



## ORIGINAL ARTICLE

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# Results of a Market Study of Vehicle Repairs Covered by Compulsory Motor Third Party Liability Insurance

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**Alexander A. TSYGANOV****ABSTRACT**

In 2022 there emerged difficulties with supply of car spare parts, which, among other things, caused difficulties with repair of insured vehicles. At the end of 2022, the Department of Insurance and Social Economics of the Financial University, as part of the ongoing applied research work, conducted a market study of service stations and car repair shops, which helped to identify the main problems that have arisen and prospects for development of repair practices commissioned by insurance companies. The main hypothesis of the study was that due to a significant change in the timing of repairs, the attitude of car owners to the use of remanufactured and aftermarket spare parts has also changed, which necessitated a change in the operating practices of Russian service stations and car repair shops, as well as in their development strategy for the short and medium term.

The problematic issues identified during the study comprise: a change in attitude towards the use of remanufactured and aftermarket spare parts, an increase in repair time. The article gives a consumer assessment of the impact of these factors on the quality of repairs. The quality of recycled spare parts, if the replacement of the part does not affect the safe operation of the car, is assessed by most unauthorised services stations as acceptable. At the same time, car service customers are ready to downgrade the category of spare parts to speed up repairs or reduce the price of repairs. The decision is influenced by the age of the car and the likelihood of receiving a discount or a reduction in the repair time.

Keywords: motor transport, repair, insurance, spare parts, service station.

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## INTRODUCTION

During 2022, the situation with car spare parts caused concern among both car owners and insurance organisations, who faced difficulties in performing repairs on insured vehicles, which was associated with both an increase in the cost of auto parts and the complication of logistics and delivery times, as well as concerns about an increase in thefts and insurance fraud. This necessitated a market survey to clarify the situation and identify entrepreneurial sentiment among the owners and management of service stations and car repair shops. Also, the hypothesis of the study was a change in consumer sentiment regarding the use of aftermarket and remanufactured spare parts during repairs, including within the framework of compulsory motor third party liability insurance, from «negative» to «allowing the use» of such spare parts in case of no impact on road safety. The survey was conducted at the end of 2022 and reflects the situation at that time.

## METHODOLOGY

When determining the objectives and problems of the research, publications on the topic of organising motor transport services [1–3] and modern problems of the motor insurance market and, first, the most widespread and social type – Compulsory Motor Third Party Liability (CMTPL), including on its effectiveness [4], considering regional Russian specifics [5], the genesis of development [6].

Development of the questionnaire included consideration of opinions on development of the motor insurance market (CMTPL and CASCO full insurance), analysis of problems and prospects [7, 8], legislative restraints and initiatives to change the practices of implementing CMTPL [9–11]. Problems of protecting the rights of consumers of insurance services [12] and public perception of insurance activities in relation to motor insurance [13, 14], including issues of tariffing and validity of the insurance premium [15], combating insurance fraud [16] also had an impact on the statement of research problems and directly influenced the wording of the questions of the market survey.

Finally, using a specially compiled authentic questionnaire<sup>1</sup>, at the end of 2022, the Department

of Insurance and Social Economics of the Financial University conducted market research devoted to organising car repairs and assessing changes related to logistics problems in the auto parts market. The study involved 45 companies representing 880 service stations and car repair shops. According to our estimates, this number of survey participants ranges from 1,3 to 2,2 % of the total number of companies providing car repair services in Russia. Companies from different regions of Russia took part in the study, including the regions of Central Russia, Siberia, the Far East, and the republics of the North Caucasus Federal District.

## RESULTS

Currently (according to various estimates) there are from 40<sup>2</sup> to 70 thousand<sup>3</sup> car service stations in Russia. The difference in numbers is due to the inclusion of various services (car wash, tire fitting, body repair), not all of which are related to repair of vehicles after traffic accidents and, accordingly, not all of these companies work with insurers under the CMTPL and CASCO programs. It is also important that, according to Autostat, more than 52 % of car repair and maintenance works are carried out by citizens independently or at private craftsmen who prefer not to go beyond the «garage» economy, while the total volume of the market for car repair and maintenance services in 2021 was estimated as 681 billion rubles<sup>4</sup>. In 2022, the directory of Russian Association of Motor Insurers on average prices for spare parts changed; in some cases, the price increase was 50 % per year<sup>5</sup>.

