



सत्यमेव जयते



Fair Competition
For Greater Good

COMPETITION COMMISSION OF INDIA

14th February, 2020

Combination Registration No. C-2019/11/703

Notice under Section 6(2) of the Act given by ZF Friedrichshafen AG

CORAM:

Mr. Ashok Kumar Gupta
Chairperson

Ms. Sangeeta Verma
Member

Mr. Bhagwant Singh Bishnoi
Member

ORDER UNDER SECTION 31 OF THE ACT

I. BACKGROUND

1. On 7th November, 2019, the Competition Commission of India received a Notice under Section 6(2) of the Competition Act, 2002 (**Act**) from ZF Friedrichshafen AG (**ZF/ Acquirer**) regarding its proposed acquisition of WABCO Holdings Inc. (**WABCO**) (hereinafter, ZF and WABCO are collectively referred to as **Parties**). The Parties entered into a Business Transfer Agreement (**BTA**) dated 28.03.2019, pursuant to which ZF will acquire 100% of shares in WABCO, via its indirect wholly owned subsidiary Verona Merger Sub Corp.

2. In terms of Regulations 14(3) of the Combination Regulations, *vide* letter dated 22nd November 2019, the Acquirer was required to provide certain information / document(s). After seeking due extension of time, the Acquirer filed its partial reply on 13th December, 2019 and the remaining reply on 23rd December, 2019.



सत्यमेव जयते



II. PARTIES TO THE COMBINATION

3. The Acquirer (ZF), with its registered office and headquarters in Friedrichshafen (Germany), is a global technology company and develops, manufactures and distributes products and systems for passenger vehicles (**PVs**), commercial vehicles (**CVs**), off highway vehicles (**OHVs**) and industrial technology. Zeppelin Foundation¹ holds ZF to the extent of 93.8% and Dr. Jürgen and Irmgard Ulderup Foundation hold the remaining 6.2% stake. Products of ZF include gearboxes, steering, axles, clutches, dampers, chassis components and systems, active and passive safety technology for automotive applications and other associated components. The details of the subsidiaries and joint ventures of ZF in India are as under:

- 3.1. *TRW Automotive India Pvt. Ltd* is a wholly owned subsidiary of ZF engaged in provision of support interface between Brakes India Private Limited (**Brakes India**) and TRW for activities surrounding braking products amongst the engineering, quality, operations and business development functions;
- 3.2. *ZF India Pvt. Ltd.* is also a subsidiary of ZF engaged in manufacturing and sale of transmissions, shock absorbers, suspension parts for CVs and clutches for PVs. It also provides services relating to repair and maintenance of gear box and transmission for automobiles;
- 3.3. *ZF Wind Power Coimbatore Pvt. Ltd* is another subsidiary of ZF engaged in manufacturing of wind turbine gearboxes and its components, axles and transmission for construction equipment;
- 3.4. *Rane TRW Steering Systems Pvt. Ltd.* is an equally held joint venture (**JV**) of ZF engaged in manufacturing and sale of seat belts and airbags; sale of steering gears and pumps and steering assembly; and steering fluid.

¹ It is a dependent community foundation with a not-for-profit mission administered by the City of Friedrichshafen as a municipal fund.



सत्यमेव जयते



- 3.5. *Somic ZF Components Pvt. Ltd.* is also a joint venture of ZF engaged in manufacturing of products including steering ball joints, suspension ball joints, control arms, stabilizer link, tie-rod, drag link and cross-axis joints for passenger cars.
- 3.6. *ZF Hero Chassis Systems Pvt. Ltd.* is another equally held joint venture of ZF engaged in manufacturing of products including chassis component assembly, which includes front suspension, axle, front corner modules and front centre modules for passenger cars.
- 3.7. *Brakes India* is a joint venture of ZF with TVS group engaged in manufacturing of braking products for PVs, CVs and OHVs. It also has a foundry and polymers product division; and
- 3.8. *TRW Sun Steering Wheels Pvt. Ltd.* is another joint venture of ZF engaged in manufacturing steering wheels for passenger cars.
4. Further, ZF holds 26% shareholding in Avin Systems Private Limited, which is engaged in the provision of AUTOSAR Platform Products and supports customers in the development of Automotive Embedded Software Products and Services. The AUTOSAR development partnership was formed to develop and establish an open industry standard for automotive E/E (electrical/electronic) architecture. It aims to standardize software architectures of automotive electronic control units.
5. WABCO, with its registered office in Delaware (USA) and its headquarters in Bern, Switzerland is primarily a global supplier of pneumatic braking control systems, technologies and services that improve safety, efficiency and connectivity of CVs including trucks, buses and trailers. Its products and services include integrated braking systems and stability control systems, air suspension systems, transmission automation controls, aerodynamics and telematics. WABCO is a public company, listed on the New York Stock Exchange and 99% of its shares are classified as 'free float'. WABCO also supplies fleet operators with fleet management solutions, diagnostic tools, training and other expert services. The group entities of WABCO having operations in India are as under:



सत्यमेव जयते



- 5.1. *WABCO India Limited* is a listed company in India with 75% of its shareholding held by WABCO. It is engaged in manufacture of automatic slack adjusters, actuators, brake chambers, valves, air compressors, drying and distribution unit, advanced braking systems, clutch control, integrated pedal unit and electronically controlled air suspension;
- 5.2. *AssetTrackr Private Ltd.* is a wholly owned subsidiary of WABCO engaged in provision of machine-to-machine and enterprise mobility solutions and platform. It also provides GPS tracking systems, fleet management systems and GPS tracking devices;
- 5.3. *WABCO Foundation Brakes Private Limited* is also a subsidiary of WABCO engaged in foundation brake business but as per the details provided in the Notice, it has not made any sales;
- 5.4. *Mico Inc.* is a wholly owned subsidiary in United States of America. It *inter alia* exports and sells dry disc brake, master cylinder and foot operated valve (modulating brake valves) used in OHVs, into India; and
- 5.5. *China Source Engineered Components Trading Corporation Ltd* is a joint venture of WABCO in China. As per the details provided in the Notice, it has minimal sales in India apparently in the steering components sphere.

III. PROPOSED COMBINATION

6. ZF and WABCO entered into a definitive agreement on 28th March, 2019 pursuant to which ZF will acquire 100% of the shares in WABCO, *via* its indirect wholly owned subsidiary Verona Merger Sub Corp., a Delaware corporation resulting in the acquisition of sole control over WABCO.

7. The Proposed Transaction will result in indirect acquisition by ZF of WABCO Asia Private Limited, which is an indirect subsidiary of WABCO and holds 75% of the voting share capital of WABCO India Limited. Thus, the Proposed Combination would result in direct or indirect acquisition of the above WABCO entities operating in India.

IV. SUBMISSIONS OF THE ACQUIRER

8. As noted earlier, ZF has given Notice in Form II along with 2 expert reports, one on braking system (**BS Report**) and another an ‘Economist Report’ prepared by external consultants. Subsequently, ZF filed further submissions on 13th December, 2019 and 23rd December, 2019 in response to the information request of the Commission. As per the Notice, the activities of the Parties overlap in the following segments, on the basis of which relevant market has been defined:

Overlapping Product Segment	Product	Vehicle Category	ZF Entities (including JVs)	WABCO
Braking System	Foundation Brakes	PV	√	x
		LCV	√	x
		HCV	√	√
	Disc Brakes	PV	x	x
		LCV	√	x
		HCV	√	√
	Drum Brakes	PV	√	x
		LCV	√	x
		HCV	√	x
	Electronic Brake Systems	PV	√	x
		LCV	√	√
		HCV	x	√
Hydraulic Anti-locking Braking System	PV	√	x	
	LCV	√	√	
	HCV	x	√	
Steering System	Steering systems	PV	√	x
		LCV	√	x
		HCV	√	√
Clutch System	Hydraulic Clutch Actuation Systems and their components	PV	√	x
		LCV	√	x
		HCV	√	√
	Clutch Booster	PV	x	x
		LCV	√	x
		HCV	√	√
	Clutch Master Cylinder	PV	√	x
		LCV	√	x
		HCV	√	√

Source: Table taken from the Notice filed by ZF



सत्यमेव जयते



V. PRELIMINARY COMPETITION ASSESSMENT

9. Both ZF and WABCO are engaged in manufacturing and sale of automotive components in India. ZF is engaged in such business through its joint venture with TVS Group viz. Brakes India.

9.1. Brakes India is a JV between ZF and TV Sundram Iyengar and Sons Private Limited (TVS). ZF holds 49% of the shareholding in Brakes India through its wholly-owned subsidiary Lucas (Industries) Limited (Lucas), while TVS, its subsidiaries and associate companies hold the remaining 51% of its shareholding.

9.2. Brakes India was set up in 1962 through a formation agreement between TVS and Joseph Lucas, which outlines the scope and functioning of Brakes India as well as the *inter-se* relationship between JV partners.;

9.3. In 1996, Lucas merged with Varsity Corp. and TRW Inc., USA (TRW) subsequently acquired the merged entity. In 2015, ZF acquired TRW and through its wholly-owned subsidiary viz. Lucas, acquired 49% shareholding in Brakes India as well. The purpose and objects of Brakes India are to carry on the business of manufacturing, sale and supply of complete brake systems for automotive and non-automotive applications. Currently, Brakes India is a significant and well-known market participant for manufacture and sale of braking and clutch products for PVs, CVs and OHVs.

9.4. The salient clauses of JV Agreement that govern the scope of activities of Brakes India are as under:

9.4.1. [REDACTED]
[REDACTED]
[REDACTED];

9.4.2. [REDACTED]
[REDACTED]



- [REDACTED]
[REDACTED];
- 9.4.3. [REDACTED]
[REDACTED];
- 9.4.4. [REDACTED]
[REDACTED]
[REDACTED];
- 9.4.5. *Clause 5:* Business and affairs of Brakes India is managed by its board of directors with equal nomination from both the JV partners. All resolutions of Brakes India need to be passed unanimously by the board of directors, without any casting vote provided to the chairman of the board; and
- 9.4.6. [REDACTED]
[REDACTED]

10. Both ZF / Brakes India and WABCO offer a variety of automotive products in India. Their business activities are similar in the spheres of components/ systems relating to brake, clutch, steering and certain embedded software products used in CVs and OHVs. In industry parlance, commercial vehicles can be broadly classified into light commercial vehicles (LCVs) of tonnage between 3.5 tons and 7.5 tons; and medium and heavy commercial vehicles (HCVs) of tonnage above 7.5 tons. The activities of Parties are significantly similar in the manufacture and sale of components forming part of steering, brakes and clutches system used in LCVs and HCVs, apart from the overlaps in OHV components and steering systems. Accordingly, the said overlaps merit competition assessment.

A. Braking systems for commercial vehicles

11. A braking system is an integral part of the functioning of any vehicle. It is used for slowing or stopping a moving vehicle, wheel and axle or to prevent its motion. Brakes resist



motion by absorbing energy from a moving system. The fundamental components of a braking system are:

- 11.1. **Foundation brakes:** These are generally disc brakes or drum brakes or a combination of both. A *disc brake* has a disc shaped metal rotor spinning within a wheel. When pressure is applied to the brake pedal, a caliper will squeeze the brake pads against the disc creating friction. This action will slow the wheel down as more pressure is applied to the brake pedal, bringing the vehicle to a halt. A *drum brake* on the other hand uses a drum that has a set of shoes inside of it. The drum brake rotates alongside the wheel and when pressure on the brake pedal is applied, the shoes are forced against the sides of the drum and the wheel is slowed.
- 11.2. **Brake actuation systems:** Brake systems, be it with drum or disc brakes, may work on fluid (hydraulic) or air (pneumatic) pressure. Hydraulic braking systems are effective in terms of space requirement and higher braking torque and thus provide a controlled and smoother braking experience. On the other hand, pneumatic braking systems could have relatively higher actuation speed required in case of heavy vehicles. The components used in the system would vary based on the requirements of the actuation systems. In a typical hydraulic system, the pressure exerted by the driver on the brake pedal is subjected to a *vacuum booster* that magnifies the mechanical pressure and transfers it into a tandem master cylinder. The master cylinder works as the hydraulic actuator. It has a piston-cylinder arrangement that is responsible for the conversion of mechanical force into hydraulic force. As the brake pedal is pressed, the fluid in the master cylinder is compressed and exerts pressure, which is transmitted to the slave cylinders attached to each of the wheels. The function of the *slave cylinders* attached to each wheel of the vehicle is to get the pressure and the fluid from the master cylinder using *pipes and hoses* and then to apply the pressure to the brake pads or the brake shoes, as the case may be. In a pneumatic system, an air compressor sucks air from atmosphere and stores the compressed air in a reservoir. This air is sent through hosepipe or delivery pipes for operating the foundation brakes of the vehicle. The amount of braking force depends on the extent of air pressure released through the braking valves that is controlled by the driver through the brake pedal.



