the relevant Parties sought to find a common understanding as to which Party would supply the relevant OSS equipment to the OEM for that model.

(36) The overall aim of each of the four cartels was to respect the incumbency principle and to coordinate on prices. This aim was pursued by coordination of responses to specific RFQs and exchanges of commercially sensitive information on requests from OEMs which were not related to a specific procurement event, with a view to coordinating the relevant competitors' conduct. For example, OEMs generally requested annual price reductions ('APRs'). These reviews related to particular OSS equipment currently being supplied to the OEM (for which production had already started) and took place during specific periods of the year. The relevant Parties coordinated their positions in an attempt to submit a common reaction to the OEM. Occasionally, some Parties also discussed the coordination of possible price increases to be passed on to the relevant OEMs due to increases in the cost of raw materials.

(37) Even though on some occasions the relevant Parties may have been unable to reach an agreement or did not respect the arrangements reached, in most cases there was at least a discussion between the relevant competitors to try to find an agreed outcome.

(38) The timing of many of the collusive contacts was naturally related to the timing of the business cycle. The contacts had a varying frequency in the course of the overall duration of the collusion. Contacts generally intensified when specific RFQs were launched."

61. See also recital (70) to (73):

"(70) In that regard, it is apparent from the General Court's and Court of Justice's case law that certain types of coordination between undertakings reveal a sufficient degree of harm to competition that it may be found that there is no need to examine their effects. That case law arises from the fact that certain types of coordination between undertakings can be regarded, by their very nature, as being harmful to the proper functioning of normal competition. Article 101 is intended to protect not only the interests of competitors or consumers, but also the structure of the market and thus competition as such.

(71) Consequently, certain collusive behaviour, such as that leading to horizontal price- fixing by cartels, is so likely to have negative effects, in particular on the price, quantity or quality of the goods and services, that it may be considered redundant, for the purposes of applying Article 101(1) of the TFEU, to prove that it has actual effects on the market.

(72) Based on the submissions of the Parties and the other evidence obtained during the course of the Commission's investigation, in each of the four infringements, the relevant competitors coordinated their behaviour to reduce uncertainty between themselves in relation to the supply of specific OSS components in the EEA. They did this by engaging, to varying degrees, in project allocation, price coordination and exchanges of commercially sensitive information.

(73) Therefore, the object of the parties' behaviour in each of the four infringements was to restrict competition within the meaning of Article 101 and Article 53 of the EEA Agreement."

(2) Witnesses of fact

62. The witnesses of fact who gave evidence in relation to the issue of procurement were:

- For VO, Mr Wojciech Saternus, who is employed by Stellantis Gliwice Sp. z o.o., formerly GM Manufacturing Poland, as a senior buyer and program buyer of safety components in the purchasing department. From 2013, he joined the purchasing department at GM, which dealt exclusively with VO procurement until PSA acquired the VO brands from GM in 2017, where he has worked to date. Mr Saternus is responsible for the production of safety components that go into vehicles, and all related commercial activities with suppliers, including procurement, any engineering changes, and other activities such as purchase order creation and managing any production issues.

- For PSA, Mr David MacQueen, who is employed by Stellantis Auto SAS, formerly PSA Automobiles SA, as senior vice president of powertrain purchasing. He joined PSA in 1998 as an innovation buyer, and held various positions there, including the position of purchasing executive manager between 2007 and 2010, which involved supervising buyers of OSS. Mr MacQueen's responsibility was to assist buyers in conducting the tendering process of OSS and selecting a supplier, including validating the proposal on supplier sourcing, and assisting with price negotiations, as well as overseeing a long-term strategy of OSS procurement.

- For FCA, Mr Alberto Carosso, who is currently employed by Stellantis Europe SpA, formerly Fiat Group Automobiles SpA and FCA Italy SpA, as the global purchasing program manager. From 2011 he was employed by FCA as a senior buyer of OSS, responsible for buying OSS.

- For Autoliv, Mr Sven Michalik, who is employed as a project manager at

Autoliv BV & Co KG in Elmshorn, Germany. He joined Autoliv in 1996, and was project engineer in the Ford project team until 2002. Since 2002, he has worked primarily on projects for GM Europe. Between 2002 and 2006, he was a project team leader in Autoliv's GM Europe team; between 2006 and 2015, he was a project platform leader; between 2015 and 2002, he was a customer technical manager in the engineering team, reporting to the PSA business unit ("BU") in 2017; since 2022, he has been a project manager leading a seatbelt application project for supply to another OEM.

- For Autoliv, Mr Fabrice Yves Corbut, currently employed as director of commercial excellence at Autoliv France. He joined Autoliv in 1996, and has worked in a number of roles there including: project manager and account manager in the Renault BU from 1999 to 2003; engineer responsible for Autoliv's frontal airbag department from 2003 to 2006; director of Autoliv's technical centre in France from 2006 to 2013; and director of the BU responsible for Autoliv's supply of passive OSS to PSA from 2013 to 2020.

- For Autoliv, Mr Pietro Antonio Squilloni, currently employed as a BU director at Autoliv Switzerland, leading the BU responsible for OSS supply to Stellantis Europe, having held various positions over 20 years with Autoliv. He joined Autoliv in 2003, supporting the engineering team at Fiat SpA for two years. He then held positions as: programme manager from 2005 to 2013; customer technical manager from 2013 to 2017 for inter alia passive safety systems; and his current role since 2017, where he is in charge of sales of OSS products to and the commercial relationship with Stellantis Europe.

63. The procurement witnesses all answered questions fairly in the witness box.

(3) The procurement process

64. There was broad agreement between the parties on the process of securing contracts for the supply of OSS components. OSS components are typically

bespoke, customer-specific products. OSS suppliers and OEMs negotiate terms of supply through Request for Quotation ("RFQ") processes.

65. RFQs are issued where OSS components are required for, among other things, a new vehicle, a new vehicle platform, or a new version of an existing vehicle. RFQs may also be issued in the course of an existing contract, such as where an OEM requires a technical change to a product, a change to production levels, or more generally seeks to obtain a lower price, although an RFQ will not always be issued for such changes.

66. RFQs may cover more than one OSS product category (i.e. airbags, seatbelts or steering wheels) and products within a category (e.g. front airbags and side airbags). RFQs may also cover more than one geographic region or vehicle model (sometimes referred to as a "global sourcing"). Whether different product categories and components within product categories would be part of separate RFQs or not was assessed by the OEMs on a case-by-case basis.

67. During the Cartel Period, the OEMs' selection of a supplier and the negotiation of the prices of OSS components typically followed the steps below, with some differences depending on the particular Stellantis group.

68. In order for the OEMs to select their tenderers, the initial step was to identify the suppliers to be included in the RFQ process. This pre-RFQ selection process was lengthy, particularly for new contracts, and could take a year or more. Several qualitative criteria were relevant for selecting the tenderers, for example, a supplier's location, financial position, quality track-record and manufacturing capabilities. The OEMs rated prospective suppliers on the basis of those qualitative criteria to determine whether any particular supplier was to be included in a given RFQ.

69. Sometimes there would be pre-RFQ engagement between the preferred supplier and the OEM, during which the OEM would communicate its expectations for the project at an early stage. This type of engagement was typically reserved for more complex or high-volume projects, or projects with particular

significance for the commercial relationship between the supplier and OEM. Meetings between suppliers and OEMs could also take place unrelated to any specific RFQ, to promote the suppliers' general product offering or discuss innovation studies conducted by the suppliers to resolve specific technical challenges encountered by the OEM.

70. Next, the OEM determined the target price for a component, based on its estimation of what the cost of the component should be (the "Should Cost" estimate) and the overall price of the vehicle and margin it aimed to make (the "best knowledge" estimate). To build the Should Cost estimate, the OEM relied on its own engineers' know-how, experience from sourcing raw materials from other (component) suppliers, and knowledge obtained through previous RFQ processes, including prices paid and costs breakdowns previously provided by its suppliers. The target price was typically communicated to the selected tenderers as part of the RFQ process, although the time at which that communication took place varied from OEM to OEM.

71. The RFQ was then issued to the selected suppliers. The RFQ comprised a package of lengthy documents, typically including, amongst other things: the components' desired technical specifications and applicable quality standards; the project's logistical specifications; and the OEM's standard terms and conditions. Anticipated volumes and contract duration were also usually specified in the RFQ.

72. Tenderers that wished to be considered by the OEM as potential suppliers would respond to an RFQ with offers that contained both a technical and economic/commercial offer. Further to these responses, the OEM would evaluate the technical characteristics of the tendered component(s).

73. After tenderers qualified for the RFQ based on their technical offer, price negotiations began. For Autoliv, commercial negotiations were managed by the sales team in the BU responsible for the relevant OEM. The BU designed the pricing strategy for the RFQ. Before responding to an RFQ, the relevant BU would seek approval of the sales team's business case for the RFQ from the

Project Steering Committee ("PSC"). The PSC comprised Autoliv senior management for the applicable region. The PSC would authorise the BU sales team's proposed first offer to be made to the OEM in response to the RFQ (the "walk in" price). The PSC would also set the minimum level of profitability for the project for subsequent offers before further approval from senior management was required (the "walk away" price).

74. The OEM would request a breakdown of the supplier's costs of the components for the tendered part in the response to the RFQ. The OEMs also negotiated price reductions, often based on bids that had been received in response to similar RFQs in the past. OEMs would provide varying degrees of feedback to suppliers during the RFQ process based on the target price; and/or bids relative to other competitors (including their pricing); or the pricing level the OEM wanted. The OEMs' approach to price negotiations was also affected by their desire to diversify and manage the market shares of their OSS suppliers.

75. An important feature of most RFQ negotiations related to the bidders' commitments to contractual Annual Price Reductions ("APRs"). These were also known as Long-Term Agreements ("LTAs") or Lifetime Conditions ("LTCs"), which specified an annual discount to be applied one year after the start of production ("SOP") and in general for a period of three to four years. In addition, negotiations may have often included a further discount ("Giveback") calculated on the basis of the contract's projected turnover.

76. After the contract was awarded to a supplier, if a component that was the subject of the RFQ was a new component, a product development phase began. The development phase typically took between two to three years, although the exact length of this period varied between projects and OEMs. Once that phase was complete, the component would then enter into serial production. Price amendments were frequent during the development phase, as a result of changes made to the OSS component which would impact its costs of production (sometimes referred to as an "Engineering Change Request"). Engineering Change Requests could be made by the supplier or OEM, and would be subject to corresponding price negotiations for price increases or decreases. As a result,

the component's RFQ price would typically be different from the price at the SOP.

77. Apart from contractually defined discounts negotiated at the RFQ stage, the price of OSS components was often subject to change during the lifetime of a contract (i.e. during serial production). Among the reasons for price amendments were: (a) technical changes; (b) changes in production volumes; and/or (c) raw material price increases ("RMPIs") (save that FCA unlike PSA and VO never agreed to RMPIs). Those changes would be discussed on a case-by-case basis with suppliers.

78. The OEMs would often request or require yearly productivity discounts from suppliers on the basis of yearly production efficiencies over the lifetime of the contract. Where provided, those discounts were in addition to any contractually agreed APRs or LTAs. Those negotiations would typically coincide with RFQ negotiations for new business.

(4) Participants in the market

79. According to Stellantis's closing submissions, Autoliv, ZF/TRW and Takata, the three principal OSS suppliers on the market at the relevant time, held between them a very high share of Stellantis's purchases of each kind of OSS component. The overall share of the market held by the three companies was set out in Table 2.1 of the First Expert Report of Mr Mat Hughes for Stellantis:

	Seatbelts		Airbags		Steering Wheels	
	2007	**2012**	**2007**	**2012**	**2007**	**2012**
Autoliv	58%	47%	42%	38%	21%	17%
TRW	26%	37%	35%	42%	42%	48%
Takata	8%	9%	13%	14%	21%	19%
Total	**92%**	**93%**	**90%**	**94%**	**84%**	**84%**

80. Stellantis further notes that PSA, FCA and VO were three OEMs amongst many to whom Autoliv and other OSS suppliers supplied OSS components. Mr

Hughes set out their market shares in footnote 166 of his First Expert Report as follows: "PSA's 2007 market share in the sales of passenger vehicles was 13.2%, [FCA's] was 8.8% and [VO's] was 8%".

(5) Countervailing purchasing power of the car manufacturers

81. A point repeatedly emphasised by Autoliv is that the car manufacturers enjoyed countervailing bargaining power with the manufacturers of OSS components and that this is relevant as to whether: (a) the conditions for collusion exist at all; and (b) any putative infringement would be likely to have any effect.

82. The Tribunal accepts that countervailing purchasing power may impact the effectiveness of a cartel. We see no basis, however, for the implied assertion that if a car manufacturer has countervailing buyer power, conditions for collusion do not exist or that collusion cannot result in an overcharge. We refer to recital (71) of OSS1 (cited above) where it is stated that cartel activity is likely to have negative effects.

83. As to establishing that car manufacturers had countervailing purchasing power, Autoliv points to the Commission's Decision in Magna/New Venture Switchgear ("NVG") (M.3486 of 24 September 2004). This concerned Magna's acquisition of Daimler Chrysler's NVG assets. NVG was a manufacturer of automotive transfer cases, power transmission units, compounders and other automotive components. It was stated in this Decision, at recital (44), that "*the Commission considers that OEMs have countervailing buying power*". It was then stated at recital (47):

> "The Commission has noted in previous cases in the automotive components industry that OEMs have buying power towards the component manufacturers. OEMs usually have an excellent knowledge of prices and costs for components on a world-wide basis and seek offers from suppliers prior to contracting component which is often done for the life of the respective car model. The market for tenders is highly competitive at the tender level and the threat to meet internally the whole or part of the OEMs' component requirements is a powerful bargaining tool to gain cost or other concessions from component suppliers. The notifying parties have therefore argued that the market shares are a much less reliable indicator of market strength of automotive component manufacturers than in other industries."

84. Autoliv points to section 60A(3) of the Competition Act 1998 which provides that a Tribunal must "*have regard to any relevant decision or statement of the European Commission made before IP Completion day and not withdrawn*." We do not consider this Decision relevant given that it was not concerned with OSS suppliers and has to be understood in the context of the suppliers with which it was concerned.

85. The Commission in TRW Automotive/Dalphi Metal (M.3972 of 12 October 2005) was concerned with the merger of TRW and Dalphi Metal and whether such an entity could distort competition in the market. It is recorded in recital (21) that "*[n]one of the OEMs consider that the concentration would make them overly dependent on TRW/Dalphi*." It was then stated in recital (23):

> "It can be concluded that airbags and steering wheels are buyer markets, with significant buyer power that has increased over the years as a result of the consolidation in the car manufacturing market and the OEMs' cross brand sourcing strategy. The OEMs feel confident that stringent cost and quality audits, on-line auctions, combined demand across platforms and unilateral renegotiation of supply contracts is sufficient to counter this level of concentration."

86. The Commission in KSS Holdings/Takata Corporation (M.8741 of 21 February 2018) considered the merger of KSS and Takata in the context of OSS. It stated at recital (69):

> "The automotive OEMs purchasing passive safety products are large, well-established buyers that have a high level of expertise. The results of the market investigation indicate that OEMs are confident that, for the products concerned, they would be able to counter any price increases brought about by the Transaction."

87. We agree that car manufacturers are well-established buyers with a high level of expertise and have the capacity to counter price increases in the absence of cartel activity. The Commission went on to state in recital (84):

> "*Finally*, as developed in paragraph (69) the market investigation revealed that, in the present case, automotive OEMs would likely be able to counter attempts of airbags, steering wheels and seat belts manufacturers to increase prices through coordinated behaviour."