Some of the car services that participated in the market research were part of networks or are divisions of large companies. 31 % of survey participants were official (authorised) services of various automakers (14 companies, Pic. 1), 11 companies operated in the Far East.

<sup>2</sup> There are 39 thousand car service points in Russia. [Electronic resource]: <https://www.asn-news.ru/news/44846>. Last accessed 25.04.2023.

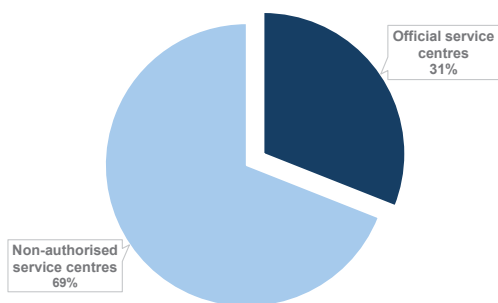
<sup>3</sup> There are about 78,000 car service stations in Russia. [Electronic resource]: <https://www.autostat.ru/news/37240/>. Last accessed 25.04.2023.

<sup>4</sup> In 2021, Russians spent more than 680 billion rubles on car service services. [Electronic resource]: <https://www.autostat.ru/infographics/50348>. Last accessed 25.04.2023.

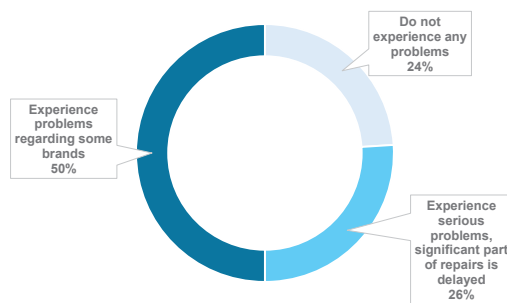
<sup>5</sup> Spare parts for some car brands have increased in price by more than half. [Electronic resource]: <https://rg.ru/2022/10/25/komu-remont-dorozhe.html>. Last accessed 25.04.2023.

<sup>1</sup> The practical part of the study involved academic staff and researchers at the Department of Insurance and Social Economics of the Financial University, namely Yu. V. Gryzenkova, N. V. Kirillova, L. S. Krutova, M. A. Selivanova, A. D. Yazykov, supervised by A. A. Tsyganov.

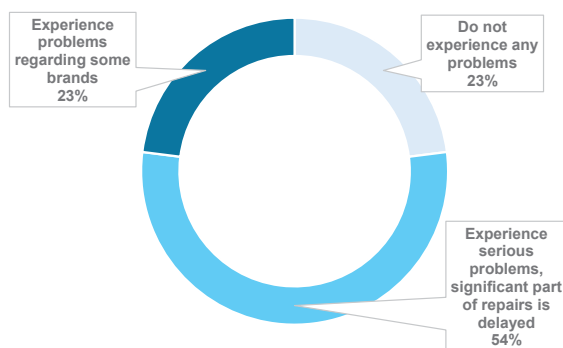




**Pic. 1.** Distribution of survey participants by official and non-authorized car services, October 2022, % of those who took part in the market survey [hereinafter charts are compiled based on the study carried out by the Department of Insurance and Social Economics of the Financial University].



**Pic. 2.** Distribution of answers to the question «Assess the current level of supply of spare parts,» October 2022, % of those who took part in the market survey.



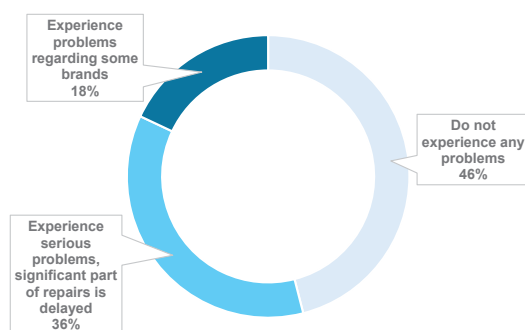
**Pic. 3.** Distribution of answers to the question «Assess the current level of supply of spare parts,» October 2022, % from companies – official service centres that took part in the market survey.