सत्यमेव जयते



12. With the technological developments, customers progressively prefer electronic braking systems (**EBS**) that have advanced safety features. Policy makers also consider mandating EBS as it prevents vehicles from skidding by providing stability when braking through an anti-lock braking system (ABS) or through electronic stability control (ESC) under all driving conditions.

12.1. **Anti-lock braking system (ABS)**: The role of ABS is to assist the driver in extremely dynamic situations by selectively reducing the brake pressure on one or more wheels. At the time of braking, ABS prevents the wheels from locking up and thus, allows the wheels to maintain tractive contact with the road and avoid skidding. ABS offers better control over the vehicles and reduces the stopping distances while braking.

12.2. **Electronic stability control (ESC)**: ESC is a proactive safety system (compared to ABS which reacts only when the driver applies brake) that recognizes unstable driving conditions and applies automatic corrective action. Utilizing the active build-up of direction-stabilizing brake forces, ESC continuously evaluates the measured data from numerous sensors and compares the driver's input with the actual behaviour of the vehicle. If an unstable condition develops, ESC intervenes through engine electronics and the brake system to help stabilize the vehicle. ESC usually encompasses ABS and traction control.

13. In the Indian context, the requirement of ABS, for certain categories of vehicle in India, has been mandated by the Ministry of Road Transport and Highway (**MoRTH**) through notifications dated 23rd January 2015, 16th March 2016, 10th February 2017; and draft rules dated 24th December 2018 and 1st March 2019. The MoRTH, in 2015, initially made ABS mandatory only for N3² category vehicles and M3³ category buses. Later, the road safety standards were further elevated through a notification in 2017 mandating ABS for M1⁴ and

² Category N3 means motor vehicles used for carriage of goods and having a Gross vehicle Weight exceeding 12 tons [source: available at <https://vahan.parivahan.gov.in/makermodel/vahan/welcome.xhtml>] last accessed on 16th January, 2020].

³ Category M3:- Means motor vehicles used for the carriage passengers, comprising nine or more seats in addition to the driver's seat and having a maximum Gross Vehicle Weight exceeding 5 tons [source: available at <https://vahan.parivahan.gov.in/makermodel/vahan/welcome.xhtml>] last accessed on 16th January, 2020].

⁴ Category M1 means motor vehicles used for the carriage of passengers, comprising not more than eight seats in addition to the driver's seat [source: available at <https://vahan.parivahan.gov.in/makermodel/vahan/welcome.xhtml>] last accessed on 16th January, 2020].



सत्यमेव जयते



M2⁵ vehicles. Although a cost for fleet operators, the safety element appears to have weighed in the minds of policy makers to stipulate ABS as a mandatory requirement. From a futuristic perspective, besides customer/ consumer preference, the Government may mandate ABS for all vehicles to ensure higher safety standards on road.

14. Currently, ESC is not a mandatory requirement, but as per the information provided by the Acquirer, in India, MoRTH is considering making ESC compulsory for passenger cars by 2022-23. MoRTH has already issued notification dated 29th March, 2019 stipulating that ESC is mandatory for certain school busses and other vehicles. Besides being a policy preference, ESC may also be a customer preference given the advantage of having an additional safety feature.

15. It is observed that both the Parties are actively engaged in manufacture and supply of various components of braking system for different categories of vehicles.

(i) Foundation brakes for commercial vehicles

16. In the foundation brake business, both ZF and WABCO are present in air disc brakes for HCVs in India. While both drum and disc brakes perform the same function of slowing and stopping a vehicle, each of these are different in terms of characteristics, efficiency and price. While drum brakes are conventional, disc brake is an advanced system with features for effective braking solution and easy to maintain. Thus, we may differentiate between disc brakes and drum brakes, regarding them as separate and distinct markets. Further, as per the details provided in the Notice, the vehicles categorization (*i.e.* PVs, LCVs and HCVs) would also be a relevant factor in delineating the relevant product markets. However, given the nature of industry and suppliers of these brakes, the case would merit assessment at the level of foundation brakes for all CVs. The overlap between the Parties as per the Notice is as under:

⁵ Category M2 means motor vehicles used for the carriage of passengers, comprising nine or more seats in addition to the driver's seat and having a maximum Gross Vehicle Weight not exceeding 5 tons [source: available at <https://vahan.parivahan.gov.in/makermode/vahan/welcome.xhtml> last accessed on 16th January, 2020].



सत्यमेव जयते

**Table 1 Overlap between Parties in foundation brakes as per Notice**

Products	Vehicles Segment	Brakes India (ZF)	WABCO
Disc brakes	PV	x	x
	LCV	✓	x
	HCV	✓	✓
Drum brakes	PV	✓	x
	LCV	✓	x
	HCV	✓	x

17. The activities of the Parties exhibit horizontal overlap in the business for disc brakes used in HCVs. However, it is relevant to note that this is a nascent market and is still evolving. Apparently, at present, a small portion of HCVs in India is using disc brakes⁶. This may be primarily because it is a recent product and its cost is higher. Globally, disc brakes are the next generation brakes for CVs. For instance, WABCO in its 2018 annual report notes that

“A new generation of ADB [air disc brakes] products was released in 2018 as part of our MAXX™ product suite. This is a new generation of high-performance single-piston ADB for trucks, buses and trailers world-wide, and is expected to further accelerate the industry’s conversion from conventional drum brakes to ADB. WABCO showcased this pioneering suite of MAXX ADB technology at IAA Commercial Vehicles 2018 in Hanover, Germany...With over six million single-piston ADB systems sold, including more than one million systems proven in the field for 30,000 Nm heavy-duty applications, WABCO is the well-established global market leader for this advanced technology. WABCO’s fifth generation range of single-piston ADB technology is suitable for all types of light, medium and heavy-duty vehicles. Superbly engineered, MAXX’s new lighter weight, high-performance and low drag-torque design further boosts fuel efficiency and enables increased transport payloads...WABCO has accelerated its single-piston ADB technology leadership in China with the launch of a new joint venture for vehicle control systems in 2018. This new joint venture with FAW Jiefang Automotive Company is designed to advance the safety and efficiency of commercial vehicles in China. A major focus of the joint venture will be heavy-duty trucks given WABCO’s mastery of single-piston ADB technology for 30,000 Nm applications which have a compact, lightweight design with fewer components and are proven to deliver the highest standards of safety, performance and reliability. WABCO’s industry-leading, high-performance single-piston ADB technology is best suited for all types of commercial vehicles—light, medium and heavy-duty platforms⁷.”

⁶ The BS Report at page 1842 of the Notice estimates the market size and volume of air disc brakes for HCVs as INR [REDACTED] crore and [REDACTED] units, respectively.

⁷ Page 5 of the 2018 Annual Report of WABCO [source: available at <https://ir.wabco-auto.com/static-files/4bf47043-6b9c-440b-8ab9-693266e8fde8> last accessed on 16th January, 2020]



सत्यमेव जयते



18. It is observed that it is more likely that evolution and transition from drum brake to disc brake takes place rather than having the existence of both the products alongside for a long time. Seen in the light of such likely transition, it would be appropriate to have competition assessment both at the level of air disc brakes for HCVs as well as at the level of all foundation brakes for HCVs.

19. ZF has claimed that the Parties do not exhibit competition in drum brakes segment. However, in India, WABCO is seen to offer automatic slack adjusters for drum brakes used in HCVs and LCVs. An automatic slack adjuster enables the transmission of power from the actuation system to the shaft in drum brakes. ZF has claimed that Brakes India has no standalone sales of slack adjusters. Therefore, as such there is no overlap at a component level for slack adjusters. However, being a component in the drum brake system for HCVs and LCVs, the slack adjusters offered by WABCO is complementary to the foundation drum brakes offered by ZF, in India. If the drum brake system is to be seen as one system market, then the said activities of the Parties are vertically related to each other. It has been stated in the Notice that WABCO's sales of slack adjusters for HCVs in India, during CY 2018, were USD [REDACTED] million (approx. INR [REDACTED] crore) and for LCVs, it was only approx. USD [REDACTED] million (approx. INR [REDACTED] crore). Given these products of the Parties, the said vertical/complementary interface also merits examination.

20. ZF has claimed that the combined market share of the Parties (WABCO and ZF/ Brakes India) in foundation brakes for HCVs (>7.5 tons) is [65-70%] with an incremental market share of [0-5%]⁸. If one were to distinguish between disc and drum brakes, the Parties do not exhibit overlap in the market for drum brakes for HCVs in India as WABCO does not manufacture and supply the said product. When disc brakes for HCV alone is taken into account, the combined market share of the Parties is stated to be around [40-45%] in the Notice⁹. Subsequently, the Parties revised this estimate to [20-25%].

21. It is observed that the market share estimate of ZF in the market for foundation brakes for HCVs, based on value terms does not correspond to the market share computed based on

⁸ Market share estimate at Annexure 15, page 1131 of the submission dated 13th December, 2019 of ZF. The market share estimates are for the FY 2018-19.

⁹ Page 94 of the Notice.

volume of sales. The BS report estimates the market value to be [REDACTED] crore and the market volume as [REDACTED] (page 1842 of the Notice). This translates to average price per component of INR [REDACTED]/- (BS report estimates the average price per air drum brake as INR [REDACTED]). As per the additional information obtained from ZF on 23rd December, 2019, Brakes India had sold [REDACTED] units¹⁰ of drum brakes for a value of INR [REDACTED] crores. These volumes against the total volume of the industry translate to [75-80%] market share for Brakes India. Further, the average selling price of Brakes India is only INR [REDACTED], which is considerably lower than the industry average price considered by BS report (*i.e.* INR [REDACTED]). Such difference may be attributable to the larger share of drum brakes of Brakes India and air disc brakes with around three times higher price being included in the overall segment for foundation brakes. The sales value, volume and revised market share estimate of the Parties in the markets for foundation brakes for HCVs is as under:

Table 1 volume based market share of Parties in foundation brakes and air disc brakes for HCVs (FY 2018-19)

Players	Foundation brakes				Air disc brakes		
	Sales channel	Value (INR Cr)	Volume	Market share	Value (INR Cr)	Volume	Market share
Brakes India	OEM	[REDACTED]	[REDACTED]	[70-80%]	[REDACTED]	[REDACTED]	[5-10%]
	IAM	[REDACTED]	[REDACTED]		[REDACTED]	[REDACTED]	[REDACTED]
WABCO	OEM	[REDACTED]	[REDACTED]	[0-5%]	[REDACTED]	[REDACTED]	[20-25%]
Total Market volume		[REDACTED]	[REDACTED]		[REDACTED]	[REDACTED]	

Source: Sale value and volumes as per Annexure 2 to the submission dated 23rd December 2019 of ZF (Annexure 2 at page 18). Total market volume as per the estimate of BS report at page 1842 of the Notice. Market share derived based on the said values.

22. Sales of Brakes India in after-market have not been taken into consideration for the purpose of computing market share. If the aftermarket business represent institutional sales

¹⁰ As per BS Report, the foundation brakes market size of HCV is as under:

Category	Volume	Value (INR Cr.)
Air disc brakes	[REDACTED]	[REDACTED]
Air Drum Brakes	[REDACTED]	[REDACTED]
Hydraulic drum brakes	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]



used for purposes other than replacement, the same may warrant inclusion in the market share computation.

23. Although the Parties do not appear to compete in foundation brakes for HCVs at present, the material on record goes to suggest that the markets for HCVs is likely to shift towards air disc brakes in the coming future. Such likely transition from drum to disc brake system and the need for Brakes India to venture into air disc brake system was observed in its e-mail to ZF [REDACTED]. Given the dynamics of the evolving market for foundation brakes used in HCVs, the present sales or revenue of the Parties and their corresponding market share alone may not be reflective of their competitive abilities/ market position, in near future.