88. As to the suggestion in this recital that "*automotive OEMs would be likely to able to counter attempts…to increase prices*", the Commission is not, in our

view, making a finding that future cartels will necessarily be ineffective. Moreover, even if it were expressing this view, that seems to be impacted in part by the matters recorded in recital (79), where it is suggested that the fine recorded in OSS1 and Takata's cooperation are relevant considerations going forward.

89. It is clear from the evidence presented in these proceedings that each of the Stellantis groups were experienced and sophisticated purchasers. They preselected suppliers in order to determine which should receive an RFQ. We were shown PSA internal documents which evidenced the active management of market share for OSS suppliers ensuring adequate diversity of supply and an understanding of the variation in material costs. Mr MacQueen, giving evidence from the perspective of PSA, explains:

> "16. Prior to the RFQ, we would also define an internal '*target price*' at which PSA wanted to purchase an OSS component. The target price came from the Project team and was their responsibility. To set the target price, the Project team combined two approaches: '*should cost*' estimates and '*best knowledge*' estimates, which they routinely discussed with the Purchasing team.
>
> (a) By 'should cost' I mean the internal bottom-up view of what the cost of the component we are sourcing should be. We had to build this knowledge from numerous RFQ feedbacks and supplier cost breakdowns and it took a while building such a database for us to start forming our own assessment or view on the target price.
>
> (b) By 'best knowledge' estimates, I refer to '*top-down*' costing. This top-down approach confirmed the margin that PSA wanted to make and the total cost of the car. Then the total cost of the car was broken into subcomponents which included what we should be paying, or what we expected to pay for the steering wheel, airbag, and seatbelt.
>
> 17. Sometimes the Purchasing team disputed the target price given by the Project team. This happened for example when there were discrepancies between the 'should cost' (bottom-up view) and top-down approach. This was because sometimes what the Project team expected the profit to be did not completely correspond to the underlying technical definition and 'should cost'. When this happened, the Project team would re-consider and fine-tune the component's specification to meet the target price, or alternatively increase the target price as a trade-off.
>
> 18. We also '*benchmarked*' each OSS component by comparing their target price and their technical content across different car models built on the same platform (meaning cars built with a shared set of common design, engineering, and production line, as well as key components in order to reduce costs) as, within the same platform, the airbags, seat belts and steering wheels were very similar across different car models. As an example, the Citroen C2 and C3 were

> sourced from the same platform, and therefore had similar parts. In addition, we would compare the target price and technical content of OSS in cars built on the B-segment platform (for small cars) versus the C-segment platform (for suburban cars) to understand the differences, and also the pricing of suppliers between platforms against the 'should cost'. However, the accuracy of this cost benchmarking was highly dependent on the cost breakdowns provided by suppliers."

This shows that PSA had informed views as to what they should be paying for OSS components.

90. Mr Saternus for VO explains that very often the target price set by VO was "*very low and challenging to achieve*". He also explains:

> "23. At the start of the RFQ, I would inform all the potential suppliers about the exact price targets provided by the Program team (as mentioned in paragraph 17 above). After getting the suppliers' first offers, I try to analyse the offers from the supplier side, looking at any cost breakdowns (or 'bill of materials', as mentioned in paragraph 16 above) they might have provided with their offers. I also compare the content of these components to the last product this supplier had delivered, to try to understand if and how they differ from the 'current' price, meaning from the other project(s) which have already been awarded to them. This is a benchmarking process: at this stage, I am trying to understand exactly what they are offering in other serial projects and how much they differ from the current offers in our new RFQ."

91. And Mr Carosso gives similar evidence on behalf of FCA:

> "21. To negotiate and agree the final price with suppliers we used 'benchmarking'. What I mean by benchmarking is comparing the prices given by suppliers for an OSS component for previous vehicles. At FCA we benchmarked across different brands of cars, regions and suppliers as a reference point when negotiating with suppliers – this process was recorded in internal presentations called 'Recommendation' where we presented the final result to the leadership. Benchmarking reflected the purchase order price, which was normally the reduced target price sent to suppliers (which was itself below the benchmark price because we wanted to improve profitability). Sometimes the target price was challenged by suppliers and we would negotiate. Other times the target price was aligned to the benchmark. Usually there were several rounds of negotiations before awarding the contract to a supplier. There were also technical discussions with the help of the Engineering team to ensure we were aligned with suppliers from a technical standpoint."

(6) Witness evidence directed to cartel activity

92. Stellantis does not advance a case of cartel activity (by object or effect) based upon its witness evidence. Mr MacQueen explains that the suppliers upon which PSA were mostly dependent between 2007 and 2010 were Autoliv and

TRW, with some supply coming from KSS and Takata. He describes Autoliv and TRW as "*tough transactionally and not transparent*". He states:

> "41. I remember without being able to name the projects that sometimes the pricing levels from suppliers were a bit strange from project to project, almost as if they were saying 'well, I'm giving you the quote because you're asking me and there are not many people, but I don't want this project. Therefore, my quote is not competitive'. Whereas they were competitive on a quite similar component for another project. I remember a situation – although I can't recall the exact project – where we were faced with not exactly understanding why the prices could be significantly different from one project to the other; the message being a supplier did not want this project. As to why, without being completely able to characterise it, it could be Autoliv and TRW were splitting PSA's business. Without any firm evidence we wouldn't have raised this suspicion in those terms but would have challenged such supplier on the inconsistency of their own commercial quotes from one project to another."

93. He goes on in his witness statement to say that such matters could be explained by availability of work force. In cross-examination he did not identify any reasons to suppose cartel activity was the cause of these observations. Other than this comment, there were no examples given of higher-than-expected prices being paid which could not otherwise be explained.

94. Mr Saternus for VO describes Autoliv and ZF as having good reputations and being technically good but gives no fact evidence relating to cartel activity.

95. Mr Carosso for FCA notes that TRW and Autoliv were FCA's biggest suppliers of OSS components and that Autoliv were best-in-class for engineering but less competitive in pricing than TRW. He also notes that TRW's cost breakdowns were more detailed. He provides no fact evidence relevant to cartel activity.

96. As to Autoliv, Mr Corbut who was director of the BU responsible for OSS to PSA from 2013 gives no relevant evidence. Mr Squilloni's evidence does not materially go beyond stating that FCA is a tough negotiating partner.

(7) Contemporaneous documents relied upon which are said to evidence cartel activity

97. In these proceedings disclosure was provided to Stellantis which included the Commission file and documents provided to other regulators. A number of disclosure documents were relied upon by Stellantis which were said to support

the Direct Case. We consider the principal documents relied upon below. The dates of some of these documents are open to alternative interpretations, depending on whether the dates are represented as day/month or month/day. There were no active disputes about the correct interpretation of these dates, and we do not understand anything material to turn on this.

98. It is apparent that some of the documents relied upon were annexed to Autoliv's leniency statement to the Commission. We were asked by Stellantis to draw an inference from this fact when interpreting documents, the suggested inference being that the documents must evidence cartel activity or they would not have been annexed to the leniency statement. We disagree and we do not draw any inference from a document annexed to a leniency statement beyond the interpretation which this Tribunal can fairly draw from its contents.

99. The documents relied upon fall into two broad categories. Some documents are said to evidence cartel activity between TRW and Autoliv in respect of the Stellantis groups in Europe and are therefore plainly relevant to this dispute. Others are said to evidence cartel activity with other participants or against other car manufacturers or against Stellantis in other jurisdictions. We gain little assistance from such documents and consequently have not analysed them all, but we do refer to examples. Insofar as these matters are advanced to support a submission that Autoliv is a company which is prepared to engage in cartel activity, then that has already been established by the Commission, and it is not necessary to engage in the far more difficult task of trying to determine whether documents evidence other cartel activity in respect of other car manufacturers or in other jurisdictions. For example, we received written submissions concerning alleged cartel activity involving Autoliv, Takata and Toyoda Gosei in relation to a joint venture between Toyota and PSA in 2008. As it was accepted this did not involve TRW it does not fall within the scope of the claim.

100. Stellantis says that evidence of cartel activity in relevant territories, beyond that identified by the Commission, shows that the Commission has not unearthed all the cartel activity in its OSS1 and OSS2 Decisions. That is a valid point insofar as it goes, but even if made well, one cannot extrapolate from this observation

that there is relevant cartel activity against Stellantis of the scope alleged. Further, as we explain below, we are not attracted by Autoliv's submission that the OSS Decisions evidence a positive finding of the limits of cartel activity.

A. Internal Takata email of 6 November 2002

101. This is an email between Takata employees. In its opening paragraph it observes that General Motors Brazil is having problems with its current suppliers of seat belts in Brazil. It contains the following text:[2]

> "As you could check below, GMB current situation of SB suppliers is very difficult , therefore we *can* understand the reason why , *so suddenly*, we got so important to GMB. The reasons are:
>
> 1. **HUZITEKA**
>   No technology to supply SB with LL and PT, bad quality and bad engineering support;
> 2. **CRIS**
>   No technology to supply SB with LL and PT, big pressure to increase prices;
> 3. **TRW**
>   It seems like they are no more interested to get SB business not only for GMB but also for all of the other customers, high price (according to GMB);
> 4. **AUTOLIV**
>   Enormous pressure to increase price, they also count on their Stockholm Headquarter support;
>
> We know that the GMB price, historically, is very miserable (we have made phase out of Corsa, Vectra and Celta this year due to price) and that our current price is also high than Autoliv and TRW, based on this, we won't see possibility to make money with this business. According to the above situation we could define one strategy to 'seat and talk' with GMB and try to reach a good business for both sides.
>
> Ms. Siomara told me that she would be asking Mr. John Chermside to contact you Bob to discuss this 'good business opportunity' to Takata Petri SA.
>
> One more subject that is in need to discuss is our relation with Autoliv, as most of the above mentioned business are their and of course, if we get them, we may create difficulties in our relation with Autoliv .Only for your information, last Monday we received the Purchase Order from Autoliv to produce the non Airbag frame for Ford Amazon (we will be sending complete information to you by today).

[2] J1/71/1 and J1/71/2.

> Only for your information attached you will find a chart with Autoliv's prices we got from them to Meriva and S10 project (our first strategy was cover Autoliv's price)."

102. Takata are not a party to this action and this email concerns supplies in Brazil. It does not evidence the cartel activity which is the subject of this claim. It is apparent that Autoliv is buying a non-airbag frame for Ford from Takata. It is of note that Takata has Autoliv's price list, but it is not clear where it got this price list from – the words "we got from them to Meriva and S10" lack clarity.

B. Communications relating to Opel's global pricing strategy including an internal Autoliv email from Mr Torben Schonborn to Mr Arthur Blanchford and Mr Jochen Fischer of 27 February 2003 and June meeting between Mr Joachim Aigner and Mr Klaus Fruck

103. This email of 27 February 2003 was supplied by Autoliv to the Commission as part of the annex to its leniency submissions and evidences a discussion about Opel's strategy to engage in global sourcing. The context is that in 2003 Opel took a decision to specify the same models of steering wheel, driver airbag and passenger airbag for a number of its models in Europe and to issue a single RFQ. This may have been disadvantageous to its suppliers. The email states:[3]

> "I had a longer discussion today with Klaus Fruck, counterpart to Art from TRW!
>
> In general we agreed that we are not willing to support Opel's strategy regarding their intention with this global sourcing! When business is sourced we should give each other the chance to recover the sourced price by engineering changes! He also has a lot of problems with Opel's pricing and want to take the opportunity to recover loss business.
>
> Furthermore I am very glad he brought up some points he is not willing to stand any more and we want to make a clear common statement to GM-Fiat-WWP whenever these points will come up:
>
> - Breakdowns for all engineering changes on a detailed level
> - Targets regarding VA/VE savings
> - Tooling Breakdowns
> - Working together to increase market prices up to a profitable level
>
> When we receive the RFQ for the sourcing we want to come together to discuss further details.

[3] J1/41/1.

> Next step will be to discuss these items also with Takata and to build up a better relationship with our competitors."

104. On its face this is evidence of cartel activity. The discussion with Mr Fruck from TRW concerned cooperation to give each other the chance "*to recover sourced price by engineering changes*" and "*[w]orking together to increase market prices up to a profitable level*". It also states "*[w]hen we receive the RFQ for the sourcing we want to come together to discuss further details*."

105. Autoliv has adduced no evidence of an alternative explanation for this document. In submissions it suggests that this is not evidence of the exchange of commercially sensitive information but evidences an intention to make a clear common statement to Opel regarding its policy which, it says, is permissible. Autoliv also contends that the reference to "*[w]orking together to increase market prices to a profitable level*" is a reference to working with car manufacturers and not to working with TRW. We do not consider this to be a credible interpretation of this document.

106. An email of 10 September 2003 from Mr Alan Hylton, retired, but formerly of Takata to Mr Barth Guillermo of Dalphi Metal (which was acquired by TRW in 2005) stated:[4]

> "We met on a few occasions to secure 'some kind of deal' that would safe guard our respective profit margins against the mighty Opel."

107. Again, this is evidence of cartel activity in relation to Opel's global sourcing strategy.

108. On 27 October 2003, Opel notified suppliers including Autoliv, TRW and Takata of its upcoming global sourcing RFQ by email.[5] An email of 6 November 2003 from Sven Kleinschmidt of TRW to both Mr Aigner of Autoliv and Mr Fruck of TRW, gives directions to a meeting on 10 November 2003 in Ulm.[6] No evidence has been provided by Autoliv which explains the purpose of this

[4] J1/692/35.
[5] J1/129/1.
[6] J1/43/1.

meeting. Given the timing, the other exchanges to which we refer, and the absence of an alternative explanation it is reasonable to infer this meeting relates to collusion around Opel's global sourcing.

C. An email between Mr Werner Mueller of TRW and Mr Aigner of Autoliv of 5 July 2004

109. Mr Mueller was manager for sales/marketing (inflators) from 2002-2004 and Application Engineer thereafter for TRW. This is an email[7] with the subject "*10 July and Opel*". Mr Mueller is contemplating bringing his family to visit Mr Aigner of Autoliv. He also informs Mr Aigner that in respect of GM the thorax airbag contract "*was probably actually won by*" a competitor Dalphi Metal (which was subsequently bought by TRW in 2005). He observes that it "*wouldn't be the first time that someone has 'won' a deal and then not got it…, wouldn't be the first time for the proud Spaniards either*". Such communications are consistent with cartel activity in that it is difficult to understand why Mr Mueller should be discussing this contract with a competitor, and in particular discussing the possibility of Dalphi Metal yet being unsuccessful. It does not however directly evidence the exchange of confidential commercial information.

D. An email of 28 April 2004 from Mr Peter Markowsky of TRW to various other TRW employees and copied to Mr Peter Lake

110. Mr Markowsky was at this time director of customer development at TRW. His email states:[8]

> "John, please give us a chance to reestablish our sense of honor. The information I got from different Autoliv individuells are the following:
>
> Givebacks Autoliv 2004:
>
> BMW 3%
>
> DCX 6.7% (LPV for 05 5,5%)
>
> GMCE/Opel 3,5% (Do not fullfill the score card, lost epsilon (Vectra) business due to global sourcing.)

[7] J1/46/1 and J1/46/2.
[8] J1/707/1.

Ford (They give > 5 Mio € for awarding EUCD Mondeo business)

PSA/Renault 3.0 - 3.5%

VOLVO 3.5%

VW 3%

In total > 3.0% VA/VE incl."

111. Autoliv individuals disclosing commercial information as to Givebacks, including GM/Opel, and PSA/Renault is prima facie evidence of cartel activity. The contents of this email were addressed by Mr Christophe Drouin of TRW in his witness statement for these proceedings. From 1 February 2002, Mr Drouin was account manager for TRW's passive safety division in charge of PSA. He says he had not seen the email before and does not know how Mr Markowsky obtained this information. He also comments that a Giveback of 3-3.5% is not realistic from his experience in charge of PSA.