Since all the service centres that took part in the survey provide car repair services commissioned by insurance companies regarding CMTPL and CASCO, the resulting sample is indicative of the market for services in the field of body repair, which is the most in demand under CMTPL.

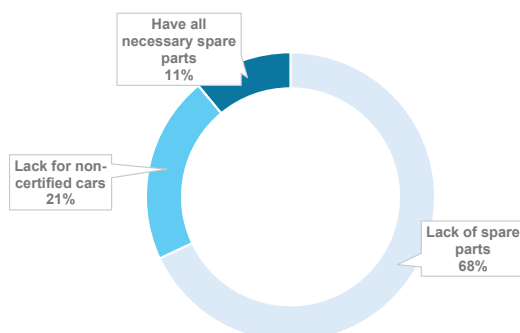
The level of availability of spare parts caused serious concerns and difficulties in repairs (Pic. 2, more than 26 %), in general, most of car services experienced problems with the availability of spare parts (76 %). But this phenomenon was most pronounced among official services (Pic. 3), which must use OEM spare parts. More than 54 % were forced to increase repair times, and 77 % of official auto repair shops experienced problems with spare parts. This assessment coincided with nationwide data, and a greater number of cases of increased repair times were associated with the inability to use remanufactured and aftermarket parts in authorised workshops.

For the Far East, the situation was mitigated by the possibility of supplying aftermarket spare parts from China, the geographical proximity of Japanese and South Korean manufacturers, but was more complicated regarding supplying spare parts for European brands (Pic. 4). This explains the prevalence of answers characterising the absence of problems with spare parts for a significant part of car services (46 %) and the forced delay in repairs for car services working with European brands (36 %). The use of recycled, remanufactured and aftermarket spare parts during repair and maintenance, especially for uncertified cars («right-hand drive» cars), is quite typical for the Russian regions of the Far East, which reduces the severity of the problem of providing new spare parts.

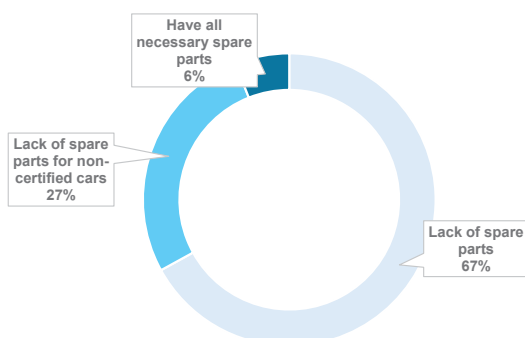
The problem of the lack of new spare parts was typical in general for Russian car services and almost all brands (Pic. 5): both for non-certified (68 %) and official services (Pic. 6, 67 %). Only 11 % of car services had all the



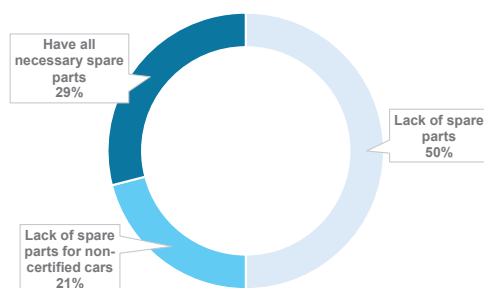
**Pic. 4. Distribution of answers to the question «Please assess the current level of supply of spare parts,» October 2022, % from Far Eastern companies that took part in the market survey.**



**Pic. 5. Distribution of answers to the question «For which categories of cars does your service centre currently lack new spare parts?», October 2022, % from companies that took part in the market survey.**

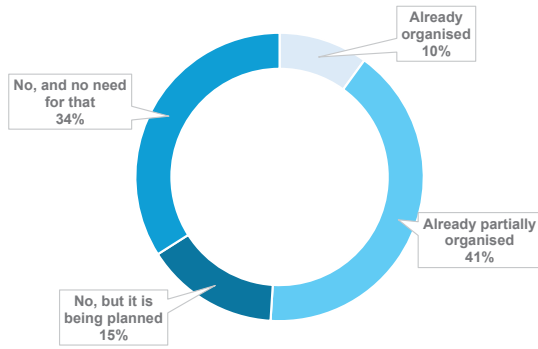


**Pic. 6. Distribution of answers to the question «For which categories of cars does your service centre currently lack new spare parts?», October 2022, % from companies – official service centres that took part in the market survey.**