24. Besides being a strong player in the drum brakes for HCVs, Brakes India/ ZF also offers disc brakes for HCVs in India. Further, it had exported air disc brake components to the tune of INR [REDACTED] crores during FY 2018-19. For its capabilities in this business segment, Brakes India has a tie-up with Meritor. WABCO on the other hand is a known global name for air disc brake system in LCVs and HCVs. It currently also offers air disc brake systems for HCVs in India. The BS report estimates the average price of air disc brake in India as INR [REDACTED]. The average price of Brakes India in air disc brakes segment works to INR [REDACTED] (sale of [REDACTED] units for INR [REDACTED] during FY 2018-19) and the average price of WABCO works to [REDACTED] (sale of [REDACTED] units for INR [REDACTED] during FY 2018-19.). It appears that WABCO offers air disc brakes at a relatively competitive price. If the Indian HCVs and LCVs market were to evolve and migrate towards advanced disc brake systems, the Parties seem to be strong contenders to participate in such market.

25. Although Brakes India has a market share of around [75-80%] in the market for air drum brakes for HCV, it has identified shifting from air drum brakes to air disc brake to be a [REDACTED] challenge. In the above said e-mail dated [REDACTED], Brakes India has also identified increased competition from WABCO and Knorr Bremse [REDACTED]. The relevant extracts of the e-mail are reproduced below:

[REDACTED]



[Redacted text block]

[Redacted text block]

- [Redacted list item]
- [Redacted list item]
- [Redacted list item]

[Redacted text block]

[Redacted text block]

b. [REDACTED]

c. [REDACTED]

[REDACTED]

(Emphasis added)

26. The need and vision of Brakes India to venture into air disc brake system was also reflected [REDACTED].

27. Innovation seems to play a critical role in the brake and clutch industry for HCVs and LCVs. Brakes India has claimed that its sustained efforts and investments in its in-house R&D has resulted in innovative braking solutions for CVs. For instance, CVs from 7.5 ton to 10 ton, which have been using pneumatic actuation, can now utilise the innovative hydraulic brake uniBOOSTER conceptualised and manufactured by Brakes India. Similarly, the introduction of electro-magnetic retarders has been well-received by OEMs as they provide better progressive braking and reduces heating of the brakes during high-speed stops, which result in the brake performance being far better and sharper, leading to better vehicle control.

28. Although the price of air disc brakes is significantly higher than that of drum brakes, the total cost of ownership over the lifecycle of the product is lower when using disc brakes. It appears that air disc brakes are more efficient than drum brakes in terms of maintenance and performance. The initial-cost-driven approach is likely to change if the industry and consumers/fleet operators appreciate the advantages of durable and efficient products. This change will be accelerated with the proactive measures of players, which is expected in the industry where OEM customers identify suppliers based on negotiation and then collaborate with them to develop enhanced components. These suggest that there would be a likely shift from air drum



सत्यमेव जयते



brakes to air disc brakes in HCV segment. In case of such a transition, WABCO and ZF/ Brakes India are likely to be aggressive competitors. WABCO is a renowned global name for air disc brakes for HCVs. Brakes India on the other hand is the strongest player for foundation brakes for HCVs in India and has capabilities in air disc brake systems pursuant to the technological tie-up with Meritor. Both these players are likely to offer competitive options to OEMs in this segment.

29. The details provided by the Parties suggest that these markets in India have a limited number of players. Globally also there are only two complete systems players viz. WABCO and Knorr-Bremse. Brakes India has been aspiring to build and offer complete portfolio of components in the braking systems and for such purpose, has already taken several measures. This includes investment and focus in air disc brake designs and other gaps in the product portfolio especially in air actuation, and in overall system responsibility. However, if WABCO were to gain significant ownership interest in Brakes India, the said aspirations to innovate, offer complete portfolio of products in brake system for CVs and turn as a full systems player, is likely to be lost.

30. In view of the above, the Proposed Combination, *prima facie*, appears to reduce/ eliminate the incentives of WABCO and Brakes India to compete in terms of price, products, innovation and areas of operation in the market of foundation brakes for commercial vehicles in India.

(ii) Brake actuation components/ system in CVs

(a) Pneumatic Brake Actuation / system for CVs

31. Brakes India is presently not engaged in pneumatic air actuation systems but [REDACTED], it is proposing to introduce components that are used in air actuation systems. Further, Brakes India has approached [REDACTED] emphasising the need for developing complete pneumatic systems including [REDACTED] and to develop the capability for integration into vehicles. This was indicated as one of the [REDACTED] challenges to Brakes India in the coming decade. Thus, it appears that the Indian operations of ZF has been



focused to introduce pneumatic brake actuation systems for different categories of CVs, particularly HCVs. Given that WABCO is a known global name for air braking systems, the Proposed Combination is likely to restrict such focus of ZF/ Brakes India in entering into the markets for pneumatic brake actuation components.

32. It is observed that Brakes India is a strong player in the market for foundation brakes for HCVs in India. A majority of HCVs in India use drum brakes and air actuation assembly. WABCO is globally known for pneumatic brake systems for CVs. It seems to have a strong market position in air brake actuation assembly for CVs in India also, as the details provided in the submission dated 13th December, 2019 of ZF show that WABCO had made significant sales of air actuation components in India. It is observed that for contriving a brake system for a HCV or LCV, the OEM would require the air actuation assembly as well as the foundation brakes. Thus, from a system perspective, the said activities are placed vertically. [REDACTED]

33. It is observed that the Parties apparently enjoy strong position in complementary components constituting the pneumatic brake system for CVs. Further, each one of them is aspiring to become a full system player in India for HCV/ LCV brakes system. However, such aspirations and incentives is likely to be lost because of the proposed combination.

(b) Hydraulic Brake Actuation (for LCVs)

34. Hydraulic brake actuation is largely used in LCVs as HCVs require greater actuation force, which can ideally be generated by pneumatic systems. However, Brakes India has claimed that with its recent innovations, hydraulic systems can also be used in HCVs with tonnage between 7.5 and 10 ton. Thus, the following discussion on hydraulic brake actuation for LCVs would include the possibility of its use in vehicles up to 10 ton.

35. The Acquirer has claimed that the activities of the Parties do not overlap in the pneumatic brake actuation segment. However, both of them are engaged in supply of components/system in hydraulic brake actuation for LCVs in India, the details of which are as under:

Table 2 Overlap between Parties in hydraulic brake actuation systems as per Notice

No.	Products	Vehicles Segment	Brakes India (ZF)	WABCO
1.	Hydraulic Brake Actuation system (consists of Tandem Master Cylinder and Vacuum Brake booster)	PV	✓	x
		LCV	✓	x
		HCV	✓	x
2.	Tandem master Cylinder	PV	x	x
		LCV	✓	x
		HCV	✓	x
3.	Vacuum Booster	PV	x	x
		LCV	x	✓
		HCV	x	x

Source: Page 1751 of the Notice

36. [REDACTED]
[REDACTED], the material given in the Notice suggests that both the Parties are present in all of the above three product categories. To that extent, Table 2 may not reflect the actual picture of overlap between the Parties. To be specific, (a) WABCO is planning to sell hydraulic brake actuation system for LCVs from [REDACTED]; (b) WABCO has sold tandem master cylinder for LCVs to the tune of INR [REDACTED] crore during FY 2019-20; and (c) ZF/ Brakes India has sold [REDACTED] vacuum brake booster during the FY 2018-19. It appears that the said three products are recent introductions of ZF or WABCO in India. Further, Brakes India is in the process of supplying vacuum booster for hydraulic actuation of brakes used in LCVs. With all such introductions, both the Parties have extended their presence to all fundamental hydraulic brake actuation components for LCVs in India. Thus, the overlap chart for hydraulic brake actuation for LCVs would be as under:

Table 3 Reviewed Overlap chart for hydraulic brake actuation system used in LCVs

No.	Products	Vehicles Segment	Brakes India (ZF)	WABCO
1.	Hydraulic Brake Actuation system (consists of Tandem Master Cylinder and Vacuum Brake booster)	LCV	✓	✓
2.	Tandem master Cylinder	LCV	✓	✓
3.	Vacuum Booster	LCV	✓	✓



37. For the purpose of competition assessment, ZF has shown hydraulic brake actuation system (comprising of both tandem master cylinder and vacuum boosters) as a separate product market, different from the markets for tandem master cylinders and vacuum boosters sold on a standalone basis. [REDACTED]. It is observed that tandem master cylinder and vacuum brake booster are two components of the same system and they appear to perform the same function, irrespective of whether they are sold together in an assembly or on a standalone basis. OEMs can contrive the brake actuation system for LCVs, in either of the said two ways. Thus, from the perspective of OEM, either buying a composite system or standalone components serves the end utility. Accordingly, supply of tandem master cylinder and vacuum boosters, on a standalone basis, is competitively constrained by the supply of composite brake actuation assembly.

38. The automobile OEMs procure various components to build a vehicle. OEMs can procure each component as a separate piece and use in the assembly of vehicle; or they can source various sub-assembled products. It is practically difficult to delineate a market based on different modes by which OEMs procure the number of components or sub-assembled products. The market could be understood either at the end product level, built by the OEM, or at the individual component level, which are supplied to OEMs. However, this market cannot be understood at all the possible permutations and combinations of sub-assembled products supplied by the same players who also supply the individual components. In the segment under discussion, the suppliers of individual components are capable of supplying sub-assembled products and vice-versa. However, unless there is a separate trading network for the sub-assembled products with their own innovative capabilities, it may not be appropriate or possible to identify such sub-assembled product as a separate market in itself different from the individual components used in the sub-assembly.

39. Suppliers of specific components of an automobile system such as brake actuation may extend their capabilities to supply other components of the same system. The market may evolve towards supply of assembled systems making supply of individual components non-existent. For instance, today we have a market for ABS, which is a safety system that works in unstable driving conditions during braking. ESC on the other hand is an advanced system that serves stabilisation of the vehicle under any unstable driving condition and subsumes an ABS. If ESC were to be a legal mandate, the market for ABS is likely to be non-existent.

40. The purpose of defining relevant market in any competition assessment is to determine the economic reality and gauge the competition amongst different suppliers. Given that both ZF and WABCO can supply entire brake assembly or individual components therein, the appropriate measure to appreciate the market position of the Parties is to look at their market share at the level of individual components *i.e.* tandem master cylinder and vacuum brake booster. If one were to go by the approach of ZF and determine overlap or relevant market at three levels, the same may be unrealistic and would not reflect the capabilities and market position of the Parties. The details of values and volumes of business of the Parties as provided by ZF in this segment are as under:

Table 4 Hydraulic brake actuation for LCVs (FY 2018-19)

No.	Party	Assembly [Tandem Master Cylinder + Booster]		Tandem Master Cylinder		Vacuum brake booster	
		Volume	Sales (INR Cr.)	Volume	Sales (INR Cr.)	Volume	Sales (INR Cr.)
1	ZF (Brakes India)	██████	██████	██████	██████	██████	██████
2	WABCO	Sales recorded during FY 19-20*		Sales recorded during 19-20**		██████	██████

Source: Annexure 2 at Page 23 to the Submissions dated 23rd December, 2019 of ZF
* During FY 2019-20, hydraulic brake actuation assemblies sold by WABCO amounted to INR ██████
** During FY 2019-20, tandem master cylinder sold by WABCO amounted to INR ██████

41. ZF has contended in the Notice that the Parties do not exhibit overlap in markets for components or assembly in the hydraulic brake actuation for LCVs. However, subsequently Brakes India was shown to have sold ██████ vacuum brake boosters during 2018-19. This limited sales was shown to translate into [0-5%] market share. Form the material filed with the notice and subsequent submission, it is observed that such an approach does not seem to reflect the reality and the competitive position of the Parties in the concerned markets.

42. It is evident that WABCO had sold significant number of vacuum brake boosters to Brakes India at the behest of OEMs. In 2018 alone, WABCO India sold approximately ██████ units of vacuum brake boosters to Brakes India (for a total value of approximately INR ██████ crore only). It is observed that such sales represents considerable portion of the overall market for

supply of vacuum brake boosters, given that the total market size is around [REDACTED] units. The said sales exhibit vertical and complementary overlap between the activities of the Parties, which deserves examination from a competition perspective.

43. It is observed that the Parties together seem to have a substantial market position in the entire hydraulic brake actuation systems for LVCs on account of the following:

43.1. ZF estimates Brakes India to hold [0-5%] markets share in LCV brake boosters market during FY 2018-19. On examination of the material on record, it has been found that Brakes India had supplied [REDACTED] units of brakes boosters as a part of the actuation assembly, inasmuch as brake boosters form an essential part of the hydraulic brake actuation system. This substantial business presence of ZF in the said product is ignored in the conclusion that Brakes India has only [0-5%] market share in LCV brake boosters market.