112. Autoliv has addressed no evidence to this email but in submissions describes it as an isolated incident. It notes that there is no evidence that this information proved material.

E. Documents relating to activities in Brazil

113. A number of documents were relevant to alleged cartel activity in Brazil. An example which was relied upon by Stellantis was an email chain[9] including Airton Evangelista and Tim Healy of Takata in May 2004. It attaches a TPSA (Takata) weekly sales report which contains the following statement:

"Fiat LAAM

- **Stilo / Doblo**

- An opportunity to present a quotation was given to TPSA. This business belongs to Autoliv. At the same time an opportunity to present a quotation to Palio Restlying II was given to Autoliv, obviously aiming to drop both prices. An agreement was made between TPSA and Autoliv not to play on Fiat's game".

[9] J1/72/5.

114. This produced the following comment from Mr Healy:[10]

> "Airton I think it is right decision not to be aggressive on Fiat Lamm but this discussion with Autoliv is not acceptable to have".

115. As we have indicated we do not feel in a position to extrapolate from comments made in Brazil concerning the Brazilian market to findings to be made in the relevant territories for these proceedings.

F. Documents relating to the Autoliv Paris sales meeting of 13 September 2004.

116. There are meeting minutes of a sales meeting in Paris on 13 September 2004.[11] Item 4 states:

> "**Raw material price increase**
>
> talk to OEMs and bring this argumentation during price negotiations. Communicate/cooperate with TRW and Takata. More information will follow soon."

117. There is also an email from 21 September 2004 to Ms Veronica Eriksson from Mr Franz Xaver Weiss of Autoliv who was global business director for VW which states:[12]

> "Dear Veronica,
>
> as already mentioned during the Sales Meeting in Paris we will try our best and use your and Halvar's argumentation to find more money for Autoliv.
>
> Some things to remember:
>
> - we never had raw material clauses in the safety business up to now
>
> - the agressive market prices will not be the nicest environment to discuss price increases
>
> - at least this facts and documents could help to slow down the market price erosion
>
> - we have to team up with our competitors or at least to use the same argumentation (who is speaking to whom?)

[10] J1/72/1.
[11] J1/66/2.
[12] J1/66/3.

- price levels are usually defined with new cars and RFQs

More when my strategy is defined and we had first talks with our customers."

118. The reference to "*have to team up with our competitors*" evidences an intention to collaborate with competitors to increase prices in the light of an increase in raw material costs. This on its face is evidence of cartel activity. Although no specific car manufacturers are identified it appears to have been copied to account managers for Stellantis group contracts (being Mr Blanchford and Mr Aigner for GM-Fiat, Mr Jerome Bailleul for PSA). Autoliv has not called Ms Eriksson or anyone else to provide an alternative interpretation of this document.

G. An email from Ms Eriksson to Autoliv account managers dated 3 February 2005, and email responses from Mr Jean-Marc Kohl, Mr George Rauch, Mr Xaver Weiss, and Mr Stefan Kroenung of Autoliv.

119. The email sent by Ms Eriksson states:[13]

> "We have realised that it's not very easy to get our customers to the table and discuss our 'compensation' for the increasing Steel-prices.
>
> To be able to discuss further actions from Autoliv it would be useful if you could share what you know regarding our competitors success in terms of getting compensated.
>
> I suggest we try to map out by region and competitor what we know about their success (or lack of). I assume mainly Europe and N. America are exposed to this, but please feel free to comment on other regions as well."

This email is a call for competitor intelligence and does not of itself indicate cartel activity. Mr Kohl was a Renault-Nissan account director. He sent the following reply:[14]

> "We have the information that TRW would have required to Renault and PSA a price increase from:
>
> - front seat belt : +1,2% in average
>
> - front buckle : +0,7%

[13] J1/123/1 and J1/123/2.
[14] J1/123/1.

- high adjuster : +4%

- Air Bags : +0,2%

We don't know if that is accepted by the customer.

On our side , we have started to give price breakdown for still price increase.

That is under discussion with the customer."

120. The fact that Autoliv has obtained information with respect to TRW's pricing and was treating it as confidential does not mean it was obtained from TRW. The source could equally well have been a customer.

121. In an email of 3 February 2005 from Mr Rauch states:[15]

> "at BMW we are still negotiating how we have to proof the material increases. But it is clear that they will compensate their suppliers with a lump sum for 2004.
>
> But it has to be waterproof and easy to understand - also for BMW internal revision.
>
> Also TRW and Takata will get compensation - the only open issue is to make the presented data compatable. Latest info is that they want to claer this all up whithin short.
>
> For 2005 we will have a separate negotiation later in the year but using the same principle."

Mr Rauch was the BMW account director. Again, it is unclear as to the source of this particular information.

122. Mr Xaver Weiss in response to Ms Eriksson's request, in an email of 3 February 2005, wrote:[16]

> "in November Lars and myself met with Mr. Kunze from TRW on a VW-Congress.
>
> He proudly expressed, that he could realize 'some' compensation for the steel-prices in the VW group.
>
> After further detained discussion, we learned, that this was only valid for his business out of suspension, not safety.

[15] J1/31/1.
[16] J1/55/1.

> Nevertheless they had VW also approached on the safety business.
>
> During our first Price Negotiations for 2005, VW stated, that they would cover some material price increases, as long as the total annual reduction will reach 5 %!
>
> We are preparing our internal figures and strategies these days.
>
> Further meetings during Febr./March.
>
> No news so far from TAKATA.
>
> More details will follow."

123. This evidences the exchange of commercially sensitive information consistent with cartel activity in respect of VW, a matter which in any event was established by the Commission.

124. Finally, there was a response from Mr Kroenung of 7 February 2005 who was vice president ("VP") of the Ford global BU.[17] This stated:

> "It appears our competitors tune their approaches by region and customer - very dangerous, as we know that the Purchase Org's from various OEs entertain frequent data exchange on key suppliers.
>
> With respect to Ford TRW got massive in the US and is addressing the issue in EU as well. In the US they ask for average 3% wich is in line with our request for roughly 3-3.5% on AB and about 2.5% in SB.
>
> Ford will tie their position on raw material increase to our response for further gap closure. We believe this will happen to Takata and TRW as well."

Again, it is unclear where this information was coming from.

H. An email exchange between Mr Aigner of Autoliv and Mr Mueller of TRW on 10 January 2006

125. The email from Mr Mueller states:[18]

> "I just received your message...
>
> Have a good start to 2006, too; hope everyone is healthy and active…
>
> We should talk again; let's talk on the phone in the evening..."

[17] J1/124/1.
[18] J1/48/1.

And the response from Mr Aigner is:[19]

> "I'll call you this evening.
>
> Ciao"

126. It is unclear what matter is to be discussed but it seems likely that this was not a social call and is consistent with cartel activity if not direct evidence of it. Mr Aigner was a GM Europe/Opel account director.

I. An email exchange between Mr Xaver Weiss and Mr Lars Westerberg (11 January 2006)

127. Mr Westerberg, by an email[20] sent on his behalf, requests from Mr Xaver Weiss "*calculations for the airbag for the new Golf and also the offer from our worst competitor who we think is TRW*". It produces the following response

> "i don.t know if the meeting with T.. is still ongoing. maybe you could agree. that we don't attack existing business. they try to take our Skoda oktavia IC!!!!"

128. It is a reasonable inference that "T" is a reference to TRW. This does seem to be evidence of planned cartel activity although there seems to be a question of whether that particular meeting is taking place. Given this is in the context of a discussion about a VW Golf it does not seem to go further than the Commission's findings.

J. The meeting between Mr Jan Carlson and Mr Lake of 10 July 2007

129. Stellantis point to an email exchange on 10 July 2007 between Mr Westerberg of Autoliv and Mr Carlson of Autoliv with the subject line "PSA":[21]

> "Meeting Peter Lake this evening. When it's regarding collaboration on components, Halvar works on it but it takes time. He is counting on having a first result available in August."

130. Mr Lake was the second most senior employee at TRW, being VP of sales and business development. It is suggested that this meeting is evidence of cartel

[19] J1/48/1.
[20] J1/118/1.
[21] J1/128/1.

activity between TRW and Autoliv with respect to PSA – the subject line is "PSA". Autoliv offers an alternative explanation. It says that "*collaboration on components*" is a legitimate activity to drive down prices. Further it points to another document which it says shows similar cooperation. This is a letter from Mr Carlson, president of Autoliv, to Mr Brenner of TRW of 27 February 2007 which on its face appears consistent with this activity:[22]

> "I am very much looking forward to our meeting on March 6th and 7th to discuss the possibility to drive cost down by a cooperation in the areas of material and component.
>
> Please find below our proposed subjects for discussion.
>
> - Collaboration in raw material sourcing (steel, plastics etc)
> - Common tooling and common sourcing of parts.
> - Common Supplier development.
> - Develop good tool makers for use in LCC, also production equipment manufacturers
> - Develop surface and heat treatment sub-suppliers in LCC
> - Collaboration of component areas
>
> are all areas where we believe that we could benefit from a cooperation.
>
> Your comments are appreciated.
>
> I think we could benefit from starting by on the white board mapping out our respective component activities by region in the beginning of the meeting and then having a discussion in what areas we can find interest for further common activities."

131. Evidence as to the cooperation between TRW and Autoliv was also provided by Mr Corbut on behalf of Autoliv. Mr Corbut was an engineer responsible for Autoliv's frontal airbag department between 2003-2006. He was director of Autoliv's technical centre in France between 2006-2013 and director of the BU responsible for Autoliv's supply of passive OSS to PSA between 2013-2020. He stated, at paragraph 47 of his first witness statement:

> "On rare occasions, Autoliv has worked with its competitors on the design interface of OSS products to be incorporated into the same vehicle. For example, I recall that in around 2004 / 2005, PSA awarded the supply of steering wheels to TRW and the supply of driver airbags to Autoliv for the Peugeot T7 platform. To ensure that these products would fit together in terms of mountability in the vehicle, the technical teams at Autoliv and TRW held joint meetings with PSA to align on development of the OSS. During these

[22] J2/97/1.

> meetings, there was no discussion of costs at all, even if changes were going to have obvious costs impacts – the only information exchanged between the technical teams was of a strictly technical nature."

Mr Corbut is here referring to technical cooperation not cooperation to drive down material or component costs.

132. Stellantis's answer to the letter of 27 February 2007 was that it is a smokescreen and was drafted to hide the real purpose of meetings which was to engage in cartel activity. Further it submitted that had meetings like this taken place a reference would have been made to them by Mr Corbut in his witness statement. It also points out that Mr Brenner was the VP for TRW at that time but by March 2009 had become president of OSS for Autoliv and that note should be taken of this because this is over a period when the Commission found cartel activity.

133. We do not consider sufficient material has been presented by Stellantis for us to conclude this letter of 27 February was drafted to mislead. This is just assertion. No obvious purpose in creating a smokescreen has been identified. Further, there is no evidence that creating documentary smokescreens for meetings between Autoliv and TRW was a tactic used generally to cover up Autoliv's cartel activity and is not an approach identified by the Commission.

134. As to the meeting between Mr Carlson and Mr Lake it is notable that Mr Carlson, who is currently the chair of Autoliv, has provided no explanation to this Tribunal as to why this meeting with Mr Lake took place. Notwithstanding that the absence of a fuller explanation of this cooperation is unsatisfactory, we are not in a position to conclude, on balance of probabilities, that this meeting related to cartel activity. There is an alternative plausible explanation which is that the meeting was about a shared interest in driving down costs, or that it related to other forms of legitimate cooperation such as technical cooperation of the type described by Mr Corbut.

K. Reference to secrecy in an email from Mr Takayoshi Matsunaga of Autoliv to Mr Junto Shirai of 26 November 2007

135. Mr Shirai was account manager for Toyota seatbelts. He records a meeting with

Mr Fujiwara of Takata who is dealing with Japanese OEMs in Auburnhills. Again, the cartel activity in respect of Toyota seatbelts involving Takata is known from OSS1. Stellantis relies on this because in response to being sent this information Mr Matsunaga who was Toyota global BU director writes:[23]

> "You must not type this kind of information. It will leave evidence. Please inform me verbally in future"

136. Mr West KC submits that this shows that specific instructions were given not to write things down.

L. Email from Mr Christophe Rivière to Mr Carlson of 13 January 2009

137. The B7 is the Citroen C4. This exchange concerns the A9 which is the Peugeot 208, with Autoliv being the incumbent supplier of the preceding platform being the Peugeot 207. Mr Rivière was PSA account director at this time. The email[24] reads as follows:

> "Please find below an updated chart about A9 "hardware" offer.
>
> For DAB/PAB/FSB/RSB, I presented 2 scenarii to PSC2 :
>
> - Scenario 1: based on B7 lessons learned, it's a rough estimation of estimated market price and corresponding profitability
>
> - Scenario 2: 6% ebit level
>
> => only scenario 2 was approved by PSC2, and the 1st offer we submit to PSA is based on this approval. I think it's not sure competition will maintain such agressive prices as they did for B7, therefore it's worthwile trying to get some PSA feedback before considering being more agressive.
>
> If we can get some feedback, I will come back to you to so that we refine and adjust our strategy. Is it OK for you? Let me know if you'd like me to call you about it."

138. The reference to "*not sure competition will maintain such agressive prices as they did for B7*" is not of itself evidence of cartel activity as it is not clear this information has come directly from the competition.

M. Meeting between Mr Carlson of Autoliv with Takata in Japan

[23] J1/1/2.
[24] J1/232/1.

139. Reference was made by Stellantis to a dinner between Mr Carlson of Autoliv and a Mr Shigehisa Takada and a Mr Wada of Takata in February 2009. It references Suzuki and Toyota. This has no direct relevance to a cartel with TRW against Stellantis.

N. Email from Mr Benedicte Chassery of Autoliv to Mr Rivière of 2 September 2009.

140. Mr Chassery is PSA Account Manager for seatbelts. Olivier Bastien was at Takata but had previously worked at Autoliv. In translation this email states:[25]

> "I've spoken with Olivier Bastien this afternoon on the referral point and mentionned the A9 to him.
>
> He told me that Takata had not been overzealous this time, that they had responded but did not hit as hard as on B7, that times were hard…
>
> He thinks that the A9 is for Autoliv.
>
> He also tried to get some information via K Yahia who told him today that there were briefings today but nothing more either."

141. It is of note that whereas this may be interpreted as evidence of cartel activity in that commercially sensitive information may be being exchanged, it does not concern TRW. Moreover, it appears to be a reflective discussion of what the parties had bid and is vague and tentative in its detail.

(8) Interim conclusions on the Direct Case based upon the OSS Decisions, and the factual and documentary evidence

142. Neither party has provided us with a picture of the documentary evidence to which the Commission would have had regard in arriving at the OSS Decisions. We are told by Mr West KC that documentary evidence against the Stellantis groups will necessarily be fragmentary, but we have no perspective on whether the documents we are seeing in these proceedings are more or less fragmentary than the documents the Commission had when considering cartel activity against BMW and VW.

143. We have to consider what weight to attach to the OSS Decisions in determining

[25] J1/51/1.

whether relevant cartel activity by object and effect took place against the Stellantis groups. We agree with Stellantis that the findings of the Commission in the OSS2 Decision are supportive of its direct case. We agree that, absent any explanation from Autoliv as to the scope of its cartel activity with TRW, or any positive case being developed in evidence as to why cartel activity might be limited to certain manufacturers only, it is reasonable to draw the inference that there is likely to have been cartel activity, at least by object, against other car manufacturers, including Stellantis. Once it is accepted that the OSS Decisions are admissible and relevant (which both parties accept), there is force in the submission that the evidential burden has shifted to Autoliv to explain the scope and limits of its cartel activities.