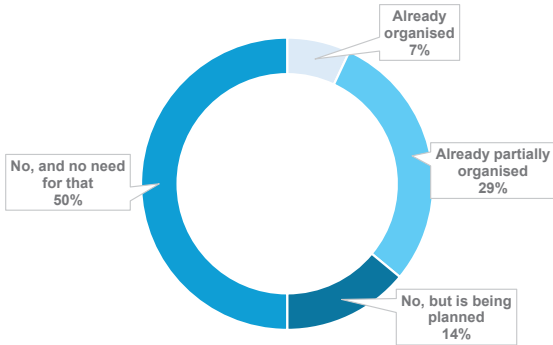


**Pic. 7. Distribution of answers to the question «For which categories of cars does your service centre currently lack new spare parts?», October 2022, % from Far Eastern companies that took part in the market survey.**

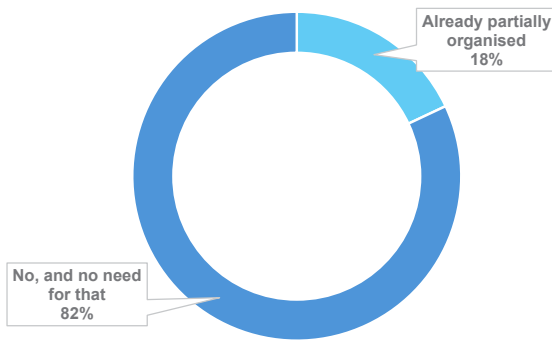




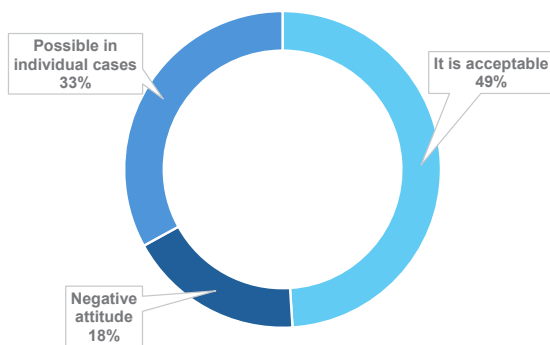
**Pic. 8.** Distribution of answers to the question «Do you have a supply of new spare parts (for example, from third countries «parallel imports»)?», October 2022, % from companies that took part in the market survey.



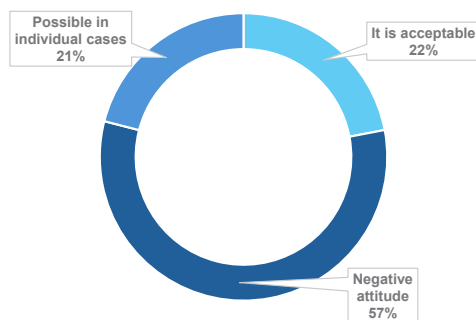
**Pic. 9.** Distribution of answers to the question «Do you have a supply of new spare parts (for example, from third countries «parallel imports»)?», October 2022, % from companies – official service centres that took part in the market survey.



**Pic. 10.** Distribution of answers to the question «Do you have a supply of new spare parts (for example, from third countries «parallel imports»)?», October 2022, % from Far Eastern companies that took part in the market survey.



**Pic. 11.** Distribution of answers to the question «How do you assess the quality of recycled spare parts, if replacing the part does not affect the safety of the vehicle (for example, glass, bumper, etc.)?', October 2022, % of companies that took part in the market survey.



**Pic. 12.** Distribution of answers to the question «How do you evaluate the quality of recycled spare parts, if replacing the part does not affect the safety of the vehicle (for example, glass, bumper, etc.)?», October 2022, % from companies – official service centres who took part in the market survey.

necessary spare parts in stock, and problems with parts for non-certified cars were noted by 21 % of car services located not only in the European part of Russia.

In the Far East, the level of availability of spare parts is higher; almost a third of respondents (29 %, Pic. 7) noted the availability of all necessary auto parts. However, here too the level of anxiety corresponding to the existing then problems with the lack of new spare parts is 50 %. Some far eastern respondents (21 %) noted problems with spare parts for non-certified cars as well.