43.2. ZF has not provided the market size of LCVs in terms of volumes of vehicles in the 3.5 to 7.5 ton category (LCVs). ZF however estimates the total LCV brake boosters market value to be INR [REDACTED] crore. An appropriate estimate of market size could be arrived at by dividing the said market value by the average price of the LCV brake booster. BS report estimates the average price to be INR [REDACTED] but the average price of WABCO is only INR [REDACTED]. The market share of the Parties using these two alternative values will work as under:

Table 5 LCV Brake Boosters (FY 2018-19)

Avg. Price (INR)	Market value (INR Crore)	Market size (Vol.)	Brakes India*		WABCO		Combined market share
			Units	MS	Units	MS	
BS Report	[REDACTED]	[REDACTED]	[REDACTED]	[65-70%]	[REDACTED]	[80-85%]	[145-150%]
WABCO Actuals	[REDACTED]	[REDACTED]	[REDACTED]	[35-40%]	[REDACTED]	[40-45%]	[80-85%]
*LCV brake booster sold as a part of assembly and on standalone basis							



Some of the estimates given by ZF/ BS Report appear to be inconsistent, leading to an erroneous result of [145-150%] combined market share of Parties in LCV brake boosters market. This may be on account of the fact that the assembly sold by Brakes India might have been composed of brake boosters procured from WABCO resulting in double counting. A detailed examination in this regard would be required to determine the realistic market position. However, the above material persuasively suggests that the Parties are the two strongest players in manufacture and supply of LCV brake boosters. Thus, the proposed combination *prima facie* appears to be an integration of two significant suppliers of LCV brake booster, whose offerings otherwise competitively constrain each other. The Parties recorded considerable sales of vacuum boosters under the aftermarket category [REDACTED], which may also merit examination.

- 43.3. In case of tandem master cylinders, WABCO has started its sales only from FY 2019-20. During FY 2018-19, Brakes India has recorded sale of [REDACTED] units of tandem master cylinders on a standalone basis and [REDACTED] units as a part of LCV hydraulic brake actuation assembly. As discussed above, if the market size were to be taken as [REDACTED] units, the market share of Brakes India will amount to [90-95%] and if the market size were to be [REDACTED] LCVs, the market share of Brakes India still be [50-55%]. The precise determination of the market position of the Parties would require further inquiry in the matter. However, the material on record is sufficient to suggest that the Proposed Combination *prima facie* is likely to restrict competition between Brakes India and WABCO, which is a recent entrant in the market for LCV tandem master cylinder, yet a capable player in the brake and clutch industry.
- 43.4. Based on the submissions in Notice and investor presentation dated 2nd August, 2019, it is evident that WABCO wants to expand its product portfolio and offer complete hydraulic brake actuation assembly for LCVs. It is already a competitor of Brakes India and a strong player in the manufacture and supply of vacuum brake booster for LCVs. Given these factors, the Proposed Combination *prima facie* is likely to reduce the competition in the market for hydraulic brake actuation assembly for LCVs that would otherwise exist.

(iii) Electronic braking system (EBS)

44. Both the Parties are engaged in manufacture and supply of ABS for LCVs. In particular, they both offer hydraulic ABS for LCVs. The Parties have submitted that definition of relevant market in the context of this segment should be left open. However, if necessary, the relevant market should be defined as the ‘market for manufacturing and sale of electronic brake system’. The details of overlap mentioned in the Notice is as under:

Table 6 Overlap between Parties in EBS as per Notice

Products	Vehicles Segment	Brakes India (ZF)	WABCO
ABS	PV	✓	x
	LCV	✓	✓
	HCV	x	✓
ESC	PV	x	x
	LCV	x	x
	HCV	x	✓

Source: Notice at pages 153 and 154

45. [REDACTED]

46. Given these developments, the competition assessment of EBS cannot be limited to Hydraulic ABS for LCVs where the Parties currently compete but also should include the impact of innovation and competition in slip control systems for different categories of commercial vehicles, particularly LCVs and HCVs.

47. The combined market share of the Parties in the market for hydraulic ABS for LCVs was estimated as [20-25%] in the Notice. This was later revised and increased to [30-35%]. The difference was primarily on account of the fact that LCVs were segmented as vehicles between 1 to 7.5 ton in the Notice and later restricted to vehicles falling between 3.5 to 7.5 ton. The details of estimation are as under:

Table 7 Hydraulic ABS (FY 2018-19)

Party	1 to 7.5 tons				3.5 to 7.5 tons			
	Sales (INR Cr.)	Volume	Market share	Combined market share	Sales (INR Cr.)	Volume	Market share	Combined market share
Brakes India	■	■	[15-20%]	[20-25%]	■	■	[25-30%]	[30-35%]
WABCO	■	■	[0-5%]		■	■	[5-10%]	
Total	■	■			■	■		

Source: Page 4 of the submission dated 23rd December, 2019 and annexure 2 therein

48. [REDACTED]

The Government of India has mandated ABS in some of the categories of LCVs. This apart, OEMs may on their own may offer ABS feature. Detailed inquiry including the gathering of relevant information from OEMs would be necessary to ascertain the actual market position of the Parties.

49. As regards the overlap analysis of slip control systems for LCVs and HCVs in India, it is observed that Brakes India offers hydraulic ABS since 2015 pursuant to its technology tie-up with ZF. The said agreement is on an exclusive basis and it imposes the following restrictions on Brakes India:

49.1. [REDACTED]
[REDACTED]
[REDACTED];

49.2. [REDACTED]
[REDACTED]

49.3. [REDACTED]
[REDACTED].

50. It is evident that Brakes India is restricted [REDACTED] for developing components falling under slip control systems. In [REDACTED], Brakes India and ZF entered into [REDACTED] regarding technology licence to the former for developing slip control



components and system. [REDACTED]
[REDACTED]
[REDACTED].

51. WABCO being one of the limited full systems players has a full range of braking products for CVs including EBS components. If ZF were to acquire WABCO, there will be no incentives for it to allow competition between Brakes India and WABCO in slip control systems for CVs. More particularly, ZF would have incentives to decline technology to Brakes India in the said sphere and promote WABCO. Without ESC technology, Brakes India would be compelled to exit the entire slip control systems for LCVs and HCVs. Thus, the Proposed Combination is likely to result in the exit of one of the formidable players from slip control system/ component.

B. Clutch Systems for CVs

52. The clutch actuation system is part of the transmission system of a vehicle, which in turn is a part of the powertrain system a vehicle. One of the roles of the clutch is to temporarily interrupt the power flow between the engine and transmission (to allow a gear shift).

53. The way a clutch actuation system functions is different in manual and automatic transmission systems. In manual transmission systems, a single actuator is used to transfer the pressure exerted by the driver's foot on the clutch pedal to the clutch, allowing the separation of the engine and the transmission. In automatic transmission systems, there is a need for several actuators operated by an electronic device called the "transmission control unit", to engage and disengage the clutch system, thereby eliminating the need for a clutch pedal and a gear lever. Clutch actuation systems can therefore be segmented into two categories:

53.1. *Passive actuation systems*, which are activated by the pressure exerted by the driver's foot and can only be used with manual transmissions, and

53.2. *Active actuation systems*, which are activated by the power generated by an electric motor and can be used only with automated transmissions.



सत्यमेव जयते



54. Passive and active clutch actuation systems form part of distinct product markets because of various technical and economic considerations. Specifically, active clutch actuation systems are used in automatic transmissions and are more expensive than passive systems, which are used in manual transmissions.

55. Passive clutch actuation systems can be classified into two categories *viz.* (a) Hydraulic actuation systems, which engage the clutch using hydraulic pressure; and (b) Mechanical actuation systems, which use a steel cable that is directly connected to both the pedal and the fork, to transmit the pressure exerted by a driver's foot on the pedal to a fork and a release bearing, which is attached to the clutch. ZF has submitted that OEMs, in practice, do not use mechanical actuation systems as hydraulic actuation systems are more flexible and reliable, enable an optimal and constant pedal effort, are almost 70% lighter compared to the manual clutch systems and are more compact.

56. The sub-components of passive hydraulic clutch actuation systems are discussed as under:

56.1. **Clutch Master Cylinder** - The clutch master cylinder (CMC) is connected directly to the clutch pedal through the piston. The pushing force of the driver acts on the piston, which compresses the hydraulic fluid inside the master cylinder. The mechanical force at the clutch pedal is converted into hydraulic pressure and is transferred through the hoses into the slave cylinder or the clutch booster and is then converted back into mechanical force at the clutch fork.

56.2. **Clutch Slave Cylinder/ Concentric Slave Cylinder** - The clutch slave cylinder (CSC) absorbs the pressure from the clutch hose and transmits it to the release lever (*i.e.* fully hydraulic clutch actuation system). This is implemented by the hydraulic fluid moving a piston forward or backwards. The clutch is disengaged or engaged depending on the direction of motion. The concentric slave cylinder performs the same task as CSC by directly transmitting force to the diaphragm spring tongues of the clutch. Concentric slave cylinders also contain the clutch release bearing. With this assembly, there is no need for a clutch fork (the slave cylinder being mounted concentric with the clutch diaphragm spring).

56.3. **Clutch Booster/Servo** - A clutch booster enables the driver to disengage and engage the clutch with minimum clutch pedal effort. The clutch booster is controlled hydraulically by the clutch master cylinder and operates the clutch mechanically *via* a lever system. It is a pneumatically assisted hydraulic clutch actuating device (*i.e.*, part of a pneumatically assisted hydraulic clutch actuation system). The clutch booster proportionally amplifies the foot pedal force by using air from the vehicle's compressed air system during the clutch disengagement process. It replaces CSC from the actuation assembly. It may also feature a mechanical wear indicator which shows the wear of the clutch.

57. ZF has submitted that both WABCO and Brakes India are engaged in manufacture and supply of Clutch Boosters and Clutch Master Cylinders. Their sales value, volume and market share as per the information provided by ZF is as under:

Table 8 Clutch Master Cylinder and Booster for HCVs (FY 2018-19)

No.	Party	Master Cylinder			Clutch Booster/ Servo		
		Volume	Sales (Rs. Cr.)	Value Market share	Volume	Sales (R. Cr.)	Value market share
1	ZF (Brakes India)	██████	██████	[70-75%]	██████	██████	[0-5%]
2	WABCO	██████	██████	[1-5%]	██████	██████	[60-65%]
Total Market size		██████	██████		██████	██████	
<p><i>Source:</i> sale value from Annexure 15 to the Submissions dated 13th December 2019 of ZF, market volume from BS report at page 1842 of the Notice and sale volume of Parties from Annexure 2 to the submission dated 23rd December, 2019</p>							

58. The market share estimates of the Parties based on the BS report and the average price of clutch master cylinder and clutch booster do not appear to be consistent. The following derivation would throw light on the same:

Table 9 HCV Clutch Master Cylinder Volume Market Share (FY 2018-19)

	Avg. Price (INR)	Market value (INR Crore)	Market size (Vol.)	Units	MS	Combined market share	Delta HHI
BS Report	████	████	████	████	████	████	████
Brakes India Actuals	████	████		████	[80-85%]	[85-90%]	>300
WABCO Actuals	████	████		████	[0-5%]		

59. The above table suggests that Brakes India is a much stronger player than what has been submitted by the Parties. The ZF/ BS Report has estimated the market size of clutch master cylinder to be INR █████ crores in terms of value and █████ units in terms volume. The average price per component was taken as INR █████. However, the average price of Brakes India and WABCO works to only Rs. █████ and Rs █████, respectively. It is relevant to note that these two players put together represent more than 80% of the market. While the average price taken by BS Report is seemingly inflated, the combined market share of the Parties increases from [75-80%] to [85-90%] if one computes volume based market share. The precise determination of the actual market position of the Parties can be determined only through further inquiry in the matter. Both Brakes India and WABCO also seem to have presence in the aftermarket segment also █████, which also merit examination.

Table 10 HCV Clutch Booster/ Servo Volume Market Share (FY 2018-19)

	Avg. Price (INR)	Market value (INR Crore)	Market size (Vol.)	Units	MS	Combined market share	Delta HHI
BS Report	████	████	████	████	████	████	████
Brakes India Actuals	████	████		████	[0-5]	[70-75]	>600
WABCO Actuals	████	████		████	[65-70]		

60. Similar to the above discussion on clutch master cylinder, the average price taken by BS Report for Clutch Boosters also seems to be inflated. While the average prices of Brakes India and WABCO are only INR █████ and INR █████, respectively, the industry average taken by



सत्यमेव जयते



BS Report is INR [REDACTED]. The combined market share of the Parties increases from [65-70%] to [70-75%] if one works out volume based market share.