144. We draw adverse inferences from the failure of Autoliv to call relevant witnesses. We agree with Stellantis that Autoliv could have called witnesses who were in a position to provide evidence of the scope of cartel activity and, if it is the case, rebut the suggestion that there was cartel activity against the Stellantis groups – including both current and former employees. Examples of witnesses who Stellantis submits should have given evidence, and whose names appear on relevant disclosure documents, are:

- Lars Westerberg who was CEO of Autoliv between 2002 and 2007 and whose name appears in connection with the Commission investigations (RFI of 22 October 2012). He was chairman of the Autoliv board from 2007-2011.

- Jan Carlson who was CEO from 2007 and is currently chairman of the Autoliv board as of 2014.

- Christophe Rivière who was head of the PSA BU within Autoliv from 2006 onwards and is still employed by Autoliv as head of the Stellantis BU.

- Veronica Eriksson who was in a senior position at Autoliv (possibly group controller) reporting directly to Mr Westerberg and Mr Carlson

and is still employed at Autoliv as head of human resources.

- Joachim Aigner who worked on the GM account and is identified by the Commission in its RFI of 22 October 2012 as having been involved with a meeting with TRW on 16 June 2010. Mr Aigner was account director for GM/Opel until around 2009 and VW account manager from around 2009.

145. There has been no suggestion that key witnesses are no longer available to Autoliv or unwilling to give evidence. Rather Autoliv chose to call witnesses who were not in a position to talk directly to the existence or not of cartel activity directed to Stellantis over the Cartel Period.

146. Autoliv has adopted a strategy of not calling potentially relevant witnesses. It offers the Tribunal no assistance in understanding its interactions with its competitors or the specific negotiation strategies it adopted with the Stellantis groups during the Cartel Period. We conclude that Autoliv has taken this approach because the relevant witnesses were either likely to give evidence which would be unhelpful to its case or that it did not wish to expose those witnesses to cross-examination.

147. We reject Autoliv's submission that we should attach weight to the Commission's decision not to pursue a case against Autoliv in respect of any of the Stellantis groups. We are in no position to determine whether the Commission concluded that there was an absence of evidence of cartel activity against Stellantis or whether, for practical purposes, it pursued what it deemed to be an evidentially stronger case against VW and BMW. We do not know the extent of the Commission's investigations into contracts with the Stellantis groups or how it decided which complaints to pursue. As to the thoroughness of the leniency process upon which Autoliv relies, we have been provided with no evidence as to how it approached that process or the scope and result of any audit which may have taken place. We also keep in mind that there is no reason to assume that the Commission in its investigations would be applying the same standard of proof – balance of probabilities – which this Tribunal is required to

apply.

148. We agree, however, with Autoliv's submission that the OSS Decisions, and in particular OSS2, are not necessarily consistent with the breadth of the case being advanced by Stellantis in these proceedings. In reconciling its econometric analysis with its complaint, Stellantis contends that the cartel activity commenced considerably earlier than the dates identified by the Commission. Further, it argues for overcharges to Stellantis of between 10.5% and 25.9% which are not of themselves supported by the Commission's findings. The Commission recorded that insofar as there were attempts to reach agreements, in many cases the parties were unable to reach a specific agreement or did not respect the arrangements reached. The Commission made no finding as to the effectiveness of the cartel activity and whether it in fact led to an overcharge of the magnitude alleged in this case or at all.

149. As to the four factors raised by Autoliv which it submits make the direct case implausible, we agree with the observation that the cartel case is broad and would require the tacit or explicit coordination of a number of people. We are not in a position to say how many people and do not agree that we have enough information from Autoliv to conclude that this of itself makes the case implausible.

150. The second and third factors Autoliv raised concern the fact that the products are bespoke and that many considerations go into determining a supply agreement for a particular platform. Whereas this is relevant background, it does not preclude there being a cartel. The fourth factor said to make the case implausible is the countervailing buying power of the car manufacturers. We agree that this is a relevant consideration, particularly given the size of the alleged overcharge (a matter we consider further below) but we do not accept that a party with countervailing buyer power necessarily cannot suffer an overcharge arising from a cartel.

151. We turn next to the disclosure documents upon which reliance is placed and which we have reviewed. As we have indicated, we agree with Stellantis that

some of these documents evidence cartel activity involving Autoliv and TRW, by object, against VO (formerly GM) in or about 2003. We refer in particular to the February 2003 documents to which reference is made under "B" above, and the documents in "C" above from July 2004. We also consider the email exchange identified under "D" above to be evidence of cartel activity as against VO and PSA/Renault in about April 2004, again involving Autoliv and TRW. We also attach weight to the minutes of the Autoliv Paris Sales Meeting in September 2004 identified at "F". These specify communicating and cooperating with TRW and Takata, and appeared to involve account managers for at least GM-Fiat and PSA in the Stellantis group.

152. Drawing together the inferences to which we refer and the aforesaid documents, we conclude that there was cartel activity, at least by object, against the Stellantis groups. However, when we take into account the findings of the Commission, and the specific documents to which we have referred, we are not in a position to conclude that the cartel activity was more than sporadic, or that it extended over the entire Cartel Period, or that it was effective and resulted in an overcharge. It is necessary therefore to consider the support the econometric evidence provides.

E. THE ECONOMETRIC EVIDENCE

(1) The expert witnesses

153. Stellantis relies upon the expert evidence of Mr Mat Hughes, a partner and managing director in the investigations, disputes and risk practice of AlixPartners UK LLP. He has a Master's degree in economics from Queen Mary College, University of London, and a bachelor's degree in accounting with economics from the University of Kent. He started his career as an economist at the OFT and was chief economist in the competition department of Ashurst LLP prior to joining Alix Partners. He has advised on a number of market and antitrust investigations.

154. No criticism was made of Mr Hughes's expertise. He was, however, criticised

by Autoliv for drawing conclusions in his First Expert Report as to when cartel activity commenced, by reference to disclosure documents.

155. Mr Hughes acknowledged that the starting point for an assessment of cartel activity is a theory of harm. In the Joint Expert Statement ("JES"), he accepted the proposition that "*[d]efining the theory(ies) of harm is a useful first step for the estimation of overcharge and thus damages*", and he added "*the theory of harm relates firstly to the likelihood of anticompetitive harm and secondly to its magnitude.*" During the concurrent examination by the Tribunal, Mr Hughes was asked to assume that there was no evidence of cartel activity from the documents in the case and that cartel activity could not be extrapolated from the OSS Decisions. He was then asked whether in those circumstances the econometric model could, of itself, lead to a conclusion that there was a cartel. He provided the following answer:

> "So -- so what I -- consistent with what I've said in my first report, and it's still my view, is what I am observing in the early period for two of the three parts, not the seatbelt, is I am observing that prices are higher and I'm attributing that to a cartel effect, but I think it is also, if there is no such cartel effect, then a logical -- the logical alternative is I think I -- that there are other factors that I may have failed to capture in my model which are explaining the price differences. So I think that would be my view on -- in answer to that question."

156. Mr Hughes is correctly acknowledging that his model (the "Hughes Model") is only showing higher prices in the Cartel Period. The model does not, of itself, prove that the cause of those higher prices is a cartel. Other factors not captured by the Model could be responsible. The Hughes Model is properly used to test a theory of harm and without a theory of harm its use is open to criticism. In other words, it is not sufficient to scan data sets for price increases, which cannot readily be explained by known factors, and from this jump to the conclusion that price differences are to be explained by the operation of a cartel.

157. Mr Hughes and Stellantis were aware of the need to identify a theory of harm and therefore sought to bolster Mr Hughes's First Expert Report by reference to documents he had identified from disclosure which, he contended, evidenced cartel activity both within the period covered by the OSS Decisions and before. Documentary support for Stellantis's case is particularly important for the

periods which predate the OSS cartels, as without such documents it is difficult to articulate a theory of harm.

158. In investigating and interpreting documentary materials, Mr Hughes trespassed on disputes of fact which were to be resolved by this Tribunal. Mr Hughes therefore sought to caveat his factual analysis with the express recognition that such matters were to be determined by this Tribunal. The Tribunal questioned the appropriateness of Mr Hughes addressing such factual matters at the PTR and directed that these factual matters were not matters for him and should not be the subject of cross-examination.

159. Autoliv is critical of Mr Hughes's evidence, because it contends that Mr Hughes should not have given such factual evidence and that the deference he showed to the Tribunal smacked of tokenism. We have some sympathy with Mr Hughes in that he was seeking to identify a theory of harm in the materials provided to him. Had he not sought to do so then he would no doubt have been criticised for failing to consider this important element of his case. We agree, however, that it was not appropriate to have Mr Hughes making findings of fact in his First Expert Report, but we see that as a fault in the way in which Stellantis's case was structured rather than a criticism to be levelled at the witness.

160. Stellantis submits that the expert evidence should engage with documents in the case and not be overly theoretical. In this respect it cites Green J in *Peugeot v NSK* [2017] CAT 2 at paragraph 21:

> "In principle I start from the proposition that it is desirable for econometric analysis to be capable of being benchmarked, or capable of being placed into context, by internal disclosure. Many econometric analyses involve the making of assumptions about how markets work. If those assumptions turn out to be incorrect, wholly or partially, then the resultant statistical analysis may be materially flawed…. If, to take a hypothetical situation, an expert generated an econometric model which then turned out in court to collide with the inferences properly to be drawn from internal disclosure then it would have been far better for the expert to have grappled with that inconsistency and attempted a reconciliation at the earliest possible stage in preparation for litigation. This, in my view, is preferable to the expert being subsequently challenged in cross examination at trial upon the basis that the econometric modelling was theoretical, artificial and divorced from reality. Early engagement with the underlying facts including disclosed material will, in my view, generate a more robust and defensible final analysis."

161. We respectfully agree with this, and later in this judgment we have observations to make on the extent to which the disclosure documents surrounding negotiations sit with the econometric evidence. We are also of the view, however, that interpreting documents to determine when cartel activity commenced was not the type of engagement that Green J (as he then was) had in mind.

162. Autoliv called, as its expert economist, Dr Adrian Majumdar who is managing partner at RBB Economics. He graduated from Cambridge University after which he completed a PhD at the Centre for Competition Policy at the University of East Anglia. He is a co-founder of the postgraduate degree in economics for competition law at King's College London and was, prior to joining RBB, deputy director of economics at the OFT.

163. No criticism was made of Dr Majumdar's expertise, but he was criticised for failing to produce an econometric model for overcharge. There is some resonance in this criticism in that when this court directed, on 2 November 2023 ([2023] CAT 66), that there should be a single expert on behalf of Autoliv and TRW, that was vigorously resisted by Autoliv and TRW inter alia because they wanted an expert each to produce an econometric model based upon each group's data set. This Tribunal was somewhat alarmed at the possibility of having to reconcile three different models and for this reason, in the absence of a perceived conflict, we ordered that the Defendants must share a single expert. They subsequently settled on Dr Majumdar. This order that there should be a single expert was then appealed by Autoliv and TRW to the Court of Appeal. The Court of Appeal hearing took place on 30 April 2024 and judgment was delivered on 5 June 2024. Mr Hughes' First Expert Report had been served on 28 March 2024 and Dr Majumdar's First Expert Report was served on 10 June, less than 6 weeks from the hearing of the appeal. In that short space of time the Defendants travelled from a position that it was necessary for Autoliv and TRW to advance two different models, using their own data sets, to a position at trial where they were advancing no model at all. The reason for this change in position has not been explained and was not explored in cross-examination.

164. Leaving aside this background, the Tribunal does not accept that the failure of Dr Majumdar to produce an alternative model is a matter which, of itself, undermines his evidence. The approach he has adopted is to criticise Mr Hughes's model and attempt to show its fragility by reference to sensitivity analyses. He concludes that the model is not sufficiently robust for this Tribunal to place any weight upon it. No personal criticism is to be attached to that approach: either that case is made out or it is not.

165. We found both Mr Hughes and Dr Majumdar to be fair witnesses when giving their oral evidence and their evidence was of considerable assistance to the Tribunal. We are grateful to the parties' legal advisers and the experts for the constructive way in which the expert evidence was deployed. Although there was a flurry of additional reports and notes close to, and during, trial, these represented efforts to narrow and clarify issues which led to a shortening of the examination and cross-examination and, consequently, the length of this judgment.

166. The experts were concurrently examined by the Tribunal (principally by Professor Neuberger), topic by topic, in what is colloquially called a "hot tub". While the scope of the issues to be addressed was spelt out in advance, no advance notice of the questions was given. The examination took place over a day and a half. During this examination, counsel were not permitted to ask questions, save at certain points, and only for the purpose of clarification. After the examination, cross-examination was permitted for up to two hours. Counsel were not required to put the their case to the experts and could choose the topics upon which they cross-examined. The experts were courteous and engaged constructively during the examination, and we found the process of considerable assistance.

(2) The form of analysis used in this case

167. The econometric evidence, comprising the Hughes Model, sought to demonstrate that the prices PSA paid for OSS components under contracts concluded during what it calls the Cartel Period were higher than prices paid for

OSS components under contracts concluded outside that period (referred to as the "Clean Period"), while attempting to control for demand and cost factors that affect prices. The evidence was deployed in support of both the Direct Case and the Indirect Case and does not distinguish between these claims.

168. In addition, Stellantis used the Hughes Model to measure the overcharge paid by PSA.

169. There was no modelling of data from the other Stellantis groups but Stellantis draws inferences from the modelling of the PSA data.

170. The Cartel Period is the period during which it is contended the cartel was in operation although the dates are something of a moveable feast as we explain below. The Hughes Model is used by both Mr Hughes and Dr Majumdar in different ways, but in each case what is being compared is a putative Clean Period and a putative "Dirty Period" (the Dirty Period being the period for which it is posited that there is cartel activity).

171. The particular mathematical technique used in the Hughes Model is a standard multivariate regression analysis. Comparing prices in Clean and Dirty Periods is a recognised approach used by economists to assess and quantify alleged overcharges in cartel damages claims. Mr Hughes refers to the Commission's *Practical Guide on Quantifying Harm in Actions for Damages Based on Breaches of Article 101 or 102 of the Treaty on the Functioning of the European Union* (11 June 2013) which endorses this approach for quantifying damages in cartel cases. The appropriateness of the approach is not in dispute.

172. Mr Hughes describes his approach at paragraphs 5.3. 1-5.3.3 of his First Expert Report:

> "5.3.1 I estimate the New Contract and PA [price amendment] overcharges by comparing the average prices of parts whose RFQs occur during and outside of the Cartel Period, and by examining the relative differences in the trajectories of price trends for Affected Parts and unaffected parts during and outside the Cartel Period.

> 5.3.2 This methodology is implemented within a multivariate regression framework, as it allows me to effectively net-out the influence of external factors that affect prices when making these comparisons, such as changes in demand and variations in costs. For example, the New Part overcharge is estimated as the difference in the average prices of parts whose RFQs occur during and outside of the Cartel Period, net of the impact of other factors that influence prices and which differ between these groups.
>
> 5.3.3 As explained further below, this approach makes it possible to test whether: (i) the Cartels were effective at increasing prices prior to the starting dates of the individual infringements identified in OSS 1 (or prices were otherwise higher for reasons not explained by my econometric model); (ii) whether there is Wind-down effect (i.e. if the Cartels were less effective between March 2010 and March 2011); and (iii) examine the extent to which the overcharge on parts procured during the Cartel Period diminishes over time after the Cartel Period or Wind-down period ends, thereby providing insights into the persistence of its effects. Consequently, regression analysis can be used to test for and estimate the influence of the Cartels on prices paid. (The reasons for assessing these points are set out in more detail in Section 2.8)."