It is clear that problems with auto parts in the absence of the possibility of purchasing from an official manufacturer can be solved in various ways, including through organisation of parallel imports, which were allowed in Russia in 2022. In this case, significant differences appeared between nation-wide trends and the Far Eastern specifics of the car market. Pics. 8–10 provide information on the use of parallel imports in the activities of car services. 66 % of car services used or planned to use this channel for the supply of spare parts to some extent (Pic. 8).

Official car service centres relied to a greater extent on official supplies; in half of the cases,

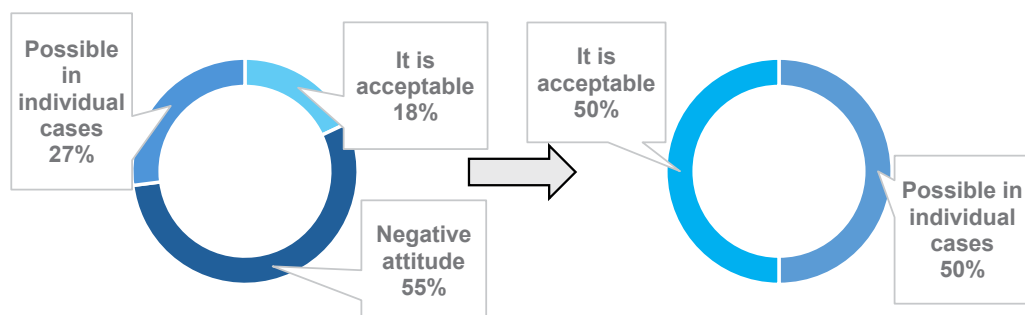
they did not consider other options for supply of spare parts (Pic. 9), while 36 % nevertheless used the services of parallel importers.

The situation in the Far East was less dependent on the supply of spare parts from European automakers; as a result, 82 % of car services did not need supplies through parallel imports, and 18 % partially used them when necessary (Pic. 10).

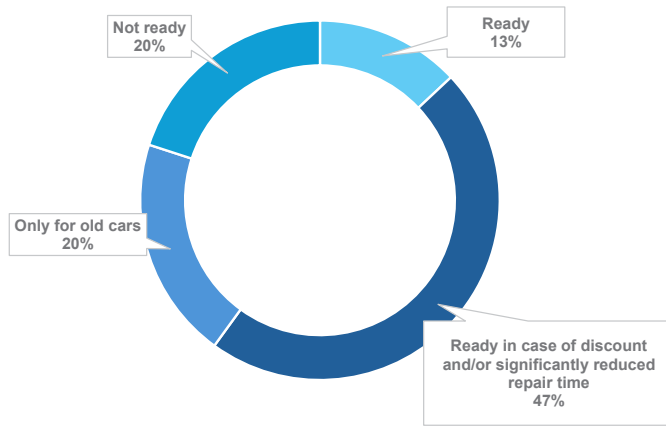
In the context of a shortage of new spare parts, it is quite logical to use suitable spare parts that have already been used. Now, such spare parts can be used, and in the case of repairs as part of an insurance payment under CMTPL, this is possible with the consent of the beneficiary. Therefore, it is advisable to consider the approach to the use of such spare parts from both car services and car owners.

In general, in Russia, car services considered it possible to use recycled spare parts if replacing the part does not affect the safety of the vehicle. 82 % considered this practice possible at least in some cases, and 49 % considered it an acceptable option for car repair in general (Pic. 11).

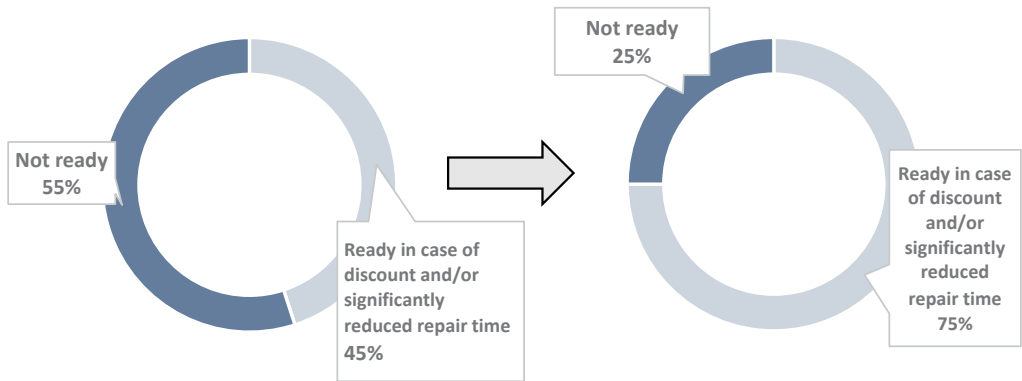
Official car services predictably had a more negative attitude towards the use of recycled parts, which was associated with warranty