61. ZF has suggested that the incremental market share because of the Proposed Combination is minimal. However, the market share estimation is seemingly inconsistent. Nevertheless, in both these fundamental components of clutch system of HCVs, the Parties put together represent around three-fourth of the supply. Seen as limited competing capabilities in these spheres, the present market share of the Parties may not be truly reflective of their abilities and market position. These markets also appear to be specialised and only players like the Parties have expertise, vision and capability to enter or expand their position. Thus, the Proposed Combination *prima facie* would not only result in perpetuating the substantial market position of the Parties but also reduce or eliminate the competitive pressure that would prevail in the absence of the Proposed Combination.

62. [REDACTED]
[REDACTED] as per footnote 489 of the Notice, WABCO has commenced sale of clutch booster for LCVs from 2019. Further, WABCO had sold [REDACTED] units of clutch booster to Brakes India during 2015-17. Thus, the activities of the Parties exhibit both vertical and horizontal overlap. The sales of WABCO in this segment appear to be minimal yet it is a renowned name and capable player in brake and clutch industry. However, the aspiration of WABCO to penetrate in this market and compete with Brakes India would be lost because of the proposed combination.

C. Other industry dynamics

(a) Entry conditions in the clutch and brake industry

63. ZF has claimed the markets in brake and clutch systems/ components in India are contestable. It is observed that an entry to be considered a competitive constraint to the combined entity of a proposed combination, shall meet the established standards of timeliness, likeliness and sufficiency. Timeliness would depend upon the time required for a new firm to enter the relevant market and offer consumers a competitive alternative to the products or services offered by the combined entity. The consideration here is not a mere entry but a



competitive alternative to the consumers of the combined entity. In general, an entry of such nature may not be considered timely if the period required is more than two years. Likelihood of an entry would *inter alia* depend upon whether the opportunity available to the entrant is higher than the scale and scope at which it could be profitable. Despite satisfying the likelihood and timeliness criteria, an entry may not be considered as a competitive constraint if the scale and scope of such entry is limited and not sufficient to counteract the anti-competitive outcomes of the combination. The entrant's products being not close substitutes of the combined entity; its capabilities being limited on account of structural, regulatory or reputational barriers; and the entry being at a smaller scale *i.e.* penetration in limited products or portfolios of the combined entity, could be some of the instances of lack of sufficiency.

64. Coming to the facts of the case, ZF has claimed that capital cost, access to technology, legal compliances and distribution networks do not prevent entry into the relevant markets. However, these claims need to be substantiated with cogent material. In the absence of material to suggest an entrant having achieved a market position of competition significance in a reasonable period, it appears the concerned markets exhibit barriers to entry. It must be appreciated that unlike new age technology markets that are dynamic in nature, the markets under consideration are relatively static yet driven by innovations. Globally, only two players seem to have full system capability in braking systems for CVs. In India, limited number of players seem to have been enjoying substantial market share over a long period in several of the brake and clutch components. Even globally renowned names like Knorr-Bremse could not achieve considerable footprint in India despite its presence for a considerably long time. This may be because of lack of expertise in localisation of manufacturing and understanding Indian road and driving conditions. On the other hand, a domestic entrant would require technology support from global players who are apparently limited in number. Further, the products of each of the players do not seem to be homogeneous. Successful testing of new products requires the support of OEMs, who are already in commercial arrangements with incumbents. In this context, it may be hard for a new entrant to replicate the goodwill and infrastructure of the incumbent in a reasonable period.

65. It is observed that there appears no likelihood of a timely and sufficient entry that could act as a competitive constraint to the combined entity given the structure of the brake and clutch industry in India and the absence of any entrant of competition significance in the recent times.



सत्यमेव जयते



With the integration of significant capabilities and goodwill of WABCO and Brakes India, the Proposed Combination *prima facie* is likely to increase the cost of entrants and rivals to compete and increase their presence in the market.

(b) *Innovation*

66. The Proposed Combination is also likely to raise concerns regarding innovation in brake and clutch systems for LCVs and HCVs, given that WABCO is a known name at global level and Brakes India is a successful player in the Indian market with localisation expertise in terms of manufacturing and moulding, and adopting global technology to suit Indian driving conditions. Further, it is also relevant to understand that ZF, a known name in the global automotive components industry, has been looking for investments to expand its presence in CVs braking components/ system¹¹. It had acquired interest in Haldex but the same has been divested [REDACTED]

67. As noted earlier, the products of the Parties are not homogeneous. The brake and clutch components are unique to the OEM requirements. At the stage of development of a vehicle itself, OEMs tie-up with suppliers such as WABCO and Brakes India to design a suitable brake and clutch system. It is at this stage, the suppliers of brake and clutch components compete for customers. The material furnished by the Parties suggest that RFQs for selection of suppliers are generally issued by OEMs well in advance and for procurements running for two to five years. Once a supplier is finalised by the OEM, the supplier would develop prototypes and test them with the assistance of OEM. Capability, trust and reputation of incumbents drive the selection by OEM. Thus, these suppliers are specialised manufacturers who can innovate customised products to meet the requirements of the customer.

68. In the Indian context, Brakes India has emerged as the leader in the commercial vehicles braking segment because of its technological tie-up up with global players and commercializing them in India. The commercial vehicles foundation braking in India is likely to transform to air disc brakes in the coming future. This is in line with the global outlook

¹¹ Annexure 30 to the submission dated 13th December, 2019



though the transition in India is likely to be slow. However, all the local and global players seem to look at opportunities and risks, and gear themselves to meet the market needs. This is reflected in the communications between [REDACTED], wherein the interest and need for Brakes India to venture into air based complete braking system was noted. The details provided by ZF in particular show that the market players are looking at system capabilities and taking appropriate measures to invest in R&D. Pipeline products of Brakes India include air actuation components. [REDACTED], Brakes India identifies WABCO and Knorr-Bremse as competitors in air-based systems, particularly because of their ability to take full systems responsibility. However, if WABCO were to gain interest in Brakes India to the tune of 49%, incentives for both these entities to compete with each other will be lost. As a result, the nature and extent of innovation is likely to reduce. Thus, the Proposed Combination *prima facie* appears to reduce the intensity of innovation in brake and clutch systems/ components for LCVs and HCVs, in India.

(c) *Countervailing buyer power*

69. At this juncture, the views of the customers such as Benz, Mahindra, Daimler, Tata, Ashok Leyland, Volvo, etc. on the combination and the industry are not available. Although these are big corporates, the markets for supply of foundation brakes, clutches and other brake and clutch components for LCVs and HCVs, in India, appear to be concentrated with the presence of limited number of players. The industry does not seem to have witnessed any entry in the recent past that eventually gained a market position of competition significance. Given these circumstances, a merger of two important capabilities is likely to increase the dependence of OEMs on ZF in the brake and clutch components for LCVs and HCVs. The extent of competitive alternatives presently available to OEMs thus is likely to reduce because of the Proposed Combination. Further, a merger of this scale is likely to enable ZF to offer complete portfolio of brake and clutch components/ systems. These factors suggest that the extent of countervailing bargaining power that they enjoy on account of the competition exerted by independent presence of WABCO and Brakes India would be lost as a result of the Proposed Combination.



VI. PRIMA FACIE VIEW OF THE COMMISSION:

70. Overall, the Proposed Combination appears to be an integration of two strong capabilities in the brake and clutch system for HCVs and LCVs. A static analysis of competition based on market share may not truly reflect the actual market position of the Parties yet market share may be one of the factors reflecting the abilities of the Parties. An appropriate competition assessment of the proposed combination would entail appreciation of the abilities and activities of the Parties to contest in the brake and clutch systems for LCVs and HCVs. Based on the foregoing preliminary assessment, the Proposed Combination, *prima facie*, appears to:

- 70.1. reduce/ eliminate the incentives of WABCO and Brakes India to compete in terms of price, products, innovation, areas of operation, etc. in the market of foundation brakes for HCVs in India;
- 70.2. result in a strong systems player for HCV brake system at the expense of two independent system suppliers in coming future;
- 70.3. restrict the focus of Brakes India to enter into the markets for pneumatic brake actuation components given that WABCO is a known global name for air braking systems;
- 70.4. integration of two significant suppliers of LCV brake boosters whose offerings competitively constrain each other. Further, restrict competition between Brakes India and WABCO in LCV tandem master cylinder even though WABCO is a recent entrant but a capable player in the brake and clutch industry. Furthermore, it is likely to reduce the competition in the market for hydraulic brake actuation assembly for LCVs that would otherwise exist;
- 70.5. result in the exit of one of the formidable players/ entrant *viz.* Brakes India from slip control systems/ components.



सत्यमेव जयते



- 70.6. perpetuate the substantial market position of the Parties in the markets for clutch master cylinder and clutch booster/ servo for HCVs; and reduce or eliminate the competitive pressure that would prevail in the absence of the Proposed Combination.
- 70.7. reduce the intensity of innovation in brake and clutch systems/ components for LCVs and HCVs, in India.
- 70.8. reduce the extent of countervailing bargaining power that the OEMs enjoy on account of the competition exerted by the independent presence of WABCO and Brakes India.
- 70.9. increase the cost of the entrants and rivals to compete and increase their presence in the market given that there is no likeliness of a timely and sufficient entry that could act as a competitive constraint to the combined entity.

71. From a static outlook of details provided by ZF, it may appear that there is either no horizontal overlap between the businesses of the Parties or it is only minimal. However, a closer scrutiny reveals that when one party is strong in a component, the other party seems to be the contestant with ability and incentives to compete. This could be well understood by looking at the details of the market share of the Parties in hydraulic brake actuation components for LCVs, clutch actuation components for HCVs and air brake system for HCVs. The material on record suggests that WABCO and Brakes India have independent capabilities to offer full systems in the said areas efficiently. However, the Proposed Combination is likely to result in a strong systems player in the said domains at the expense of two independent system suppliers in the near future. Such a position is likely to result in reduced degree of countervailing power on the part of OEMs, higher price, and barrier for new entrants.

72. In view of the above, it is observed that, *prima facie*, the Proposed Combination is likely to result in appreciable adverse effect on competition. Thus, it may be appropriate to conduct further inquiry into the matter to address the data inconsistencies discussed above, estimate the actual market position of the Parties and verify the potential harm to competition and consumers detailed above.



सत्यमेव जयते



73. It is further noted that the activities of the Parties in India also overlap in the segments of steering components and brake components for off-highway vehicle. [REDACTED]

74. In view of the above, the Commission directed the Secretary to issue a notice under Section 29(1) of the Act to the Acquirer to show cause as to why investigation in respect of such combination should not be conducted. Accordingly, notice (SCN) dated 20th January, 2020 was issued to the Acquirer under Section 29(1) of the Act.

VII. REMEDIES

75. Before the issuance of the SCN, the Commission had also considered the voluntary remedy proposal offered by ZF *vide* its submission dated 16th January, 2020. It is noted that ZF has offered behavioural compliances largely in the nature of firewall at the board of Brakes India, for a period of five years, with a view to avoid coordination between WABCO and Brakes India. Such remedy has been offered on the basis that the Parties have minimal or insignificant overlap in India. However, the preliminary assessment discussed above *prima facie* suggests that Parties put together constitute the substantial supply of brake and clutch components/ system for commercial vehicles in India. The markets in question appear to be concentrated with the presence of limited number of players and the Proposed Combination is likely to result in integration of two competing brake and clutch component portfolios for commercial vehicles resulting in a strong systems player, who would otherwise provide competitive alternatives to OEMs. The *prima facie* concerns expressed herein above are not addressed in the submission dated 16th January, 2020 of ZF.

76. In view of these, the Commission was of the view that the nature and extent of remedies offered by ZF are not sufficient to drop the inquiry, at that stage. Accordingly, the Commission directed to issue the SCN.

77. In response to the SCN, the Acquirer submitted another set of voluntary modifications *vide* submission dated 13th February, 2020 under Regulation 25 (1A) of the Competition



सत्यमेव जयते



Commission of India (Procedure in regard to the transaction of business relating to combinations) Regulations. The remedies offered are provided as Annexure-A to this Order. ZF has clarified that the scope of remedy offered to the Department of Justice in the US, in relation to the Proposed Combination, includes the divestment of steering business of WABCO in India (**Steering Divestment**). With the divestment of steering business of WABCO, the remaining *prima facie* competition concerns in India would be in braking, and driveline / clutch actuation. To address the said remaining concerns, ZF has proposed divestment of its 49% shareholding interest, and all rights and arrangements thereof, in Brakes India (**BI Divestment**). Further, ZF would not reacquire shares or interest or influence or control over Brakes India for a period of ■■■ years. ZF has submitted that the BI Divestment would remove all the remaining overlaps between the Parties in India and therefore, the Proposed Combination would not have any adverse effect on competition in any market in India at all.