173. The econometric analysis is based only upon data obtained from PSA. Mr Hughes expressed the view that PSA's data is the only usable dataset for the calculation of damages and Dr Majumdar did not disagree. Mr Hughes had access to monthly price observations from PSA. The Hughes Model has three variations, each variation relating to a particular category of OSS: airbag, steering wheel or seatbelt. The Hughes Model seeks to explain the average monthly price of individual OSS parts in terms of a number of explanatory variables.[26]

174. The explanatory variables are of two types. There are continuous variables that take general numerical values. Typical continuous variables are ones that reflect the level of costs (such as the price of steel), or demand (such as the level of GDP) and other factors that are expected to affect prices (such as the length of time since the item in question started production). The other type of variable used in the model is a dummy or indicator variable. Dummy variables take a value of 0 or 1. Dummy variables used in the model include those that record whether the item has a certain feature or not that is likely to affect its price (e.g. for steering wheels, the material, whether heated, electronic switches and wheel-

[26] For airbags, for example, there are 1,351 monthly price observations in the dataset running over almost 20 years relating to 106 distinct parts (typically a type of airbag designed for a specific platform). For steering wheels and seatbelts, the number of observations and parts are 761 and 67, and 1,557 and 106 respectively.

size). Dummy variables are also used to capture the effect of the infringements.

175. Based on his theory of harm, Mr Hughes considers that:

> "The Cartels may have had two types of effects on the Claimants. First, they may have caused higher prices in the context of RFQs and more generally new contracts ("**New Contract overcharge**") …Second, the Cartels may have caused higher prices in the context of PAs [price amendments] negotiated between the Cartelists and the Claimants as part of ongoing contracts ("**Amendment overcharge**").[27]

He therefore includes variables in his model for whether the RFQ takes place inside or outside the Cartel Period, and the age of the cartel.

176. The exchanges between the experts before, and at, trial focused almost entirely on the RFQ dummies and the "New Contract Overcharge", and there was little or no discussion of the two cartel age variables and the "Amendment Overcharge".

177. Central to the criticism made of Mr Hughes's approach is his use of two or three RFQ dummies, not one. He explains the reason for this in his First Expert Report:[28]

> "Given the uncertainty surrounding the start of the Cartel Period across the various part categories (see paragraphs 2.8.2-2.8.3), I control for a different overcharge in the Cartels' impact during the early period ("the Early Period"), so as to test when collusion may or may not have occurred. This is important, as neglecting this uncertainty could result in an underestimate of the overcharge if the cartel was operating over this longer period or prices were otherwise higher in the Early Period for reasons not captured in my econometric models as I rely on before, during and after data to maximise the number of observations I have."

178. The Early Period starts from the first documentary evidence available to Mr Hughes that, in his view, suggests collusive behaviour. The Main Period is the period when the OSS1 and OSS2 cartels were in operation, as reported by the Commission. The "Wind-down Period" is that part of the Main Period that follows the coordinated dawn raids carried out by the Commission, the DoJ and the Japan Fair Trade Commission which, it is suggested, is the period from

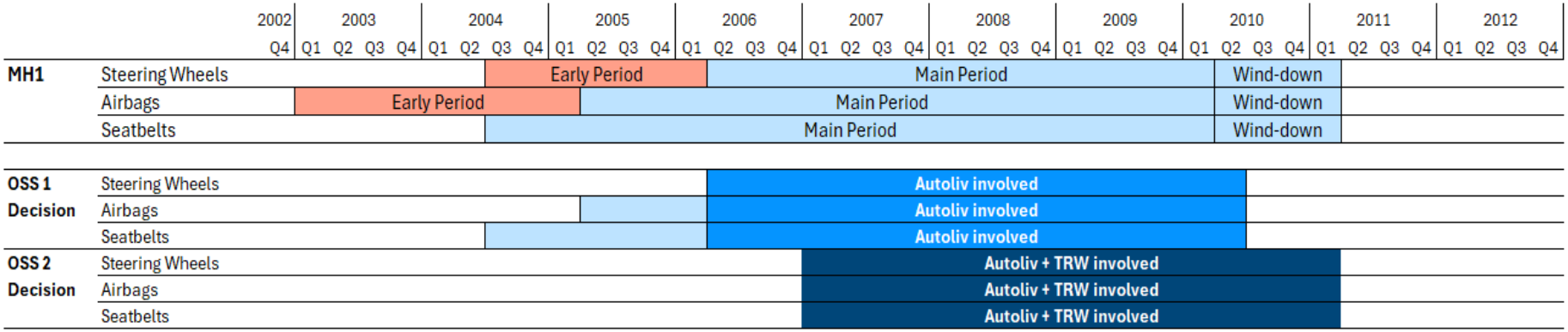
[27] Hughes 1, paras. 1.5.7-1.5.8.
[28] Hughes 1, para. 5.6.1.

which the cartels were breaking down. It is also the period said by the Commission to be when participation in the various infringements started to fall away. The periods for the different categories of OSS are as follows:

	Airbags	**Seatbelts**	**Steering Wheels**
Early Period	Feb '03 – Jan '05	Nov '02 – Jun '04	May '04 – Mar '06
Main Period	Feb '05 – Mar '11	Jul '04 – Mar '11	Apr '06 – Mar '11
Wind-down Period	Mar '10 – Mar '11	Mar '10 – Mar '11	Mar '10 – Mar '11

179. Mr Hughes identified these Early Periods by reference to disclosure documents. The documents to which Mr Hughes refers in respect of steering wheels and seat belts were documents from Takata which are interpreted as suggesting a cartel between Takata and Autoliv.

180. Dr Majumdar produced a helpful visual representation of the various periods which fall for consideration at figure 1 of this First Expert Report:


2002 Q4
2003 Q1 Q2 Q3 Q4
2004 Q1 Q2 Q3 Q4
2005 Q1 Q2 Q3 Q4
2006 Q1 Q2 Q3 Q4
2007 Q1 Q2 Q3 Q4
2008 Q1 Q2 Q3 Q4
2009 Q1 Q2 Q3 Q4
2010 Q1 Q2 Q3 Q4
2011 Q1 Q2 Q3 Q4
2012 Q1 Q2 Q3 Q4
MH1
Steering Wheels
Early Period
Main Period
Wind-down
Airbags
Early Period
Main Period
Wind-down
Seatbelts
Main Period
Wind-down
OSS 1 Decision
Steering Wheels
Autoliv involved
Airbags
Autoliv involved
Seatbelts
Autoliv involved
OSS 2 Decision
Steering Wheels
Autoliv + TRW involved
Airbags
Autoliv + TRW involved
Seatbelts
Autoliv + TRW involved

181. "MH1" in this table is a reference to the periods identified in Mr Hughes's First Expert Report with the Main Period aligning with the infringement periods identified by the Commission but not necessarily those periods in which both Autoliv and TRW were involved. The periods during which Autoliv and TRW were involved are shown.

182. Mr Hughes considers two different specifications of his model, one with separate RFQ dummies for each of the Early, Main and Wind-down Periods, and one with two dummies, being one for the Main Period, and one for the Wind-down Period. It is convenient to refer to the two sensitivities respectively as E/M/W and M/W (Dr Majumdar, considers further sensitivities including one which has a single dummy for the combined Early and Main Periods, and a Wind-down dummy). The Clean Period used in the Hughes Model for airbags and steering wheels is principally the period from the end of the Wind-down Period and runs from April 2011 to December 2022; and for seatbelts the Clean Period also includes the Early Period.

183. Mr Hughes describes the details of his model in the following way:

> "5.4.3 Letting p_{it} denote the average price of part i in year-month t, the basic regression model that I use to explain prices can be described as follows:
>
> $$\log p_{it} = \alpha + \beta_1 x_t + \beta_2 z_i + \beta_3 Age_{it} + \theta_1 RFQ_i + \theta_2 Age_{it}^{Cartel} + \theta_3 Age_{it}^{PostCartel} + \varepsilon_{it}$$
>
> 5.4.4 In words, the price of the part at period t is determined by a constant α, a set of demand and cost variables in x_t, and set of technical characteristics in z_i (which identify whether a given part exhibits a specific feature), the time in months from the date of the SOP price Age (reflecting the practice of OEMs seeking general APRs […] and contractual APRs […]), three further variables RFQ, Age^{Cartel} and $Age^{PostCartel}$ that account for the impact of the Cartel, and an error term ε_{it} that contains unobserved factors that affect prices (reflecting that no model can include all factors that affect prices).
>
> 5.4.5 The coefficients associated with these variables measure the impact of a unit increase in their values, and as is conventional in the literature, I apply a logarithmic transformation to both the prices of the OSS parts and to the values of the cost and demand variables. I also allow for supplier fixed effects, to control for permanent differences in prices between the Cartelists, and a time-trend (not shown above) to control for common unobserved factors such as inflationary forces that impact all parts in the same way.

5.4.6 The econometrics literature indicates that it is important to include a time trend variable (which simply increases over time). This is because variables may (spuriously) seem to be correlated with one another simply because they are both trending over time due to common factors not included in the model, rather than these variables actually being causally related to one another. Such spurious relationships can be addressed by adding a time trend variable. In addition, including a time trend allows for prices to trend up or down over time due to factors such as general cost inflation or productivity trends that are not otherwise captured in the model. Accordingly, I include a time trend in the model.

5.4.7 The age from the SOP price-date (Age_{it}) is separate to the calendar time trend and is specific to each part. It applies over the whole period and is divided into three time periods: the first three years (36 months; reflecting that contractual productivity discounts are commonly included in New Contracts for the first three to four years post-SOP); the next three years (37-72 months); and thereafter (from 73 months). It captures both contractual APRs/productivity discounts and general APRs and ensures that the model does not restrict the rate at which prices fall each month to be the same each month.

5.4.8 The final three variables control for the impact of the Cartel and identify the New Contract overcharge, the PA overcharge effect, and the run-down effect. These are described as follows:

(a)RFQ_i: this is an indicator for whether the RFQ is during ($RFQ_i = 1$) or outside of the Cartel Period ($RFQ_i = 0$). The coefficient θ_1 represents the difference in the average prices of these parts, adjusted for the impact of the various controls and identifies the New Contract overcharge.

(b) Age_{it}^{Cartel}: this counts the number of months over the Cartel Period, between the amendment date and the start of the Cartel, or SOP price date, if this occurs during the Cartel Period. The corresponding coefficient θ_2 represents how much faster prices grow each month during the Cartel Period relative to general SOP age trend and the effect of this variable is the PA overcharge.

(c) $Age_{it}^{PostCartel}$: this counts the number of months between the amendment date and the start of the post-Cartel Period, or SOP price date, if this occurs after the cartel has ended. The coefficient θ_3 is again incremental to the trajectory of the general SOP age trend and allows the prices of affected parts to fall at a faster rate during the post-cartel period. This Run-off effect identifies the progressive Unwinding effect on both the New Contract and PA overcharges post-Cartel and is applied to parts whose RFQ occurs during or before the end of the cartel.

5.4.9 The summation of the above three components represents the combined price overcharge (on the log-scale) and is the expected difference between the collusive price, and the price that would have occurred in the counterfactual absent the Cartel. I convert these overcharge figures into the percentage of the collusive price that is attributable to the cartel, which can be used to calculate the damages based on the Claimants' purchases of OSS products during the Cartel Period."

184. The regression determines the weight to be put on each of the variables included in the specification, whether continuous or dummy, to fit the price data as closely as possible. Regression can therefore be seen as an exercise in fitting the data. The output of the model is a set of weights, or coefficients on the variables. The coefficient on the RFQ dummies is the Model's best estimate of the extent to which the price of an item is increased by virtue of the fact that the original RFQ on that item fell within the relevant period, net of the impact of other variables included in the Model.

185. Two minor technical details should be noted. First, the Hughes Model is fitted to the logarithm of the price; this means that there is a mathematical transformation to turn the coefficient on the cartel dummy into a percentage overcharge. The coefficient is similar to the overcharge when they are small but they deviate as they get larger. So, coefficients of 0.01, 0.1 and 0.3 are equivalent to overcharges of 1.0%, 9.5% and 25.9% respectively. Second, to avoid outlying observations having a disproportionate effect on results, it is common practice to exclude outliers. The results to which reference is made in this judgment exclude outliers.

186. As well as generating coefficient estimates, a regression model generates standard errors for each of the estimates. The standard error is an indication of the precision of the estimate. For example, if the cartel dummy coefficient is 0.3 with a standard error of 0.06, that means that even if the model is right ("well-specified" in the jargon), the average error in estimating the coefficient is 0.06. Since the level of the estimated coefficient in this example (0.3) is five times its standard error (0.06), it is highly unlikely that the true value is zero or negative – the result is therefore described as highly statistically significant. As is conventional in such matters, Mr Hughes indicates estimates which are 1.64, 1.98 or 2.58 standard errors away from zero by one, two or three asterisks and describes them as being statistically significantly different from zero at the 10%, 5% or 1% level. This reflects the fact that under rather idealised assumptions, the difference between the true value of the statistic and the Model's estimate will exceed 1.64 times the standard error only 10% of the time, and similarly for the other significance levels.

187. It should also be kept in mind that the standard error and the level of statistical significance are calculated on the basis that the statistical model itself is an accurate representation of reality. Since any model is at best an approximate representation of reality, the standard errors and claimed levels of statistical significance must be treated with caution. It is therefore common practice to test a model by seeing how the results stand up to reasonable changes in assumptions, and the experts in this case agree that reasonable sensitivity tests play an important role in establishing the reliability of the model.

(3) The results of Mr Hughes's analysis: the Direct Case

188. The Hughes Model generated for New Contract overcharges the results shown in Table 1. The numbers in parenthesis are the standard errors.

Table 1

	Metric	**Airbags**	**Seatbelts**	**Steering Wheels**
Early Period	Coefficient (Std error) Overcharge	0.293*** (0.059) **25.4%**	-	0.300*** (0.068) **25.9%**
Main Period	Coefficient (Std error) Overcharge	0.111*** (0.041) **10.5%**	0.163*** (0.049) **15.0%**	0.252*** (0.079) **22.3%**

189. As we have already mentioned, the Hughes Model uses the E/M/W specification for airbags and steering wheels (meaning separate RFQ dummies for the Early, Main and Wind-down Periods) but, controversially, for seatbelts uses the M/W specification. This means the M/W period is being treated as the Dirty Period, whereas data from the Early Period and the period after the Wind-down Period are both being treated as clean. Mr Hughes provides the following explanation for this different approach:[29]

> "For seatbelts, my initial analysis indicates prices were lower during the Early Period, suggesting that the Cartel's impact began around the start of the Main Period. Consequently, the estimates I present exclude the Early cartel period variables."

[29] Hughes 1, para. 5.9.6.

190. Mr Hughes finds strong statistical evidence for New Contract overcharges but only weak evidence for the existence of Amendment Overcharges. Mr Hughes states: [30]

> "The only statistically significant Amendment overcharge arises as regards airbags, and at the 10% level (more precisely just above the 5% threshold) based on a two-tailed test – it would be significant at the 5% level based on a one-tailed test. This Amendment overcharge is small but applies every time a seatbelt part's price is amended during the Cartel Period prior to March 2010 (the start of the Wind-down period), and thus will compound up over time."

191. Mr Hughes goes on to say when estimating the size of the claim that he has not included Amendment overcharges in his calculation of overcharge.