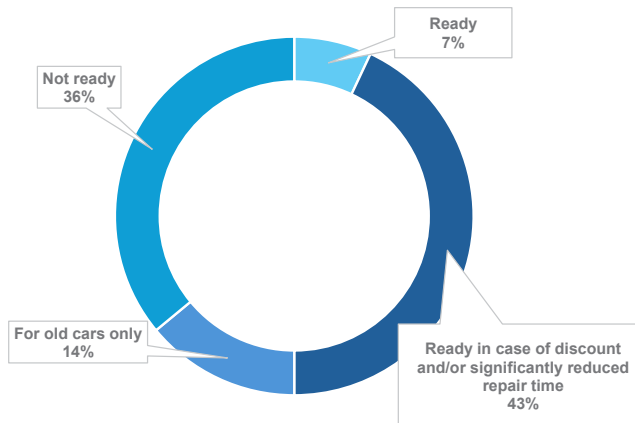
**Pic. 13.** Distribution of answers to the question «How do you evaluate the quality of used spare parts, if replacing the part does not affect the safety of the vehicle (for example, glass, bumper, etc.)?», October 2022, % of Far Eastern companies that took part in a market survey. On the right are data for non-authorised car services only.



**Pic. 14.** Distribution of answers to the question «Are your customers ready to downgrade the category of spare parts (for example, use aftermarket parts instead of OEM ones, use remanufactured ones instead of aftermarket parts) to speed up repairs or reduce the cost of repairs?», October 2022, % of companies that took part in the market survey.

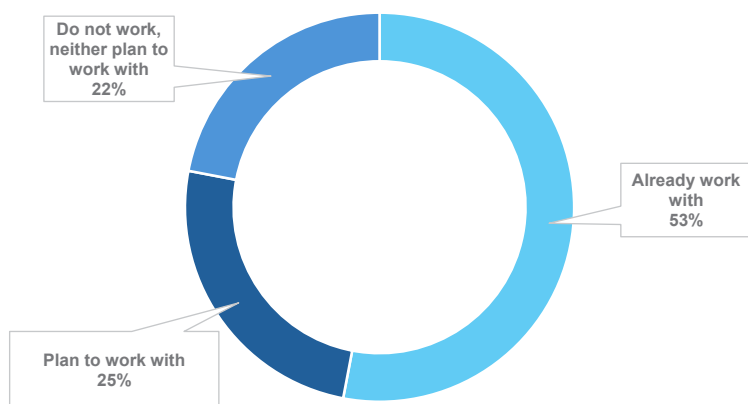


**Pic. 15.** Distribution of answers to the question «Are your customers ready to downgrade the category of spare parts (for example, use aftermarket parts instead of OEM ones, use remanufactured ones instead of aftermarket parts) to speed up repairs or reduce the cost of repairs?», October 2022, % of Far Eastern companies that took part in the market survey. On the right are data for non-unauthorized services only.



**Pic. 16.** Distribution of answers to the question «Are your customers ready to downgrade the category of spare parts (for example, use aftermarket parts instead of OEM ones, use remanufactured ones instead of aftermarket parts) to speed up repairs or reduce the cost of repairs?», October 2022, % of companies – official service centres that took part in a market survey.





**Pic. 17.** Distribution of answers to the question «Does your service centre plan to work with brands from eastern countries (China, India, Iran and others)?», October 2022, % of companies that took part in the market survey.

obligations, formalisation of technological processes, and in some cases with the impossibility or complexity of using non-new parts on automated equipment (Pic. 12).