78. The Commission notes that the remedies proposed by ZF would ensure that the overlapping products of either ZF or WABCO would be divested to third parties thereby the competition between the overlapping products lines would be preserved as that before the Proposed Combination. Thus, the Commission considers such divestment to be a clean and efficient remedy sufficient and proportional to address the competition concerns that would result otherwise from the Proposed Combination.

79. In case the Parties fail to comply with the voluntary modifications submitted, as provided in the Annexure, the Proposed Combination would be deemed to have caused appreciable adverse effect on competition in India and the concerned Parties shall render themselves liable for being proceeded under the relevant provisions of the Act.

80. The Order shall stand revoked, if at any time, the information provided by the Parties is found to be incorrect.

81. The information provided by the Parties is confidential at this stage in terms of and subject to provisions of Section 57 of the Act.



82. The Secretary is directed to communicate to the Acquirer accordingly

(Sangeeta Verma)
Member

(Bhagwant Singh Bishnoi)
Member

(Ashok Kumar Gupta)
Chairperson

ANNEXURE – A

I. DEFINITIONS

- (i) **Articles of Association / AoA:** Refers to the articles of association of Brakes India.
- (ii) **Board:** Board of directors of Brakes India.
- (iii) **Brakes India:** Brakes India Private Limited, a company incorporated in India having its registered office at 21, Patullos Road, Chennai-600 002. The shareholders of Brakes India are T V Sundram Iyenger & Sons Private Limited (holding 51% shares) and ZF (holding the remaining 49% shares, through ZF International UK Limited. ZF International UK Limited was previously known as ‘Lucas Industries Limited’, prior to which it was known as ‘Joseph Lucas (Industries) Limited’.
- (iv) **Brakes India Divestment:** Proposed divestment of ZF’s 49% shareholding interest, and all rights and arrangements thereof, in Brakes India.
- (v) **Brakes India Acquirer:** An independent third party acquirer of ZF’s shareholding interest in Brakes India. The detailed conditions of such third party acquirer are set out at paragraph 7 of Annexure A.
- (vi) **Combined Entity:** The entity post ZF’s acquisition of WABCO.
- (vii) **Combination Regulations:** The Competition Commission of India (Procedure in Regard to the Transaction of Business Relating to Combinations) Regulations, 2011.
- (viii) **Confidential Information:** Any business secrets, know-how, commercial information, or any other information of a proprietary nature relating to the Brakes India Divestment that is not available in public domain.
- (ix) **Divestiture Agency:** One or more natural or legal person(s), independent from the

Parties, who is / are appointed by the Hon'ble Commission with the duty to divest ZF's shareholding interest in Brakes India during the Second Divestiture Period, in line with the agreed conditions.

- (x) **Divestiture Agency Agreement:** The agreement executed by and between the Hon'ble Commission and the Divestiture Agency regarding the monitoring of the divestment of ZF's shareholding interest in Brakes India during the Second Divestiture Period.
- (xi) **Effective Date:** The date of receipt of the Order by ZF or its counsels.
- (xii) **First Divestiture Period:** The period of [REDACTED] from the Effective Date or such extended period as may be agreed by the Hon'ble Commission.
- (xiii) **Formation Agreement:** The formation agreement dated 17 October 1962, entered into between Joseph Lucas (Industries) Limited (which was thereafter known as 'Lucas Industries Limited', and is now known as 'ZF International UK Limited') and T V Sundram Iyenger & Sons Private Limited, for setting up the Brakes India joint venture.
- (xiv) **Hon'ble Commission:** The Competition Commission of India at New Delhi, India.
- (xv) **Order:** The final order of the Hon'ble Commission approving the Proposed Transaction under the relevant provisions of Section 31 of the Competition Act.
- (xvi) **Parties:** ZF and WABCO are collectively referred to as Parties.
- (xvii) **Proposed Transaction:** The acquisition of WABCO by ZF.
- (xviii) **Remedy Proposal:** Refers to this present submission being filed with the Hon'ble Commission on 13 February, 2020, providing a voluntary divestment proposal.
- (xix) **Second Divestiture Period:** The period of [REDACTED] from the elapse of the First Divestiture Period or such extended period as may be agreed by the Divestiture Agency and the Hon'ble Commission.

- (xx) **SCN:** Notice dated 20 January 2020, issued by the Hon'ble Commission under Section 29(1) of the Competition Act.

- (xxi) **TVS:** T V Sundram Iyenger & Sons Private Limited, a company incorporated in India, having its registered office at 7-B, West Veli Street, Madurai-625 001.

- (xxii) **WABCO:** WABCO Holdings Inc., a company incorporated in the United States of America having its principal place of business at Chaussee de la Hulpe 166, 1170 Brussels, Belgium.

- (xxiii) **ZF:** ZF Friedrichshafen AG, a company incorporated in Germany having its registered office at ZF Forum, Löwentaler Straße 20, 88046 Friedrichshafen, Germany.

II. REMEDY PROPOSAL

1. A description of the key aspects of the Remedy Proposal being offered by ZF is provided below:

(i) Brief overview of the commitment

2. In order to alleviate any concerns that the Hon'ble Commission may have in relation to the Proposed Transaction and to expedite the approval process, ZF commits to the following:

(a) Divestment of ZF's complete shareholding interest in Brakes India

3. ZF commits to transfer its complete shareholding interest of 49% in Brakes India, including all rights and arrangements thereof, by the end of the First Divestiture Period, to an approved third party acquirer. ZF will not retain any shareholding interest in Brakes India, directly or indirectly, after the Brakes India Divestment.

(b) No reacquisition of shares / interest / influence / control for a period of ■■■ years

4. ZF shall, for a period of ■■■ years from the closing of the Brakes India Divestment, not acquire any stake or the possibility of exercising an influence (by way of shareholding, change in the charter documents, or by exercising affirmative rights or right to appoint a Director on the board of Brakes India or otherwise) over the whole or part of Brakes India. Further, ZF shall, for a period of ■■■ years from the Effective Date, not enter into any new joint ventures with TVS in India relating to braking, clutch and steering products / services for commercial and off-highway vehicles, without the Hon'ble Commission's approval.

(c) First Divestiture Period

5. As mentioned above, ZF shall seek to close the Brakes India Divestment within a period of [REDACTED] from the Effective Date (or such extended period as may be agreed by the Hon'ble Commission), which will constitute the First Divestiture Period.

(d) Second Divestiture Period

6. In the event that the Brakes India Divestment is unable to close within the First Divestiture Period then the Second Divestiture Period shall commence and will last for a period of up to [REDACTED] (or such extended period as may be agreed by the Hon'ble Commission and the Divestiture Agency) for carrying out the proposed divestment through the Divestiture Agency, as further detailed at paragraphs 21 to 26 below.

(ii) Requirements of the Brakes India Acquirer

7. In line with the Hon'ble Commission's past decisional practice¹, the acquirer proposed by ZF for acquiring ZF's shareholding interest in Brakes India, will —

(a) Be independent of and with no connection whatsoever with the Parties and their affiliates;

(b) Not have either a present or past employee or Director ('past' employee or Director includes anyone who has been employed in ZF / WABCO anytime in the last five years), or spouse or child of such employee or director on the boards of ZF or WABCO;

(c) Not have any structural or financial links (this does not include any commercial dealings in the ordinary course of business, which may have taken / take place on an arm's length basis), whether directly or indirectly, with any existing ZF / WABCO group entity;

¹ Please see Combination Registration No. C-2014/07/190, Order dated 30.03.2015, para 52; Combination Registration No. C-2016/08/424, Order dated 16.05.2017, para 36; Combination No. C- 2018/01/545 order dated 06.9.2018, paragraph 166; and, Combination Registration No. C-2016/05/400, Order dated 8.06.2017, para 35.10.

- (d) Have the financial resources and incentive to hold the divestment stake as a viable and active competitive force in competition with the Parties and other competitors;
- (e) Neither be likely to create, in light of the information available to the Hon'ble Commission, *prima facie* any competition concerns nor give rise to a risk that the implementation of the Order will be delayed. In particular, the Brakes India Acquirer must reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the implementation of the Brakes India Divestment.

(iii) Hon'ble Commission's prior approval of the Share Acquisition Agreement and the Brakes India Acquirer

- 8. The final binding share acquisition agreements, including all ancillary agreements, relating to the transfer of ZF's shareholding interest in Brakes India shall be conditional on the Hon'ble Commission's approval during the First Divestiture Period or the Second Divestiture Period, as the case may be. Within a period of [REDACTED] from the Effective Date, ZF shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s).
- 9. ZF will further demonstrate to the Hon'ble Commission that the Brakes India Acquirer fulfils the requirements as set out above at paragraph 7 and that the share transfer is consistent with the Hon'ble Commission's Order.

(iv) Hold Separate Obligations

- 10. ZF shall, until the closing of Brakes India Divestment, keep or procure to keep Brakes India separate from the businesses of the Combined Entity / its affiliates and ensure that the management, key personnel and other staff of the Combined Entity / its affiliates, shall have no involvement whatsoever in any business activities of Brakes India.

(a) ZF's participation in Brakes India board meetings during the divestiture period

11. Within [REDACTED] of the Effective Date:
- (i) all ZF nominated directors on the board of Brakes India shall resign from the Board of Brakes India. Accordingly, with the resignation of such Directors, ZF shall not be able to exercise any voting rights in Brakes India;
 - (ii) ZF will nominate as designees to the board of directors of Brakes India, only 2 independent directors who will not be current employees of ZF/ WABCO / Combined Entity (including its affiliates) or the Parties' competitors in braking, clutch or steering segments in India, to meet quorum requirements of Board meetings of Brakes India. It is clarified that such independent directors will not act under the instructions of ZF, while exercising their veto rights or otherwise. ZF and its affiliates will ensure that any current employees of Brakes India remain subject to the ring-fencing and firewall provisions below; and
 - (iii) ZF and its affiliates will no longer appoint or second any employees to serve in Brakes India in any capacity.
12. The purpose of the hold separate obligations is to (a) preserve Brakes India as a viable, competitive and on-going business, independent of the Parties until the closing of Brakes India Divestment; (b) assure that no Confidential Information is exchanged between the Parties and Brakes India, except as otherwise provided in the Remedy Proposal; (c) prevent harm to competition in the relevant market(s) pending Brakes India Divestment; and (d) ensure that there is full compliance with the Remedy Proposal.
13. From the Effective Date, ZF undertakes to: (a) not exercise any shareholder rights pursuant to its shareholding in Brakes India; and (b) nominate the independent directors (nominated pursuant to paragraph 11) as proxy, to participate and vote only in such shareholder meetings of Brakes India, where the agenda involves any of the following items:
- (i) Alteration to the Memorandum and / or Article of Association of Brakes India;

- (ii) Sale letting or other disposal of any part of the fixed assets and undertakings of Brakes India;
- (iii) Issue increase or reduction of the capital of Brakes India, except as provided under the Formation Agreement;
- (iv) Any amalgamation with any other business; and
- (v) Lending of Brakes India's monies or giving of guarantees by it otherwise than in its normal course of business; or borrowing monies other than borrowings in the usual course of business from bankers and / or other persons as may be approved by the Board.

(b) Ring – fencing

- 14. ZF shall implement or procure to implement, all necessary measures to ensure that the Combined Entity / its affiliates does not, after the Effective Date, obtain any Confidential Information relating to Brakes India and that any such Confidential Information obtained by ZF before the Effective Date in respect of Brakes India Divestment will be eliminated and not be used by ZF.
- 15. ZF may obtain or keep information relating to Brakes India which is reasonably necessary and will assist in the Brakes India Divestment or the disclosure of which to ZF is required by law or which is reasonably required by ZF to comply with their financial reporting or other legal obligations (including in relation to tax filings). It is clarified that such information would not be used for any other purposes.

(v) Transitional Support

- 16. ZF shall provide such transitional support as may be required by the Brakes India Acquirer to effectively implement the Brakes India Divestment.