192. Mr Hughes concludes that:[31]

> In short, there are New Contract overcharges on all three components, which are 10.5% (airbags), 15.0% (seatbelts), and 22.3% (steering wheels) during the Main Period. There is also evidence of New Contract prices being high in the Early Period, 25.4% for airbags and 25.9% for steering wheels. The Early Period overcharge appears to be higher for airbags than the Main Period, whereas it is similar for steering wheels. Across all three products, New Contract prices are lower in between March 2010 and March 2011 (as shown by the Wind-down effect), suggesting that the Cartels ceased to be effective at raising prices from March 2010 onwards (the Wind-down effect is generally similar in magnitude to the Main Period overcharge, but is slightly higher for seatbelts).

193. Mr Hughes starts with a hypothesis (theory of harm) that there is cartel activity from November 2002 to March 2011 and tests that hypothesis with his economic model. When his model does not support this hypothesis, at least in respect of seatbelts, he amends the hypothesis to test whether there is cartel activity between July 2004 and March 2011 only.

(4) Dr Majumdar's criticisms of the Hughes Model

194. Dr Majumdar disagrees that Mr Hughes's analysis provides support for there being an overcharge arising from a cartel. He takes issue with Mr Hughes on a number of grounds. Some of the issues were clarified in the run up to the trial.

[30] Hughes 1, paras. 5.10.2-5.10.3.
[31] Hughes 1, para. 5.10.1.

The main outstanding issues at trial were:

(a) The omitted variable problem;

(b) The inconsistent model specification; and

(c) Dr Majumdar's sensitivity testing.

The omitted variable problem

195. Dr Majumdar argues that the Hughes Model fails to capture relevant cost and demand variables, making the results unreliable. Dr Majumdar observes that the unit price of an OSS product is determined by cost factors, such as investment in production facilities, costs of materials, labour costs, logistic costs, and other costs. He contends that it cannot be assumed that such costs are constant during the Clean and Dirty Periods. Unless such costs are accounted for, the econometric model will be unreliable because changes in prices due to changes in costs may be falsely attributed to the effects of cartel action. His concerns about omitted variables in the Hughes Model were exacerbated by his finding that the raw material cost and demand variables make only a small contribution to the explanatory power of the Model, and that they therefore explain very little of the variation in costs over time. Mr Hughes, in the data presented in his First Expert Report, controlled only for a subset of costs factors notably a selection of raw material costs.

196. Dr Majumdar in his First Expert Report in answer to Mr Hughes looked at the evolution of unit cost production per year for Autoliv and compared this to changes in raw material costs. He observed that these were not in step.

197. Mr Hughes in reply tried various alternative cost variables, to show that this has limited impact on the model results. For example, in the case of airbags, these changes increased the Early Period New Contract overcharge from 25.5% to 27.6% and for the Main Period from 10.8% to 13.2%. By the time of the trial, the experts accepted that suitably granular cost information at the individual part

level was not available. Dr Majumdar stated during the concurrent examination:

> " …if -- we know there is not granular cost data that allows us to work out cost for any particular contract, so I would think that that is an important piece of information a good econometrics model would have. Now, it's no fault of anyone that we don't have it, it's just the data aren't there. But, to my mind, that at least informs us as to how much weight one can put on results when there is ultimately an important variable missing.

198. In our judgment, taken in isolation, the question of omitted costs would not be sufficient to undermine, materially, the Hughes Model. However, the problem of omitted variables is endemic to this type of analysis and is not limited to the problem of measuring costs: it may extend to various known and unknown factors. In plain terms, while econometric analysis can demonstrate whether prices were higher during the cartel period, it cannot prove that any overcharge was caused by the cartel as opposed to other factors not taken into account by the Model. This is relevant to the discussion which follows.

The inconsistent Model specification

199. Dr Majumdar criticises Mr Hughes for presenting inconsistent specifications across the three categories of OSS. He has both Early and Main Period dummies for airbags and steering wheels and only a Main Period dummy for seatbelts (with no Early Period dummy).

200. Mr Hughes defended the difference in the specification arguing that:[32]

> "In his report, Dr Majumdar criticises the fact that there is no Early Period dummy variable for seatbelts in the Hughes 1 econometric model, contrary to airbags and steering wheels (Majumdar 1, paragraphs 177 and 178). However, as regards seatbelts, I find no evidence of prices being higher in the Early Period contrary to steering wheels and airbags. Therefore, I consider that it is sensible to adopt a different modelling approach for seatbelts."

201. The Tribunal agrees with the importance of presenting results on a consistent basis across the three categories of OSS. The Model is used to test the proposition that the prices paid by PSA for OSS during the Cartel Period were elevated. For the test to be useful, it is essential that the test be formulated on

[32] JES, para. 29.

the basis of a theory of harm, such as evidence found in documents. The theory of harm which is being tested should not be adjusted or revised in the light of the econometric data to ensure some desired result. Mr Hughes himself recognises the importance of this in his First Expert Report. In para 1.8.8 (repeated at para 5.10.4) he says:

> "My view that overcharges are likely has not fed into my econometrics models, but rather the models' findings of such effects corroborate my view that they are likely."

202. There is no basis in the theory of harm being advanced, or within the documentary and witness evidence, for the application of different tests for the different categories of OSS. It seems to us that Mr Hughes has allowed his views that an overcharge is likely in the case of seatbelts to cause him to recast his model.

203. We consider it appropriate to look at the results of Mr Hughes's Model for all three categories of OSS in the round. The coefficient estimates in Table 2 below, as regards airbags and steering wheels are those reported in Mr Hughes's First Expert Report, while the seatbelt numbers are calculated by Dr Majumdar applying the E/M/W specification.

Table 2: RFQ dummy coefficients and overcharge under the E/M/W specification

	Metric	Airbags	Seatbelts	Steering Wheels
Early Period	Coefficient (Std error) Overcharge	0.293*** (0.059) **25.4%**	-0.419*** (0.076) **-52.0%**	0.300*** (0.068) **25.9%**
Main Period	Coefficient (Std error) Overcharge	0.111*** (0.041) **10.5%**	-0.145** (0.061) **-15.6%**	0.252*** (0.079) **22.3%**

Source: E1/19

204. One possible interpretation of this data might be that it shows cartel overcharges in the range 10.5%-25.9% in airbags and steering wheels, and no cartel overcharge in the case of seatbelts. But that interpretation does not explain the undercharges in the case of seatbelts. The undercharges are both large and

highly significant statistically. They cannot plausibly be explained by cartel activity. They must be explained by other factors that are not included in the model and therein show that the Hughes Model is not robust.

205. We have no evidence upon which reasonably to speculate that seatbelts prices are harder to model compared with the other types of OSS. The figures for seatbelts leads this Tribunal to the conclusion that the recorded overcharges for airbags and steering wheels are equally likely to be due in whole or in part to omitted variables rather than due to the operation of a cartel.

206. We conclude that Mr Hughes's Model is seriously compromised by the omitted variable problem and for this reason we are not able to place reliance upon it to conclude that prices were higher as a result of cartel activity.

Dr Majumdar's sensitivity testing

207. Dr Majumdar's position is that if an econometric model is well specified then its qualitative predictions are typically robust to a range of sensitivity checks (whilst the precise values may differ). He contended that flexing the Hughes Model to incorporate reasonable adjustments to its starting assumptions gave rise to a wide range of results and this was evidence of the model being unreliable.

208. In his First Expert Report, Dr Majumdar produces a number of sensitivity checks where he uses alternative characterisations of the Cartel Period. In particular he posed the questions:

- How do results change under different definitions of the period affected by the cartel?

- How do results change when a different methodology is used to estimate the RFQ contract date?

- What happens to the key findings regarding overcharge on New Contract

prices when this effect is looked at in isolation?

209. The most significant of the sensitivity tests is where Dr Majumdar adopts the same Early, Main and Wind-down Periods but uses a single cartel dummy for the Early and Main Periods. The results are shown in Table 3 below. Table 3 incorporates the data shown in Table 2 and adds to it a new line giving the single dummy coefficient for the early and main periods.

210. Dr Majumdar justifies the use of a single dummy by stating that:

> "If the Tribunal finds an infringement that covers the Main and Early periods, the appropriate way to test for an overcharge for infringement effects that covered both the Main Period and Early Period is to adopt a single cartel dummy across both periods. To justify splitting that period into separate dummies for the Early Period and the Main Period, requires: (i) a factual basis for expecting a material change in behaviour by the Defendants; and (ii) a description of how that behaviour would be expected to impact the overcharge (i.e., whether a higher or lower overcharge would be expected in the Early Period as a result of the factual evidence pointing to a break in the Defendant behaviour).
>
> I note that the MH1 model [the Hughes Model] departs from this standard approach without providing a factual basis for splitting the Main and Early Periods, and that the MH1 model is not robust to this sensitivity test."

211. Mr Hughes disagrees:

> "Dr Mujumdar's approach, of using a single combined indicator for the entire Cartel Period, is flawed for two reasons. First, because Dr Majumdar's approach restricts the impact of the Cartels to be the same across the entire Cartel Period (i.e. across the Early and Main Periods), whereas I wish to test whether there is evidence of Early Period effects and only include such effects in my models if prices are statistically significantly higher in the Early Period. Second, my approach of considering the Early and Main Periods separately, where there is evidence of Early Period effects, enables the model to exploit the data more efficiently to capture different cartel effects between the Early and Main Periods as certain parts were not purchased consistently over time. Where certain OSS parts were not purchased consistently over time, Dr Majumdar's approach of defining a single longer Cartel Period means that data on such parts are likely to make less of a contribution to the estimation of the overcharge, compared to my method, when the Cartel impacts exist but differ between the Early and Main Periods. As a result, under Dr Majumdar's approach, potentially valuable data is likely to be ignored or given less weight and the resulting estimate is likely not to fully capture the impact of the Cartels."

Table 3: RFQ dummy coefficients and overcharge specification where

separate dummies are used for the Early and Main Periods and where a single dummy is used for these periods.

	Metric	Airbags	Seatbelts	Steering Wheels
E/M/W specification				
Early Period	Coefficient (Std error) Overcharge	0.293*** (0.059) **25.4%**	-0.419*** (0.076) **-52.0%**	0.300*** (0.068) **25.9%**
Main Period	Coefficient (Std error) Overcharge	0.111*** (0.041) **10.5%**	-0.145** (0.061) **-15.6%**	0.252*** (0.079) **22.3%**
Single Dummy specification				
Combined Period	Coefficient (Std error) Overcharge	0.017 (0.046) **1.6%**	-0.011 (0.068) **-1.1%**	0.304*** (0.058) **26.2%**

Source: E1/19

212. There is an obvious inconsistency between values evidencing a large cartel effect in airbags in both the Early and Main Periods, and values evidencing that the cartel effect in the two periods combined is small or non-existent. Yet these calculations are based on the same Hughes Model, with the same data, the same control variables and comparing the same Clean and Dirty Periods. The only difference between the two is whether the Dirty Period is treated as one period or broken into two.

213. The problem is not restricted to airbags. The regression for seatbelts shows large and significant undercharges in both the Early and Main Period, but no significant undercharge in the two periods combined.

214. It is troubling that the two specifications lead to qualitatively different results. Mr Hughes argues that the first regression makes better use of the data and is to be preferred. This is not clear from the regressions themselves. The standard errors on the dummy coefficients in the first regression are similar to those on the second, suggesting that in each case the overcharge estimates have similar precision. But even if the argument is accepted, it does not show that the first regression can be relied upon. The fact is that seemingly innocuous decisions

about how to divide up the Cartel Period are having a large effect on the weight placed on different observations, and these shifts in weights have the capacity to cause very wide swings in the estimates of the average overcharge in the Cartel Period. Without getting to the bottom of the problem and demonstrating that one particular formulation leads to reliable results, we are left with a model that is so unreliable in its outputs that it is unusable.

215. Although the results in respect of steering wheels are more consistent across the two variants of the Hughes Model, the fragility demonstrated in the model by the inconsistency observed with airbags and seatbelts necessarily impacts the confidence one can place in the model when applied to steering wheels.

216. The second sensitivity which occupied a material part of the trial, and led to a flurry of exchanges between the experts, was the question of estimating when the contracts were negotiated (the RFQ dates) and whether differences in this estimate impacted the qualitative results of the model. The exchanges culminated in a Supplementary JES. Mr Hughes identified why the issue is so important:[33]

> "It is appropriate to start with why RFQ dates matter to the econometric modelling of the New Contract overcharge. As I set out in Hughes 1, I am seeking to identify the contracts that may be affected by the New Contract overcharge, which depends on the timing of "the conclusion of contract prices" and I thus rely on estimated RFQ dates for this purpose. If the RFQ date falls within the Cartel Period, I consider that the contract was potentially affected by the New Contract overcharge."

217. Although some RFQ dates were known most RFQ dates were unknown.[34] In his First Expert Report, where the RFQ date was unknown, Mr Hughes assumed the RFQ date to be 30 months before the SOP, this being the median gap observed between the SOP and *known* RFQ dates, as determined from PSA data.

218. The two experts converged on an alternative strategy for determining unknown RFQ dates, referred to as "Sensitivity (b)". This sensitivity assumes that where the RFQ date is unknown, the date of the RFQs was to be estimated as the

[33] Mr Hughes's Response to the RBB Note of 4 October on by-platform sensitivity testing, para 2.2.
[34] In particular, the RFQ dates of 58% of airbags, 42% of seatbelt and 63% of steering wheels are unknown.

earliest known RFQ date for the platform.

219. Table 4 compares the dummy coefficients in the Hughes Model (as set out in Table 1) and the corresponding dummy coefficients under Sensitivity (b).

Table 4: Effect on RFQ coefficients and overcharge of inferring unknown RFQ dates

	Metric	Airbags	Seatbelts	Steering Wheels
Hughes Model				
Early Period	Coefficient (Std error) Overcharge	0.293*** (0.059) 25.4%	-	0.300*** (0.068) 25.9%
Main Period	Coefficient (Std error) Overcharge	0.111*** (0.041) 10.5%	0.163*** (0.049) 15.0%	0.252*** (0.079) 22.3%
Sensitivity (b)				
Early Period	Coefficient (Std error) Overcharge	0.269*** (0.060) 23.6%	-	0.170* (0.089) 15.6%
Main Period	Coefficient (Std error) Overcharge	0.091** (0.043) 8.7%	0.221*** (0.048) 19.8%	-0.477*** (0.098) -56.4%

Source: E1/19

220. Given the important role that the RFQ date plays in the analysis and the lack of good data, this was a helpful sensitivity analysis. Although this sensitivity test does not greatly impact the overcharge for airbags and seatbelts, in the case of steering wheels, the Main Period estimate has changed very substantially, going from +22.3% to -56.4%. This raises further concerns about the robustness of the Hughes Model.

221. In Dr Majumdar's First Expert Report he argues that:

> "One of MH1's [the Hughes Model's] key findings of the overcharge quantification is that the effect of the alleged cartel (almost exclusively) played out on "New Contract" prices, i.e., the prices that were set at the beginning of the contract period, as opposed to via price amendments once the contract is in place. If this finding were robust, I would expect to also find an overcharge in an analysis that is limited to New Contract prices. Intuitively, if prices are not decreasing more slowly during the alleged cartel period than after it, then any

> overcharge must be caused by the level of the New Contract price. I therefore consider it reasonable to test the robustness of MH1's key findings by quantifying the effect of the alleged cartel on New Contract prices separately."

222. Dr Majumdar therefore estimates a variant of Mr Hughes's Model where the dataset is restricted to the first price for that item, and all subsequent prices for the same item are excluded from the dataset. The dummy coefficients from this variant are shown in Table 5 along with the original estimates from Mr Hughes's First Expert Report.