Interestingly, car services in the Russian Far East also had a negative attitude towards the use of used car parts (55 %, Pic. 13). This can be partly explained by participation in a survey of companies that repaired cars based on referrals from insurance companies, which suggested that they use new spare parts. Also, among the Far Eastern companies participating in the survey, a significant part were official services. This leaves its mark on distribution of answers.

Moreover, if the answers of authorised service centres are excluded from the survey of Far Eastern companies, the picture changes completely – the rest, that is non-authorised centres believed that the use of recycled spare parts is permissible and acceptable (50 % in most cases, and 50 % in some cases). The authorised services in the Far East spoke in favour of the use of OEM parts in 91 % of responses. This is influenced by the same reasons as in general for authorised services, but also by additionally objectively smaller problems and costs for the changed logistics, at least in terms of Japanese and South Korean foreign cars that prevail in the region.

Estimates of the likelihood of consumer consent to the use of recycled spare parts varied depending on the region and the quality of service. It is obvious that repairs of «old» cars, carried out in personal garages or small private workshops and by self-employed people, rarely

do without restoring their own or remanufacturing used parts. Answers to the question «Are your customers ready to downgrade the category of spare parts (for example, use aftermarket instead of OEM ones, use remanufactured ones instead of aftermarket ones) to speed up repairs or reduce the cost of repairs?» were distributed as shown in Pic. 14. The main driving motive is providing a discount or reducing the repair period (47 %). Some clients immediately ask about this possibility if the vehicle remains safe to operate, understanding the objective difficulties that have arisen with the supply of spare parts (13 %).

Far Eastern clients were ready to use recycled parts in almost half of the cases (Pic. 15).

It is noteworthy that some clients of official services, immediately upon contacting the service, were ready for repairs using aftermarket and remanufactured spare parts, understanding the arisen difficulties (Pic. 16). Clients of 36 % of services were fundamentally unready.

To assess development prospects, a survey question was asked «Does your service centre plan to work with brands from eastern countries (China, India, Iran and others)?» (Pic. 17). 22 % of respondents did not expect to work with new automakers in the near and medium term, the rest were either already working (53 %) or planning to start working, some of the latter service centres planned to become authorised centres (25 %).

## CONCLUSIONS

1. In 2022, there was a shortage of new auto parts, which caused difficulties and an increase in repair time, this was noted by 76 % of service





centres. Significant problems were experienced by 26 % of all services, and by 54 % of authorised centres.

2. 68 % of Russian car service centres did not have sufficient quantity of new spare parts. In the Far East, the level of availability of spare parts was higher; 29 % noted the availability of all necessary auto parts. The problem with almost all services was the provision of new spare parts for non-certified (right-hand drive) cars.

3. Providing new spare parts was organised in no more than 10 % of car services; 30–40 % of car services planned to establish such a process for supplying spare parts. At the same time, in the Far East there such need was not practically mentioned.

4. The quality of recycled spare parts, if replacing a part does not affect the safe operation of the vehicle, was assessed by most non-authorised services as acceptable. In the Far East, this opinion was the only one expressed by non-authorised services.

5. Customers of car services were ready to downgrade the category of spare parts (for example, use aftermarket ones instead of OEM ones, use remanufactured ones instead of aftermarket parts) to speed up repairs or reduce the cost of repairs in half the cases. The decision was influenced by the age of the car and the likelihood of receiving a discount or reducing the repair period. Clients of non-authorised Far Eastern services in most cases (75 %) were ready to consider installing such parts if a discount is provided.

Those conclusions are based purely on the results of the 2022 market survey and summarise the opinion of respondents, other aspects and consecutive developments are subject to further research.

## REFERENCES

1. Gryaznov, M. V., Antropova, E. M. Balance of Interests in a Car Fleet Service Contract. *World of Transport and Transportation*, 2016, Vol. 14, Iss. 5 (66), pp. 152–165. EDN: YSQFTR.
2. Kotliarov, I. D. Organization of Motor Transport Services on the Basis of Commercial Car Sharing. *World of Transport and Transportation*, 2016, Vol. 14, Iss. 6 (67), pp. 78–85. EDN: ZGWNWL.
3. Razgovorov, C. I., Bazhenov, Y. V. The Issue of Centralization and Development of Car Warranty Service.