(vi) Reporting

17. ZF shall submit written reports on the Brakes India Divestment process to the Hon'ble Commission no later than ■ days after the end of every ■ months following the date of the Order of the Hon'ble Commission, including, if applicable, details on the potential acquirers of Brakes India Divestment, negotiation with such potential acquirers and on the status and progress of the Brakes India Divestment. Further, in the first such report that shall be submitted to the Hon'ble Commission, ZF shall also confirm the steps undertaken to fulfil the obligations set out under paragraphs 11 and 13.
18. ZF shall submit on a strictly confidential basis a list of all potential acquirers who have expressed interest in acquiring the shareholding in Brakes India to the Hon'ble Commission at each stage of the divestiture process. Further, ZF undertakes to furnish all such details as may be required by the Hon'ble Commission for the Brakes India Divestment, from time to time.
19. ZF shall keep the Hon'ble Commission informed about the divestiture process, in particular, on preparation of the data room documentation and due-diligence and submit copies of any information memorandum and / or similar documents to the Hon'ble Commission.
20. ZF shall provide the Hon'ble Commission with an undertaking in respect of compliance of conditions relating to non-acquisition of influence contained at paragraph 4 of the Remedy Proposal.

(vii) Divestiture Agency

21. ZF shall divest or seek to divest its shareholding interest in Brakes India within the First Divestiture Period. However, if the divestiture does not take place as specified, the Hon'ble Commission may, under Regulation 27 of the Combination Regulations, appoint an independent agency as the Divestiture Agency for the purpose of supervising the Brakes India Divestment during the Second Divestiture Period.
22. The appointment of the Divestiture Agency shall take effect from the commencement of the Second Divestiture Period or the day of its appointment, whichever is later.

23. Upon receipt of the notice of the Hon'ble Commission regarding the appointment of the Divestiture Agency, ZF must execute or procure their affiliates to execute, within the period prescribed by the Hon'ble Commission, a comprehensive power of attorney in favour of the Divestiture Agency to effect the Brakes India Divestment (including closing) and all actions and declarations which the Divestiture Agency considers necessary or appropriate to achieve the Brakes India Divestment (including closing), including the power to appoint advisors to assist with the sale process. The power of attorney shall include the authority to grant sub-powers.
24. During the Second Divestiture Period, the Divestiture Agency shall have the sole authority to sell ZF's shareholding interest in Brakes India at no minimum price to an approved acquirer(s). Upon request of the Divestiture Agency, ZF shall cause the documents required for effecting the sale and closing of the Brakes India Divestment, to be executed.
25. The Brakes India Divestment shall not be affected by the Divestiture Agency unless and until the Hon'ble Commission has approved the terms of share acquisition agreement(s), including any ancillary agreements, and the acquirer proposed by the Divestiture Agency (as detailed above).
26. A copy of the Divestiture Agency Agreement shall be provided to ZF and ZF shall use its best efforts to support the Divestiture Agency in the performance of its duties and obligations provided in the Divestiture Agency Agreement.

(viii) Sale of ZF's shareholding interest in Brakes India within the Second Divestiture Period

27. As indicated above, within the Second Divestiture Period, the Divestiture Agency shall sell ZF's shareholding interest in Brakes India to an Approved Acquirer at no minimum price.

28. The Divestiture Agency shall have full discretion as to the manner in which it sells ZF's shareholding interest in Brakes India. The Divestiture Agency shall include in the share acquisition agreement, or other disposal arrangement, (as well as in any ancillary agreements) (a) such terms and conditions as it considers appropriate for an expedient disposal in the Second Divestiture Period; and (b) such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Agency shall protect the interests of ZF, including commercial interests, subject to ZF's unconditional obligation to divest at no minimum price in the Second Divestiture Period.
29. During the Second Divestiture Period, the Divestiture Agency shall provide the Hon'ble Commission with a comprehensive monthly (or otherwise at the Hon'ble Commission's request) report on the progress of the divestiture process. The monthly reports shall be submitted within ■ days after the end of every month and a non-confidential copy to ZF.

(ix) **Due Diligence**

30. In order to enable potential acquirers to carry out reasonable due diligence for acquiring ZF's shareholding interest in Brakes India, the Parties shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process, provide to the potential acquirer(s) sufficient information (to the extent available with ZF) as regards to Brakes India.

(x) **Duties and obligations of ZF**

31. ZF shall provide and shall cause their advisors to provide the Hon'ble Commission and Divestiture Agency with such co-operation, assistance and information as the Hon'ble Commission / Divestiture Agency may reasonably require to perform its tasks. The Hon'ble Commission / Divestiture Agency (as the case may be) shall have full and complete access to any of the books, records, documents, management or other

personnel, facilities, sites and technical information necessary of Brakes India for fulfilling its duties, to the extent ZF can provide such access. ZF shall provide the Hon'ble Commission / Divestiture Agency upon request with copies of any document required by the Hon'ble Commission / Divestiture Agency, as the case may be and as available with ZF. ZF shall make available to the Divestiture Agency one or more offices (including its main office in Pune) on their premises, if required and shall be available for meetings in order to provide the Hon'ble Commission and the Divestiture agency with all necessary information for the performance of their task.

32. ZF shall provide the Hon'ble Commission with the managerial and administrative support that it may reasonably request in relation to the Brakes India Divestment. This shall include administrative support functions relating to the Brakes India Divestment which are currently carried out at headquarters level. ZF shall provide and shall cause its advisors to provide the Hon'ble Commission, on a strictly confidential basis on request, with the information submitted to potential acquirers, in particular give the Hon'ble Commission access to the data room documentation and all other information granted to potential acquirers in the due diligence procedure. ZF shall inform the Hon'ble Commission, on a strictly confidential basis, of potential acquirers, submit lists of all potential acquirers at each stage of the selection process, including offers made by potential acquirers at those stages and keep the Hon'ble Commission informed of all developments in the divestiture process.
33. ZF shall indemnify the Divestiture Agency and its employees and agents and hold each indemnified party harmless against any liabilities arising directly out of the performance of the Divestiture Agency's duties under the order, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the indemnified party.
34. The Hon'ble Commission may share confidential information proprietary to ZF with the Divestiture Agency without seeking any approval from ZF.
35. Prior to the closing of the Brakes India Divestment, ZF shall undertake all reasonable measures to secure all consents and waivers from third parties that are required by the Brakes India Acquirer in relation to the Brakes India Divestment as of the closing date,

to the extent applicable. ZF may satisfy this requirement by certifying that the Brakes India Acquirer has, to the Brakes India Acquirer's satisfaction, executed the necessary agreements directly with the relevant third parties.

(xi) **Costs**

36. The payment to the Divestment Agency appointed by the Hon'ble Commission in relation to the services provided for Brakes India Divestment shall be made by ZF.

(xii) **Removal of difficulty / review clause**

37. The Hon'ble Commission may either on its own motion or based on a reasoned application filed by ZF, pass such order or direction as it deems fit, to address any unforeseen circumstances or difficulties in implementing the Order by ZF.

III. CONCLUSION

38. As explained in detail above, the remedy sufficiently addresses all potential competition concerns. It is a fully effective remedy as it would eliminate all remaining overlaps between Brakes India / ZF and WABCO, even in the limited overlapping product areas existing in India.

ANNEXURE – A

I. DEFINITIONS

- (i) **Articles of Association / AoA:** Refers to the articles of association of Brakes India.
- (ii) **Board:** Board of directors of Brakes India.
- (iii) **Brakes India:** Brakes India Private Limited, a company incorporated in India having its registered office at 21, Patullos Road, Chennai-600 002. The shareholders of Brakes India are T V Sundram Iyenger & Sons Private Limited (holding 51% shares) and ZF (holding the remaining 49% shares, through ZF International UK Limited. ZF International UK Limited was previously known as ‘Lucas Industries Limited’, prior to which it was known as ‘Joseph Lucas (Industries) Limited’.
- (iv) **Brakes India Divestment:** Proposed divestment of ZF’s 49% shareholding interest, and all rights and arrangements thereof, in Brakes India.
- (v) **Brakes India Acquirer:** An independent third party acquirer of ZF’s shareholding interest in Brakes India. The detailed conditions of such third party acquirer are set out at paragraph 7 of Annexure A.
- (vi) **Combined Entity:** The entity post ZF’s acquisition of WABCO.
- (vii) **Combination Regulations:** The Competition Commission of India (Procedure in Regard to the Transaction of Business Relating to Combinations) Regulations, 2011.
- (viii) **Confidential Information:** Any business secrets, know-how, commercial information, or any other information of a proprietary nature relating to the Brakes India Divestment that is not available in public domain.
- (ix) **Divestiture Agency:** One or more natural or legal person(s), independent from the

Parties, who is / are appointed by the Hon'ble Commission with the duty to divest ZF's shareholding interest in Brakes India during the Second Divestiture Period, in line with the agreed conditions.

- (x) **Divestiture Agency Agreement:** The agreement executed by and between the Hon'ble Commission and the Divestiture Agency regarding the monitoring of the divestment of ZF's shareholding interest in Brakes India during the Second Divestiture Period.
- (xi) **Effective Date:** The date of receipt of the Order by ZF or its counsels.
- (xii) **First Divestiture Period:** The period of [REDACTED] from the Effective Date or such extended period as may be agreed by the Hon'ble Commission.
- (xiii) **Formation Agreement:** The formation agreement dated 17 October 1962, entered into between Joseph Lucas (Industries) Limited (which was thereafter known as 'Lucas Industries Limited', and is now known as 'ZF International UK Limited') and T V Sundram Iyenger & Sons Private Limited, for setting up the Brakes India joint venture.
- (xiv) **Hon'ble Commission:** The Competition Commission of India at New Delhi, India.
- (xv) **Order:** The final order of the Hon'ble Commission approving the Proposed Transaction under the relevant provisions of Section 31 of the Competition Act.
- (xvi) **Parties:** ZF and WABCO are collectively referred to as Parties.
- (xvii) **Proposed Transaction:** The acquisition of WABCO by ZF.
- (xviii) **Remedy Proposal:** Refers to this present submission being filed with the Hon'ble Commission on 13 February, 2020, providing a voluntary divestment proposal.
- (xix) **Second Divestiture Period:** The period of [REDACTED] from the elapse of the First Divestiture Period or such extended period as may be agreed by the Divestiture Agency and the Hon'ble Commission.

- (xx) **SCN:** Notice dated 20 January 2020, issued by the Hon'ble Commission under Section 29(1) of the Competition Act.

- (xxi) **TVS:** T V Sundram Iyenger & Sons Private Limited, a company incorporated in India, having its registered office at 7-B, West Veli Street, Madurai-625 001.

- (xxii) **WABCO:** WABCO Holdings Inc., a company incorporated in the United States of America having its principal place of business at Chaussee de la Hulpe 166, 1170 Brussels, Belgium.

- (xxiii) **ZF:** ZF Friedrichshafen AG, a company incorporated in Germany having its registered office at ZF Forum, Löwentaler Straße 20, 88046 Friedrichshafen, Germany.

II. REMEDY PROPOSAL

1. A description of the key aspects of the Remedy Proposal being offered by ZF is provided below:

(i) Brief overview of the commitment

2. In order to alleviate any concerns that the Hon'ble Commission may have in relation to the Proposed Transaction and to expedite the approval process, ZF commits to the following:

(a) Divestment of ZF's complete shareholding interest in Brakes India

3. ZF commits to transfer its complete shareholding interest of 49% in Brakes India, including all rights and arrangements thereof, by the end of the First Divestiture Period, to an approved third party acquirer. ZF will not retain any shareholding interest in Brakes India, directly or indirectly, after the Brakes India Divestment.

(b) No reacquisition of shares / interest / influence / control for a period of ■■■ years

4. ZF shall, for a period of ■■■ years from the closing of the Brakes India Divestment, not acquire any stake or the possibility of exercising an influence (by way of shareholding, change in the charter documents, or by exercising affirmative rights or right to appoint a Director on the board of Brakes India or otherwise) over the whole or part of Brakes India. Further, ZF shall, for a period of ■■■ years from the Effective Date, not enter into any new joint ventures with TVS in India relating to braking, clutch and steering products / services for commercial and off-highway vehicles, without the Hon'ble Commission's approval.

(c) First Divestiture Period

5. As mentioned above, ZF shall seek to close the Brakes India Divestment within a period of [REDACTED] from the Effective Date (or such extended period as may be agreed by the Hon'ble Commission), which will constitute the First Divestiture Period.

(d) Second Divestiture Period

6. In the event that the Brakes India Divestment is unable to close within the First Divestiture Period then the Second Divestiture Period shall commence and will last for a period of up to [REDACTED] (or such extended period as may be agreed by the Hon'ble Commission and the Divestiture Agency) for carrying out the proposed divestment through the Divestiture Agency, as further detailed at paragraphs 21 to 26 below.