Table 5: Effect on RFQ coefficients and overcharge of restricting data to new contract prices

	Metric	**Airbags**	**Seatbelts**	**Steering Wheels**
Hughes 1				
Early Period	Coefficient (Std error) Overcharge	0.293*** (0.059) **25.4%**	-	0.300*** (0.068) **25.9%**
Main Period	Coefficient (Std error) Overcharge	0.111*** (0.041) **10.5%**	0.163*** (0.049) **15.0%**	0.252*** (0.079) **22.3%**
New contract model				
Early Period	Coefficient (Std error) Overcharge	0.180* (0.096) **16.5%**	-	0.309*** (0.094) **26.6%**
Main Period	Coefficient (Std error) Overcharge	0.164** (0.065) **15.1%**	0.057 (0.059) **5.5%**	0.036 (0.115) **3.5%**

Source: E1/19

223. Dr Majumdar concludes that the New Contract variant again evidences a lack of robustness in the Hughes Model. Mr Hughes does not agree and suggests the differences between the two results arise because of a reduction in sample sizes. He states:

> "Dr Majumdar's approach relies solely on the price of each part on the SOP date, reducing the sample size to between 55-103 observations and resulting in fewer degrees of freedom. Specifically, the degrees of freedom fall to 70 for airbags, 88 for seatbelts, and just 36 for steering wheels. This reduction in sample size adversely affects the precision of the estimates and reduces the power of the statistical tests to detect a New Part Contract overcharge when

> one exists. I consider that these results demonstrate the inappropriateness of this sensitivity."

224. During the concurrent examination, Mr Hughes went on to argue that the first price of an item is not necessarily representative of prices later on in the contract, and this calls into question the relevance of the sensitivity test, and Dr Majumdar conceded as much:

> "Q. […] one hypothesis is that although you are throwing away a lot of data points, you are not really throwing away a lot of data, and therefore if you come out with a different answer, then I ought to be disturbed. The other hypothesis is actually you are not only throwing away a lot of data points, you are actually throwing away a lot of data, because the start of production price is not that representative of the prices which follow. As far as I can see, on the basis of the evidence we have got before us, we are in no position to take a view on that ourselves; is that right?
>
> A. I have not done the check that you suggest we should have done so I cannot confirm -- therefore I cannot confirm that the first price is as representative of the sort of -- of what follows. I would need to check the data, so I --
>
> Q. But, to put it crudely, there are two possible inferences from the change between Hughes and Majumdar. One is that it shows that [the Hughes Model] is very fragile, the other is that Majumdar is throwing away a lot of data, and it's quite difficult for us to be sure which it is.
>
> A. I think that's fair."

225. In the circumstances we have some hesitation in concluding that this third sensitivity test of itself materially undermines the robustness of the Hughes Model.

F. THE TRIBUNAL'S CONCLUSIONS ON THE DIRECT CASE

226. We have already expressed the interim view that the findings of the Commission in combination with the failure of Autoliv to develop a positive case that its activity was limited to the car companies identified in the OSS Decisions means that it is more likely than not that Autoliv has engaged in some cartel activity by object in relation to the Stellantis groups. Furthermore, we have identified documents which are indicative of cartel activity. We have also observed that neither the OSS Decisions nor the documents provide evidence that the cartel activity was effective, that it impacted all or most negotiations, or that it was likely to give rise to overcharges of the size contemplated by this claim.

227. The overcharges which Mr Hughes identifies are substantial, ranging from 10.8% to 25.9%. These are mean overcharges and around that mean will be a spread of overcharges. One would expect overcharges of this magnitude, and in particular, those data points which are greater than the mean, to be noticeable and therefore questioned at the time. No explanation has been provided as to why these overcharges were not apparent nor why they could not now be exemplified in respect of certain projects with the benefit of hindsight, even if not at the time. We recognise that to identify overcharges for multiple contracts for different OSS components, over an extended period, it may be necessary to engage in an econometric analysis and may not be practicable or appropriate to perform a bottom-up contract-by-contract analysis. Nevertheless, with overcharges of this magnitude, and with a sophisticated purchaser, it is reasonable to expect there to be *some* evidence of overcharges of this magnitude and *some* explanation of why these overcharges might not be apparent to those negotiating such contracts with the Stellantis groups.

228. Few documents detailing specific contractual negotiations were produced. One, which the parties focused on, was an internal Autoliv email of 25 March 2009 which concerned negotiations for the supply of airbags for the A9 (Peugeot 208) pursuant to an RFQ. The email contained the following text:[35]

> "**1.DAB+PAB :**
>
> Last offer : 43.62€ /car : 22,60€ for DAB + 21.02 for PAB (average price AKF/AMR)
>
> They ask for 37€
>
> Proposal for round 3 : 40€ (5,7% Ebit)
>
> If we go down to 37€ : Ebit = -1%
>
> Specific comment : DAB&PAB inflator : ADP5 with TGS"

229. As can be seen, PSA was seeking a price of €37 which would have meant a small loss for Autoliv. Autoliv were proposing €40 in the next round which is only 8% higher than this loss-making figure. In these particular negotiations, it is

[35] J1/234/1.

difficult to identify space for a 10% overcharge or for any material overcharge. This is a single contract and of itself it does not mean there were not other contracts with overcharges in excess of 10% over the Cartel Period. But there were no contrary examples. When this point was put to Mr Hughes, he said that a possible explanation is that the existence of the cartel over a lengthy period had resulted in inefficiencies such that the overcharge would not necessarily show up as greater profit for Autoliv. That might theoretically be correct but again there is no evidence to support this hypothesis.

230. We also take into account our finding that each of the Stellantis groups were experienced and sophisticated purchasers with countervailing purchasing power and that in these circumstances it seems unlikely that overcharges in excess of 10% and up to 26% could be implemented without Stellantis taking issue with those prices. There is a lack of contemporary documentation showing that the Stellantis groups found prices to be in excess of that which they would have expected.

231. As to the econometric evidence, the Hughes Model has only examined PSA data for evidence of overcharge. There has been no analysis of VO or FCA data. We do not accept that an econometric analysis of PSA data can be used as a proxy for an overcharge experienced by the VO or FCA groups. We recognise that quantification of an overcharge is necessarily imprecise and that it is appropriate to take a broad axe when analysing the impact of cartel activity on prices. However, to measure losses in one business and transpose them to another unconnected business, is not a measure of damage: there comes a point at which the broad axe becomes a mallet.

232. The OSS products in issue are bespoke products and there is no particular market price for the products which is common to customers. We see no facts from which to infer that if there was an overcharge to PSA in respect of one of its new contracts for the supply of OSS products, a similar overcharge is likely to be observed in respect of other OSS products negotiated by different teams at VO or FCA. We therefore reject the case that Stellantis has shown that any cartel activity has resulted in an overcharge to VO or FCA.

233. Returning to the evidence provided by the Hughes Model, we have reached a conclusion that the use of a common E/M/W specification across all three categories of OSS indicates that there is an omitted variable problem which has led us to conclude that reliance should not be placed on Mr Hughes's analysis.

234. For an econometric test of this type to provide reliable results, it is essential that the test be formulated in advance in the light of a particular hypothesis (theory of harm) and be used to test that hypothesis. It is not appropriate to reformulate the hypothesis to fit the data. Mr Hughes's decision to use the M/W specification rather than the E/M/W specification for seatbelts on the grounds that the data shows no overcharge in the Early Period is in our view a clear example of an inappropriate application of an econometric analysis. Mr Hughes provides no satisfactory explanation why it is safe to rely on the E/M/W specification for airbags and steering wheels, but not to rely upon it for seatbelts.

235. We consider it unfortunate that Mr Hughes and the Claimants did not, in Mr Hughes's First Expert Report, present the results of what happened when the E/M/W specification was applied to the seatbelts. These should have been disclosed.

236. The sensitivity test using a single dummy for the combined Early and Main Periods also leads us to the conclusion that it is unsafe to place reliance upon the Hughes Model. As noted above, if the Hughes Model is applied to seatbelts with the Early and Main Periods being regarded as Dirty and the rest of the time being treated as Clean, then it gives flatly contradictory results depending on whether the Early and Main Periods have separate dummies or a joint dummy. The contradiction is not explained by omitted variables; both regressions account for exactly the same variables. The contradiction is not explained by uncertainty about the existence or timing of cartel activity either.

237. The Tribunal concludes that no useful conclusions can be drawn from the econometric evidence concerning the validity of the Direct Case. Stellantis has failed to show that any cartel activity directed against the Stellantis groups resulted in an overcharge at all or of the size claimed.

G. THE INDIRECT CASE

238. The Indirect Case was not pursued with particular enthusiasm by Stellantis in closing. We have concluded that the econometric evidence fails to support the Direct Case. For essentially the same reasons it cannot therefore support the Indirect Case. The Indirect Case was entirely dependent upon the robustness of the Hughes Model.

239. The Indirect Case assumes that the Direct Case has not been substantiated. Stellantis's Indirect Case is that the prices charged by the cartelists to OEMs identified in the OSS Decisions will lessen the degree of competition in the market in general and thereby increase prices.

240. The causal link between the cartel activity which was the subject of the OSS Decisions and any overcharge to PSA which might have been shown in the econometric analysis was elusive. It appeared to depend upon an information spillover from the cartel activity reported in the OSS Decisions to the negotiations around RFQs in this case, but the evidence in support of that proposition did not develop beyond a theoretical speculation.

241. A further problem with this alternative case is that it has not been shown that there was an overcharge arising from the OSS cartels which is an essential element of this argument. If there was no overcharge in respect of BMW, VW Toyota etc., how can there be a spillover to PSA?

242. Autoliv rely upon a further impediment to this mechanism in that they contend that the sales teams relating to the different BUs were isolated from one another which would make the transfer of information less likely. This case was supported with witness evidence. We consider this to have been a bit of a sideshow in that, in its opening skeleton argument, Autoliv made clear that it was not saying that it was impossible for information to pass between different BUs. That concession was correctly made, and we have no hesitation in holding that information was capable of passing between BUs and this was not of itself an impediment to there being spillover.

H. PASS-ON

243. We have held that Stellantis have failed to demonstrate that they have suffered the loss claimed as a result of the alleged cartel activity. In the light of this conclusion the question of pass-on does not arise. But, having heard evidence and argument in relation to pass-on, we address, briefly, that aspect of Autoliv's case.

244. Autoliv contends that, in the event that the Stellantis groups were overcharged on the supply of OSS, they would have passed on a significant proportion of any overcharge to their customers in the form of higher prices for their motor vehicles, and any damages award should be reduced accordingly. Stellantis contends that the facts relied upon are insufficient to constitute pass-on as a matter of law and that neither the factual nor the econometric evidence establishes there was pass-on. It is also said that if costs were passed on in the form of higher prices, any benefit to Stellantis would have been neutralised by the loss of sales volume.

(1) The legal principles

245. The legal principles that apply to pass-on have been reviewed by the Supreme Court in *Sainsbury's Supermarkets Limited v Visa Europe Services LLC* [2020] UKSC 24, [2020] 4 All ER 807, and by both this Tribunal and the Court of Appeal in *Royal Mail*.[36] We remind ourselves, in particular, of the following.

246. As stated in *Sainsbury's*, at [197]:

> "There are sound reasons for taking account of pass-on in the calculation of damages for breach of competition law. Not only is it required by the compensatory principle but also there are cases where there is a need to avoid double recovery through claims in respect of the same overcharge by a direct purchaser and by subsequent purchasers in a chain, to whom an overcharge has been passed on in whole or in part."

247. The legal burden falls upon a defendant to show the claimant has mitigated its loss by the passing on of potential losses to customers. That burden should not,

[36] The judgment of this Tribunal is [2023] CAT 6, [2023] 5 CMLR 6.

however, be overstated (*Sainsbury's* at [211]). Once this issue is raised the evidential burden may shift to the claimant to show how it dealt with losses.

248. When addressing pass-on it is necessary to look for a direct and proximate causative link between the overcharge and the mitigation, per [151] of *Royal Mail*:[37]

> "In terms of factual causation, DAF could only succeed in its argument on SPO if it could establish that the prices charged by Royal Mail and BT to their customers were higher because of the overcharge, in other words if it could establish (and the burden of proof is on DAF) that the overcharge had been passed on to those customers. The CAT was unanimous as to this requirement at [223] of its judgment where it said: "we consider that DAF must prove that there was a direct and proximate causative link between the Overcharge and any increase in prices by the Claimants. That means that there must be something more than reliance on the usual planning and budgetary process, into which the Overcharge was input and at some point prices increased." I agree with Mr Ward KC that the CAT was applying the correct legal test, as recently restated by this Court in Stellantis (as cited at [23] above)."

249. A central question in this case is whether any overcharge would be an input into the usual planning and budgetary processes or whether there was a direct and proximate link between the overcharge and a cost passed on to the customer.

250. Stellantis place reliance upon "relevant factors" identified by the Tribunal in *Royal Mail Group Limited v DAF Trucks and Others* [2023] CAT 6, [2023] 5 CMLR 6 (at [228]) to establish a proximate causative link:

> "By way of summary on the legal test for causation in relation to a pass-on form of mitigation defence, we respectfully conclude that DAF must prove a direct and proximate causative link between the Overcharge and any increase in prices by the Claimants. It is not enough for DAF to say that all costs, including increases in costs, are fed into the Claimants' or their regulators' business planning and budgetary processes. There must be something more specific than that and there are a number of potentially relevant factors that it can rely on, including:
>
> (1) Knowledge of the Overcharge or the specific increase in the cost in question;
>
> (2) The relative size of the Overcharge against the Claimants' overall costs and revenue;
>
> (3) The relationship or association between what the Overcharge is incurred

[37] [2024] EWCA Civ 181.

> on and the product whose prices have been increased; and/or
>
> (4) Whether there are identifiable claims by identifiable purchasers from the Claimants in respect of losses caused by the Overcharge.
>
> This is not an exhaustive list of factors but they do seem to us to be the most relevant ones to this case. In relation to the last point (4), we think that, even though there are no such claims before us, we need to be mindful of the effect of our decisions in relation to pass-on defences in other claims."

251. Stellantis submits that neither (1) nor (4) applies in this case. It was not however suggested by the Tribunal in *Royal Mail* that this list was determinative, exhaustive or that it applied to all cases. The Tribunal specifically stated that they "*seem…to be the most relevant ones in this case*". We do not accept that the absence of (1) means that the case of pass-on is unlikely to succeed. In most cartel cases, the claimant may be unaware that there is an overcharge or the size of the overcharge, but it does not follow that the overcharge, as an element of the cost of a component of an article (in this case the motor vehicle), is not passed on to the customer.

252. As to legal claims by downstream buyers, this is a matter to which the Tribunal needs to be attentive so as not, inadvertently, to deprive such buyers of damages to which they would otherwise be entitled and/or to avoid double recovery. The Tribunal in *Royal Mail* was saying no more than this. The presence or absence of downstream claims, now or in the future, cannot of themselves answer the question of whether there is a proximate and causative link between the overcharge and the alleged pass-on. Nevertheless, it is necessary to be able to reconcile the entitlement to damages of the immediate customer with downstream claims.

253. Finally, we keep at the front of our mind the guidance given in *Sainsbury's* (at [217]-[226]) that, in applying the compensatory principle, precision in the assessment of an overcharge may not be possible or proportionate and that it is necessary for this Tribunal to take a pragmatic approach. In a case such as this, just as in the question of overcharge, the assessment of pass-on will inevitably involve evidence-based estimation not a precise calculation.

(2) The factual evidence relating to pass-on

254. Autoliv contends that if Stellantis was overcharged on the supply of OSS, this would have increased the direct costs of manufacturing its cars, and they would therefore have passed on a proportion of that overcharge to the independent dealers who purchased their cars. Autoliv acknowledged that the rise in prices would have some effect on sales volume (the "Volume Effect"). It deploys factual evidence to show the existence of pass-on, and then relies on the expert econometric evidence for their estimate of the amount of pass-on of the overcharge after taking account of the Volume Effect.