*World of Transport and Transportation*, 2014, Vol. 12, Iss. 2 (51), pp. 142–146. [Electronic resource]: <https://mirtr.elpub.ru/jour/article/view/61>. Last accessed 23.04.2023.

4. Rybakov, S. I. Assessment of the economic efficiency of transport insurance in the Russian Federation [*Otsenka ekonomicheskoi effektivnosti transportnogo strakhovaniya v Rossiiskoi Federatsii*]. *ETAP: economic theory, analysis, practice*, 2022, Iss. 4, pp. 135–167. EDN: ZMFBCP.

5. Tsyganov, A. A., Yazykov, A. D., Yanenko, E. A. On changes in the territorial CMTPL coefficient in the regions of Russia [*Ob izmeneniyakh territorialnogo koeffitsienta OSAGO v regionakh Rossii*]. *Finansy*, 2020, Iss. 8, pp. 39–44. EDN: WBPBRN.

6. Yazykov, A. D., Tsyganov, A. A., Kirillova, N. V., Yanenko, E. A. General indicators of the CMTPL market 2015–2018 [*Obshchie pokazateli rynka OSAGO 2015–2018*]. *Strakhovoe delo*, 2019, Iss. 4 (313), pp. 32–44. EDN: DVHSQZ.

7. Melnikov, V. V. Auto liability insurance: what's next? [*Strakhovanie avtograzhdanskoj otvetstvennosti: chto dalshe?*]. *Finansy*, 2017, Iss. 2, pp. 28–33. EDN: YICGAJ.

8. Solovieva, Yu. R., Khominich, I. P. On measures to improve the efficiency of CMTPL [*O merakh po povysheniyu effektivnosti OSAGO*]. *Strakhovoe delo*, 2019, Iss. 9 (318), pp. 45–53. EDN: NCJMAV.

9. Dedikov, S. V. Single insurance contract for CMTPL and CASCO: legal aspects [*Ediniy dogovor strakhovaniya OSAGO i kasko transportnykh sredstv: pravovye aspekty*]. *Finansy*, 2019, Iss. 11, pp. 26–29. EDN: SAELTS.

10. Karimullina, A. E. Insurance compensation in kind under the CMTPL agreement: problems of legislation and law enforcement practice [*Strakhovoe vozmeshchenie v naturalnoi forme po dogovoru OSAGO: problemy zakonodatelstva i pravoprimenitelnoi praktiki*]. *Transportnoe pravo*, 2020, Iss. 2, pp. 9–12. EDN: LSFTDF.

11. Spletukhov, Yu. A. Adjusting legislation and increasing the efficiency of CMTPL [*Korrektirovka zakonodatelstva i povyshenie effektivnosti OSAGO*]. *Finansy*, 2021, Iss. 1, pp. 35–41. EDN: PLYROI.

12. Sannikova, L. V. Problems of protecting the rights of consumers of insurance services [*Problemy zashchity prav potrebitelov strakhovykh uslug*]. *Predprinimatelskoe pravo*, 2020, Iss. 2, pp. 17–26. EDN: XPBXBU.

13. Zubets, A. N. Public perception of the cost of CMTPL [*Obshchestvennoe vospriyatie stoimosti OSAGO*]. *Strakhovoe pravo*, 2020, Iss. 2 (87), pp. 20–24. EDN: HAOTRS.

14. Zubets, A. N. Assessment of the quality of work of insurers when selling CMTPL policies and making insurance payments (according to sociological research) [*Otsenka kachestva raboty strakhovshchikov pri prodazhe polisov OSAGO i pri strakhovykh vyplatakh (po dannym sotsiologicheskikh issledovaniy)*]. *Strakhovoe delo*, 2020, Iss. 1 (322), pp. 42–47. EDN: WZTQWR.

15. Tulenty, D. S. On the issue of price adequacy and margins in CMTPL [*K voprosu ob adekvatnosti tsen i marzhinalnosti v OSAGO*]. *Imushchestvennye otnosheniya v Rossiiskoi Federatsii*, 2020, Iss. 10 (229), pp. 40–51. EDN: JQPDZT.

16. Beletskiy, I. A. Fraud in the field of CMTPL [*Moshennichetvo v sfere OSAGO*]. *Zakonodatelstvo*, 2019, Iss. 10, pp. 71–75. EDN: TZMSUQ.

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