(ii) Requirements of the Brakes India Acquirer

7. In line with the Hon'ble Commission's past decisional practice¹, the acquirer proposed by ZF for acquiring ZF's shareholding interest in Brakes India, will —

- (a) Be independent of and with no connection whatsoever with the Parties and their affiliates;
- (b) Not have either a present or past employee or Director ('past' employee or Director includes anyone who has been employed in ZF / WABCO anytime in the last five years), or spouse or child of such employee or director on the boards of ZF or WABCO;
- (c) Not have any structural or financial links (this does not include any commercial dealings in the ordinary course of business, which may have taken / take place on an arm's length basis), whether directly or indirectly, with any existing ZF / WABCO group entity;

¹ Please see Combination Registration No. C-2014/07/190, Order dated 30.03.2015, para 52; Combination Registration No. C-2016/08/424, Order dated 16.05.2017, para 36; Combination No. C- 2018/01/545 order dated 06.9.2018, paragraph 166; and, Combination Registration No. C-2016/05/400, Order dated 8.06.2017, para 35.10.

- (d) Have the financial resources and incentive to hold the divestment stake as a viable and active competitive force in competition with the Parties and other competitors;
- (e) Neither be likely to create, in light of the information available to the Hon'ble Commission, *prima facie* any competition concerns nor give rise to a risk that the implementation of the Order will be delayed. In particular, the Brakes India Acquirer must reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the implementation of the Brakes India Divestment.

(iii) Hon'ble Commission's prior approval of the Share Acquisition Agreement and the Brakes India Acquirer

- 8. The final binding share acquisition agreements, including all ancillary agreements, relating to the transfer of ZF's shareholding interest in Brakes India shall be conditional on the Hon'ble Commission's approval during the First Divestiture Period or the Second Divestiture Period, as the case may be. Within a period of [REDACTED] from the Effective Date, ZF shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s).
- 9. ZF will further demonstrate to the Hon'ble Commission that the Brakes India Acquirer fulfils the requirements as set out above at paragraph 7 and that the share transfer is consistent with the Hon'ble Commission's Order.

(iv) Hold Separate Obligations

- 10. ZF shall, until the closing of Brakes India Divestment, keep or procure to keep Brakes India separate from the businesses of the Combined Entity / its affiliates and ensure that the management, key personnel and other staff of the Combined Entity / its affiliates, shall have no involvement whatsoever in any business activities of Brakes India.

- (a) ZF's participation in Brakes India board meetings during the divestiture period
11. Within [REDACTED] of the Effective Date:
- (i) all ZF nominated directors on the board of Brakes India shall resign from the Board of Brakes India. Accordingly, with the resignation of such Directors, ZF shall not be able to exercise any voting rights in Brakes India;
 - (ii) ZF will nominate as designees to the board of directors of Brakes India, only 2 independent directors who will not be current employees of ZF/ WABCO / Combined Entity (including its affiliates) or the Parties' competitors in braking, clutch or steering segments in India, to meet quorum requirements of Board meetings of Brakes India. It is clarified that such independent directors will not act under the instructions of ZF, while exercising their veto rights or otherwise. ZF and its affiliates will ensure that any current employees of Brakes India remain subject to the ring-fencing and firewall provisions below; and
 - (iii) ZF and its affiliates will no longer appoint or second any employees to serve in Brakes India in any capacity.
12. The purpose of the hold separate obligations is to (a) preserve Brakes India as a viable, competitive and on-going business, independent of the Parties until the closing of Brakes India Divestment; (b) assure that no Confidential Information is exchanged between the Parties and Brakes India, except as otherwise provided in the Remedy Proposal; (c) prevent harm to competition in the relevant market(s) pending Brakes India Divestment; and (d) ensure that there is full compliance with the Remedy Proposal.
13. From the Effective Date, ZF undertakes to: (a) not exercise any shareholder rights pursuant to its shareholding in Brakes India; and (b) nominate the independent directors (nominated pursuant to paragraph 11) as proxy, to participate and vote only in such shareholder meetings of Brakes India, where the agenda involves any of the following items:

- (i) Alteration to the Memorandum and / or Article of Association of Brakes India;
- (ii) Sale letting or other disposal of any part of the fixed assets and undertakings of Brakes India;
- (iii) Issue increase or reduction of the capital of Brakes India, except as provided under the Formation Agreement;
- (iv) Any amalgamation with any other business; and
- (v) Lending of Brakes India's monies or giving of guarantees by it otherwise than in its normal course of business; or borrowing monies other than borrowings in the usual course of business from bankers and / or other persons as may be approved by the Board.

(b) Ring – fencing

- 14. ZF shall implement or procure to implement, all necessary measures to ensure that the Combined Entity / its affiliates does not, after the Effective Date, obtain any Confidential Information relating to Brakes India and that any such Confidential Information obtained by ZF before the Effective Date in respect of Brakes India Divestment will be eliminated and not be used by ZF.
- 15. ZF may obtain or keep information relating to Brakes India which is reasonably necessary and will assist in the Brakes India Divestment or the disclosure of which to ZF is required by law or which is reasonably required by ZF to comply with their financial reporting or other legal obligations (including in relation to tax filings). It is clarified that such information would not be used for any other purposes.

(v) Transitional Support

- 16. ZF shall provide such transitional support as may be required by the Brakes India Acquirer to effectively implement the Brakes India Divestment.

(vi) Reporting

17. ZF shall submit written reports on the Brakes India Divestment process to the Hon'ble Commission no later than ■ days after the end of every ■ months following the date of the Order of the Hon'ble Commission, including, if applicable, details on the potential acquirers of Brakes India Divestment, negotiation with such potential acquirers and on the status and progress of the Brakes India Divestment. Further, in the first such report that shall be submitted to the Hon'ble Commission, ZF shall also confirm the steps undertaken to fulfil the obligations set out under paragraphs 11 and 13.
18. ZF shall submit on a strictly confidential basis a list of all potential acquirers who have expressed interest in acquiring the shareholding in Brakes India to the Hon'ble Commission at each stage of the divestiture process. Further, ZF undertakes to furnish all such details as may be required by the Hon'ble Commission for the Brakes India Divestment, from time to time.
19. ZF shall keep the Hon'ble Commission informed about the divestiture process, in particular, on preparation of the data room documentation and due-diligence and submit copies of any information memorandum and / or similar documents to the Hon'ble Commission.
20. ZF shall provide the Hon'ble Commission with an undertaking in respect of compliance of conditions relating to non-acquisition of influence contained at paragraph 4 of the Remedy Proposal.

(vii) Divestiture Agency

21. ZF shall divest or seek to divest its shareholding interest in Brakes India within the First Divestiture Period. However, if the divestiture does not take place as specified, the Hon'ble Commission may, under Regulation 27 of the Combination Regulations, appoint an independent agency as the Divestiture Agency for the purpose of supervising the Brakes India Divestment during the Second Divestiture Period.

22. The appointment of the Divestiture Agency shall take effect from the commencement of the Second Divestiture Period or the day of its appointment, whichever is later.
23. Upon receipt of the notice of the Hon'ble Commission regarding the appointment of the Divestiture Agency, ZF must execute or procure their affiliates to execute, within the period prescribed by the Hon'ble Commission, a comprehensive power of attorney in favour of the Divestiture Agency to effect the Brakes India Divestment (including closing) and all actions and declarations which the Divestiture Agency considers necessary or appropriate to achieve the Brakes India Divestment (including closing), including the power to appoint advisors to assist with the sale process. The power of attorney shall include the authority to grant sub-powers.
24. During the Second Divestiture Period, the Divestiture Agency shall have the sole authority to sell ZF's shareholding interest in Brakes India at no minimum price to an approved acquirer(s). Upon request of the Divestiture Agency, ZF shall cause the documents required for effecting the sale and closing of the Brakes India Divestment, to be executed.
25. The Brakes India Divestment shall not be affected by the Divestiture Agency unless and until the Hon'ble Commission has approved the terms of share acquisition agreement(s), including any ancillary agreements, and the acquirer proposed by the Divestiture Agency (as detailed above).
26. A copy of the Divestiture Agency Agreement shall be provided to ZF and ZF shall use its best efforts to support the Divestiture Agency in the performance of its duties and obligations provided in the Divestiture Agency Agreement.

(viii) Sale of ZF's shareholding interest in Brakes India within the Second Divestiture Period

27. As indicated above, within the Second Divestiture Period, the Divestiture Agency shall sell ZF's shareholding interest in Brakes India to an Approved Acquirer at no minimum price.

28. The Divestiture Agency shall have full discretion as to the manner in which it sells ZF's shareholding interest in Brakes India. The Divestiture Agency shall include in the share acquisition agreement, or other disposal arrangement, (as well as in any ancillary agreements) (a) such terms and conditions as it considers appropriate for an expedient disposal in the Second Divestiture Period; and (b) such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Agency shall protect the interests of ZF, including commercial interests, subject to ZF's unconditional obligation to divest at no minimum price in the Second Divestiture Period.
29. During the Second Divestiture Period, the Divestiture Agency shall provide the Hon'ble Commission with a comprehensive monthly (or otherwise at the Hon'ble Commission's request) report on the progress of the divestiture process. The monthly reports shall be submitted within ■ days after the end of every month and a non-confidential copy to ZF.

(ix) Due Diligence

30. In order to enable potential acquirers to carry out reasonable due diligence for acquiring ZF's shareholding interest in Brakes India, the Parties shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process, provide to the potential acquirer(s) sufficient information (to the extent available with ZF) as regards to Brakes India.

(x) Duties and obligations of ZF

31. ZF shall provide and shall cause their advisors to provide the Hon'ble Commission and Divestiture Agency with such co-operation, assistance and information as the Hon'ble Commission / Divestiture Agency may reasonably require to perform its tasks. The Hon'ble Commission / Divestiture Agency (as the case may be) shall have full and complete access to any of the books, records, documents, management or other personnel, facilities, sites and technical information necessary of Brakes India for fulfilling its duties, to the extent ZF can provide such access. ZF shall provide the Hon'ble Commission / Divestiture Agency upon request with copies of any document

required by the Hon'ble Commission / Divestiture Agency, as the case may be and as available with ZF. ZF shall make available to the Divestiture Agency one or more offices (including its main office in Pune) on their premises, if required and shall be available for meetings in order to provide the Hon'ble Commission and the Divestiture agency with all necessary information for the performance of their task.

32. ZF shall provide the Hon'ble Commission with the managerial and administrative support that it may reasonably request in relation to the Brakes India Divestment. This shall include administrative support functions relating to the Brakes India Divestment which are currently carried out at headquarters level. ZF shall provide and shall cause its advisors to provide the Hon'ble Commission, on a strictly confidential basis on request, with the information submitted to potential acquirers, in particular give the Hon'ble Commission access to the data room documentation and all other information granted to potential acquirers in the due diligence procedure. ZF shall inform the Hon'ble Commission, on a strictly confidential basis, of potential acquirers, submit lists of all potential acquirers at each stage of the selection process, including offers made by potential acquirers at those stages and keep the Hon'ble Commission informed of all developments in the divestiture process.
33. ZF shall indemnify the Divestiture Agency and its employees and agents and hold each indemnified party harmless against any liabilities arising directly out of the performance of the Divestiture Agency's duties under the order, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the indemnified party.
34. The Hon'ble Commission may share confidential information proprietary to ZF with the Divestiture Agency without seeking any approval from ZF.
35. Prior to the closing of the Brakes India Divestment, ZF shall undertake all reasonable measures to secure all consents and waivers from third parties that are required by the Brakes India Acquirer in relation to the Brakes India Divestment as of the closing date, to the extent applicable. ZF may satisfy this requirement by certifying that the Brakes India Acquirer has, to the Brakes India Acquirer's satisfaction, executed the necessary agreements directly with the relevant third parties.

(xi) **Costs**

36. The payment to the Divestment Agency appointed by the Hon'ble Commission in relation to the services provided for Brakes India Divestment shall be made by ZF.

(xii) **Removal of difficulty / review clause**

37. The Hon'ble Commission may either on its own motion or based on a reasoned application filed by ZF, pass such order or direction as it deems fit, to address any unforeseen circumstances or difficulties in implementing the Order by ZF.

III. CONCLUSION

38. As explained in detail above, the remedy sufficiently addresses all potential competition concerns. It is a fully effective remedy as it would eliminate all remaining overlaps between Brakes India / ZF and WABCO, even in the limited overlapping product areas existing in India.