255. Stellantis put forward three factual witnesses on pass-on, one for each of the three Claimant OEMs as they stood at the time of the claimed overcharge. The written witness statements explain the sales process in their respective companies, and describe how costs and competition are taken into account in the setting of prices. The three witnesses were:

(a) Mr Jerome Gautier who gave evidence for PSA. He joined PSA in 1990 and held a variety of roles. Up until 2009 he was involved in country-level implementation of sales prices through his role as market manager for the UK and Sweden and as marketing director for the Netherlands and Turkey. From this he was familiar with the PSA group's price setting methodology. From 2009 to 2014 he was the price and product director for Peugeot with responsibility for overseeing the setting of prices for product ranges, and his understanding is the same process was used before this. From 2014-2017 he was prices and volumes director and involved in the setting of prices globally. He was also chair of the pricing committee.

(b) Ms Francesca Biancheri who gave evidence for FCA. She joined Fiat in 1995 and has held a number of roles at the company. From 2007-2011 she was pricing manager for the Fiat brand with overall responsibility for the Fiat pricing team. She was not involved in pricing before 2007 or after 2011. She stated in her witness statement (in the

Bearings litigation – see below) that she spoke to unnamed colleagues about the pricing processes after 2011 and as a result of those conversations she understands the processes to be largely unchanged.

(c) Mr Benoit Couturier who gave evidence for VO. He joined Opel France in 1997. In 2001 he moved to Zurich as a European price analyst within GM Europe's headquarters and in 2004 became current pricing manager. In 2005 he moved to Germany where he was financial manager in charge of the new global platform of GM which sought to share key components/designs and reduce costs. He stated that he was most comfortable discussing pricing of vehicles already on the road from 2001 and 2005 and the pricing of new vehicles from 2017.

256. PSA/FCA were claimants in earlier cartel proceedings before this Tribunal relating to car components, referred to as the "Bearings Litigation". We were provided with little information about the earlier proceedings but were told that, in the Bearings Litigation, similar issues arose in relation to pass-on. In 2017, Mr Gautier for PSA,[38] and in 2021 Ms Biancheri for FCA,[39] filed witness statements in the Bearings Litigation. An odd approach was taken in these proceedings in that, rather than annex their witness statements from the earlier litigation and give evidence as to their recollections today, they swore to their earlier witness statements as if they had been made in these proceedings. They then supplemented these statements with additional witness statements. We found this unsatisfactory. In the event that it was considered advantageous to swear to a witness statement in another action and treat that as evidence in chief in these proceedings, directions from this Tribunal should have been sought. Had the recollections of the witnesses been subject to serious challenge, the fact that Mr Gautier's Bearings Litigation witness statement had been signed seven years ago may have been an important issue. That said, in the light of the cross-examination we do not consider anything material turned on this approach. All three witnesses were cross-examined and gave their evidence fairly.

[38] Case No 1248/5/7/16
[39] Case No 1357/5/7/20

257. The parties agreed that:

- While there are several different channels through which cars pass from manufacturer to the final purchaser, the sale of vehicles by the claimants to independent dealers is the primary channel, and the channel on which the pass-on argument should focus; and

- The relevant price for the pass-on analysis is the net price paid by the dealer. It is not the list price set by the OEM nor the price paid by the final purchaser which is negotiated by the dealer. The net price is the list price net of any dealer margin and discounts.

258. In their opening submissions, Autoliv argued that pass-on occurred in practice through either higher list prices for the vehicles, or through lower discounts and dealer margins, or some combination of the two. In its closing, it focused on the discounts and dealer margins. It contended that "*the discretionary rebates, discounts and incentives available to the OEMs provided a range of tools that were used to protect profit targets and margins by adjusting the net price payable by dealers to OEMs for their motor vehicles.*"

259. The parties differ in their interpretations of the witness evidence. Autoliv submits that the evidence conclusively established that a proportion of any overcharge would have been passed on to the Claimants' independent dealers through the mechanism of the net dealer price. Stellantis disagrees and contends that the witnesses firmly rejected that factual contention. It submitted that whilst each witness accepted that the OEMs could, in principle, have adjusted their net dealer prices in response to changes in component costs, they would have done so only if the change in costs was significant (in the order of hundreds of euros).

Mr Gautier

260. Mr Gautier for PSA explained in his witness statements that when prices are set, the most important consideration is the price positioning of its closest rivals. He stated:

> "The Product Pricing Team has a Market Manager for each region. The Market Manager works closely with local teams (i.e. individuals working in the country in question) in order to identify the appropriate rival models in each country in his or her region, and to propose benchmark prices accordingly. This can be a complex and time-consuming process. One reason for the complexity is that no two cars are identical, so we seek not only to identify the closest rivals but also to make appropriate adjustments to the comparator prices to reflect any differences in equipment levels or specifications: for example, if the closest rival model is sold without a radio as standard, whereas the PSA model has a radio as standard, we will add a set amount to the rival's list price to account for this difference. We call these adjusted prices the 'product prices'."

261. He goes on to explain that the pricing recommendations once finalised are put before a pricing committee for approval which involves top level management. Because of the focus on rival prices, the prices set will vary between countries.

262. When initial prices are set, there will be established a profitability forecast for each country. These detailed forecasts are set at an early stage in the process. Mr Gautier explains that if the costs of a particular component were inflated even before the early stage of a launch that would typically result in a prediction of lower profitability not a change in pricing strategy.

263. Autoliv submits that Mr Gautier agreed that one of the tools available to the PSA sales teams to achieve PSA's profitability targets was to offer more, or less, commercial support to dealers: that they could change the net dealer price or incentivise dealers to sell cars with more optional extras. It is said that the evidence showed that PSA *always* passed on higher-than-expected costs to its dealers in the process of price implementation and that was how it achieved its profitability targets.

264. The Tribunal does not accept that this is a reasonable conclusion to draw from Mr Gautier's evidence. While he agrees with the proposition that one of the tools available to PSA's national sales teams to achieve profitability targets was to offer more, or less, dealer support, he did not agree that PSA would reduce dealer support in response to an increase in costs. Indeed, the general thrust of his oral evidence, consistent with his witness statement, was that PSA would

generally not pass on higher-than-expected costs to its dealers: [40]

> "Q: Now, would you accept that if PSA knew the price of the OSS components when they were pricing their motor vehicles, they could address those costs via changes to the net dealer price?
>
> A: No, I would not agree.
>
> Q: Why is that?
>
> A: Because, basically, we are setting prices according to the price competitiveness of our cars on the market, not based on profitability. So it means that if we would have, let's say, further insight regarding, let's say, the OSS cost, it might not have any influence on the way that we were setting prices. It will impact profitability without changing our pricing strategy.
>
> Q: So are you -- is it your evidence to the Tribunal that if PSA knew what it was being charged for OSS components, it would not take those costs into account when it was setting its profitability targets?
>
> A: It depends on the magnitude of the impact that it would have. We have profitability targets within a project. So it means when there is an overcharge and if it's, I would say, not harming the overall objective, we will not adjust. If it is marginally, I would say, impacting our objective, we'll not adjust. If it is -- if it would have a major impact, say, under the few rules, we will probably revisit the way that we are trying to price our cost.
>
> Q: So in some circumstances you would take account of the additional costs?
>
> A: In some, yes."

265. Furthermore, PSA was in any event seeking to set prices at an optimal level. If it increased its prices to dealers or reduces dealer support that will be anticipated to impact the volume of sales. As Mr Gautier explained:

> "Q: Well, I want to be clear that when PSA was pricing its motor vehicles, considerations of profitability were taken into account and were important considerations?
>
> A: Maybe I will use my own words, it will help everybody to understand. The approach was to set prices, first, to try to achieve the competitiveness that we were looking for, having in mind that we were industry volumes, so it means there is a strong relation between price and volumes. So, first, we were setting the prices, then we were looking at our profitability, and sometimes, when the gap was too big compared to our objectives, we were revisiting prices to try to find other ways to adjust it, but it -- the primary target was to set the appropriate prices in order to realise the volumes that were let's say the backbone of our profitability."

[40] T 4, 103:11-104:13.

Ms Biancheri

266. Ms Biancheri for FCA describes a similar approach to pricing to that described by Mr Gautier. She explains that vehicles are priced by reference to what the target customer group within a particular market segment is prepared to pay for a particular kind of vehicle and that this is determined by looking at competing products and pre-existing FCA models. She explains that FCA does not sum up the costs of all the components, add overheads and labour and then apply a margin.

267. In its budgeting FCA uses "standard costs" in its budgeting. This is made up of both base costs and options costs. Standard costs are generally set once a year in broad terms by reference to actual costs for the preceding six months and anticipated costs for the next six months. Standard costs are made up of a large number of individual elements. Standard costs are used by FCA in making and evaluating proposals for new models and in managing pricing over the life of a vehicle.

268. Ms Biancheri states that although costs are, obviously, important in that if prices do not cover costs the business will not be sustainable for long, the prices of competing vehicles and the price target consumers are prepared to pay are the most significant determiners of price. After launch, standard costs are used to monitor costs and are taken into account in pricing decisions but not every change in standard costs will lead to an increase in prices.

269. Autoliv contends that Ms Biancheri accepts that maintaining margins was one of the considerations FCA took into account in deciding whether to adjust its net dealer price and that reducing discounts was one way of increasing the net dealer price. It submits that there would have been an increase in the overall cost of producing a car if OSS costs increased. It argues that margin-maximisation was an important consideration for FCA in pricing its cars and that FCA would aim to recover costs over the lifetime of the vehicle, and to do that, FCA could decrease discounts given to dealers, thereby increasing the net dealer price. Further, it is said that to the extent that FCA benchmarked, it benchmarked only

to the list price (or RRP), not to the net dealer price.

270. During cross-examination, Ms Biancheri agreed that maintaining profit margins was a consideration in setting prices, but explained that so too was maintaining the volume of sales:

> "Q: As a general proposition, would you agree that one of the reasons FCA might want to adjust net dealer prices is that it was concerned to maintain margins in the business?
>
> A: I would not say that. It was more concerning maintaining the volume of sales in the business together with the margin"

271. She later added:

> "Q: When Fiat priced its vehicles, Ms Biancheri, an important aspect of that process was to maximise its margins, was it not?
>
> A: It -- it is true and not true in the sense that the important aspect was to -- to be able to maintain the right equation among volume sold and the margin maximisation. This is what I remember from that time."

272. Similarly, when Ms Biancheri was questioned about cost recovery over the lifetime of the vehicle, she accepted that one way FCA could have responded to an increase in costs was through decreasing the discount given to dealers, but made clear that FCA's readiness to do so would depend on the competitive situation:

> "Q: One of the ways that FCA could have responded to an increase in standard costs was to decrease the discounts that it made available to independent dealers when it sold its vehicles to them; would you agree?
>
> A: It could be done if the net pricing offer by the competitor was allowing us to keep the right balance of price offer. So we could decrease the discount, increasing the price to final customer, if the competitive scenario would have allowed us to do it."

Mr Couturier

273. Mr Couturier gave evidence that the pricing of vehicles at GM before 2017 was by reference to competitor vehicles. Sometimes this was done on a Europe-wide basis and sometimes it was broken down to individual markets. Each vehicle program would have "key performance indicators" which would include

a cost target and a price target. An "allowable cost" for a part was defined by the program team and an "estimation cost" was provided by a cost engineer. Subsequently, a "sourced cost" would be identified. If the estimation of cost was greater than the allowable costs, they would then try to find an engineering solution to reduce the costs of the part. As development progressed, the sourced costs would be identified such that at the Pricing Review Gate ("PRG") meeting, where the vehicles pricing targets were set, about 85-90% of costs would be sourced costs. The PRG took place about three to six months before launch and considered inter alia how the vehicle would be positioned, the trim levels, the sales channels mix, and how the profitability target related to the vehicle's target price.

274. As to profitability, the program team would define a net income percentage target which was between 3-5%, factoring in fixed and variable costs, advertising costs and administration. Mr Couturier explains that there was no direct relation between component cost increases during production and the price a customer paid. If costs increased, different levers could offset those costs, such as changing the sales channel mix, reducing customer advantages for upgrading trim levels and reducing discount support.

275. Mr Couturier was cross-examined on a document called *Pricing Cookbook* (2007) written by the General Motors Central & Eastern Europe Regional Finance and Administration. Mr Couturier had not seen the document prior to the preparations for the trial and said in re-examination that he was not aware of any official status it had within GM.

276. Autoliv's counsel put to Mr Couturier one particular passage which says:

> "When costs of production change and GME CM [General Motors Europe Contribution Margin] reduces, GME may decide to increase prices in CEE [Central and Eastern Europe] markets to off-set the profitability deterioration".

It goes on to describe the steps to be taken including:

> "In the event, Country has a legitimate case why prices should not be changed at that time (competitive pressure; low product appeal) then Country case will be presented to GME. GME will consider and may permit some Markets to

keep prices the same."

The following exchange took place:

> "Q: I was saying that this is suggesting that GM may increase vehicle prices in CEE markets if production costs went up, and I put to you that that is correct, is it not?
>
> A: I need to refer to my experience and I need to say I do not recall that we took price increase because of cost increase. Why? It's because in this case you are not competitive on the marketplace and there is -- there is a risk of volume drop, and that's a major risk, especially at the time of GM, GM was very oriented on the volume side."

(3) Conclusions on the factual evidence

277. In the case of each of the Stellantis groups, the position is that the principal input into the price is the price of competitor vehicles in the market. The evidence shows that in all three companies, those responsible for setting prices (including dealer discounts and margins) were always seeking to balance two objectives: maintaining or raising profit margins and maintaining or raising sales volumes. While there was some evidence that when margins declined precipitately or were far from target, they would seek to raise prices, the Tribunal heard no evidence to suggest that the companies would raise their prices in response to a relatively small increase in direct manufacturing costs. The evidence does not establish that profitability is finely managed such that adjustments are made to small variations in component costs.

278. The overcharges with which we are concerned on average range between 10.8% and 22.3% in the Main Period. The cost of the various components is relatively small. Autoliv in its cross-examination put its case broadly suggesting that costs in the generality would be passed on at the level of the dealer. Importantly, however, the evidence showed that the key driver of price was the competition in the market. It was understood that raising prices would be expected to have an impact on volume and that costs which are not industry wide are not automatically passed onto customers. There is not a proximate and causative link between a small price increase and the price charged to dealers or the support given to dealers in other forms.

279. As Autoliv accepts, the Stellantis groups were educated purchasers and as we have observed there is no evidence that they were aware that the charges for OSS products, even with overcharges, fell outside their expectations. If they broadly fell within costs anticipated by the Stellantis groups, it is difficult to see how prices would lead to a review of profitability or an adjustment to the dealer price or benefits. If – and there is no evidence to support this – they did exceed anticipated costs, then it is not established that the response to this would be to adjust the anticipated dealer margins rather than accept a small reduction in profitability or an adjustment to costs or to the specification. These scenarios are equally plausible.

280. For these reasons the Defendants' case of pass-on of losses would have failed had it arisen.

I. CONCLUSIONS

281. We conclude that Stellantis has failed to establish that there was a cartel operating over the entire Cartel Period against any of the Stellantis groups. Further insofar as there was cartel activity within this period Stellantis has failed to show that this has resulted in an overcharge. The decision is unanimous.

Justin Turner KC Chair	Sir Iain McMillan CBE FRSE DL	Professor Anthony Neuberger

Charles Dhanowa C.B.E., K.C. (*Hon*)
Registrar

Date: 21 February 2025