General considerations about a new EU competition tool strengthen competition enforcement

This consultation offers a valuable opportunity to provide views on whether there is a need for a new competition tool to ensure fair and competitive markets with a view to delivering lower prices and higher quality, as well as more choice and innovation to European consumers.

In the context of accelerated digitalization in the maritime sector, the creation of a new market investigation tool aimed at addressing structural competition problems across markets is necessary. There is a compelling need to finally find a concrete response to the the recent developments in the area of Big Data and BI&A systems, and their potential anti-competitive effects in the market of containerized liner shipping services.

Over the last decade, the maritime sector has been subject to major transformations, especially due to the ever-rising use of business intelligence and analytics (BI&A) systems, which store and process Big Data. This technology has led container and logistic services revisit their strategic and commercial policies.

Big data and its application in the maritime sector

Big data is the term used to indicate the large volume of data – both structured and unstructured – that is generated in our personal and professional lives. The analysis of this big data is extremely useful as it allows businesses to monitor and make the best use of market trends and other useful information in real time.

Traditional technology has been serving organizations' analytics needs for decades, allowing them to analyse large data sets from traditional sources such as warehousing and distribution systems.

Big data has now the potential to transform the maritime sector by creating new opportunities to drive innovation and deliver tangible operational efficiencies across the maritime logistics chain.

For the past few years, most industries have been leveraging the power of Big data to increase their pace of innovation and efficiency.

The advent of Big Data and the consequent widespread use of BI&A systems have encouraged numerous shipping lines to revise their commercial strategies and turn to global end-to-end services.[1] The use of the BI&A systems will allow for the control of the entire logistics chain of these services and, where possible, will protect these systems and their improvements by IP rights. For this same purpose, Maersk and IBM have entered a joint venture creating TradeLens, a company owned 51% by Maersk and 49% by IBM.

TradeLens is a profit-orientated business that provides a platform connecting all actors which implement a stage of the global end-to-end services, helping companies move and track goods digitally across borders. To that end, the platform will allow participants to share

[1] August Braakman in Splash, https://splash247.com/digitalisation-globalisation-and-monopolisation-lines-create-trinity /

information and ease collaboration across the shipping industry's supply chain. TradeLens is now supported by 6 of the world's largest lines.

In order to offer global end-to-end services, shipping lines need a common foundation for technical interfaces and data and to develop common information technology standards. For this purpose, the Digital Container Shipping Association (DCSA) has been established.

DCSA aims at paving the way for digitalisation and standardisation in the industry and its standards have been and will be further developed and managed by lines exclusively.

At the moment, apart from COSCO-OOCL, all major container lines that are involved in one of the three global alliances are members of the DCSA, thus representing 70% of the global market. Furthermore, as all DCSA members support TradeLens, this means that the DSCA standards have become signatory for the industry.

Antitrust concerns may emerge from the need for these new actors to have access to the technical data underlying the DCSA standards in order to be able to research and develop new standards. Particularly if the DCSA standards are protected by IP-rights, lines may impose royalties or licensing terms. **This behaviour may have severe antitrust implications that could be fostered in a situation where DCSA standards cover topics outside the legitimate standard-setting activity.**

These developments have a huge impact on the proper assessment of antitrust issues on this market, particularly in the following areas: (i) scope: the market has undeniably become a global market; (ii) structure: the ever-increasing use of the digital technology and the establishment of companies like TradeLens which gather (iii) dominance: the majority of the big carriers.

The tools the Commission currently possesses for measuring, evaluating and neutralizing anti-competitive conduct were formulated in an era when Big Data and BI&A systems were still a vision for the future. These tools are far from adequate and effective for dealing with antitrust concerns in relation with these developments.

Some of these concerns were raised in the framework of the consultation regarding the Consortia BER for liner shipping[2] and it was stressed upon the fact that digitalization, globalization and concentration in the container shipping may lead to anti-competitive effects due to the fact that the provisions of the Consortia BER are lacking clarity about do's and don'ts with respect to the exchange of information and that more and more container shipping lines are offering door to door services and using of Big Data and BI&A systems to their advantage.

The absence of tools that are sufficiently adequate and effective for enabling EU and national antitrust authorities to measure, evaluate and neutralize the anticompetitive effects that may derive from the above mentioned evolution in the containerized sector is becoming a real threat for a number of actors which compete with shipping lines on a number of land and logistics related services.

[2] https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32020R0436&from=EN

The weaknesses of the Consortia BER for liner shipping

On the 24th of March 2020, in spite of strong reserves expressed by the majority of customers and services providers of the liner shipping sector, the European Commission decided to extend without modification the Consortia Block Exemption Regulation (CBER), granting the exemption by another 4 years.

The Consortia BER provides for an exemption from the cartel prohibition for agreements/ arrangements that restrict freedom but that have the sole effect of promoting competition. Within the present context, the exemption relates to the following activities:

1. the joint operation of liner shipping services including:

    (a) the coordination and/or joint fixing of sailing timetables and the determination of ports of call;

    (b) the exchange, sale or cross-chartering of space or slots on vessels;

    (c) the pooling of vessels and/or port installations;

and

4. any other activity ancillary to those referred to above which is necessary for their implementation, such as:

    (a) the **use of a computerized data exchange system.**

The Consortia BER contains a *per se* prohibition for "hard core" restrictions of competition. These restrictions include activities, which, directly or indirectly, in isolation or in combination with other factors under the control of the parties, have as their object:

1. the fixing of prices when selling liner shipping services to third parties;

2. the limitation of capacity or sale except for capacity adjustments in response to fluctuations in supply and demand.

3. the allocation of markets or customers.

Application of Article 101(1) TFEU presupposes that the prevention, restriction or distortion of competition is an "object or effect".[3]

The "hard core" prohibition of the fixing of prices when selling liner shipping services to third parties laid down in the Consortia BER only refers to arrangements that have this as their ***object*****.** Pursuant to the established case law of the ECJ, the circumstances surrounding its attainment may also be used in interpreting the wording of arrangements for those areas, which are unclear. As a result, not only the fixing of prices but also price recommendations and tariff impositions, by any per person on transport users, fall within the scope of the "hard core" prohibition of the consortia BER, provided they have a similar anticompetitive impact.

Arrangements that do not have a restriction on competition as their *object* may also be caught by the prohibition on cartels because they have it as their *effect.* This effect does not need to have actually occurred. It is sufficient for it to appear likely in the near future. This second

[3] August Braakman in Splash, https://splash247.com/digitalisation-globalisation-and-monopolisation-lines-create-trinity /

alternative for application of the prohibition therefore permits the Commission to intervene to prevent distortions of competition at an early stage.

The competition-limiting effect of an arrangement may be the result of it alone or of the interaction between it and the accompanying economic circumstances. Special importance may, in particular, be attached to the fact that an agreement is part of a network of similar agreements that the party has also completed with other undertakings and the fact that the market contains other networks of agreements which have been build up by other undertakings.

In view of the above, it should be assessed whether the prohibition of Article 101(1) TFEU catches the competition-limiting effects of the above-mentioned activities that are exempted from the cartel prohibition in combination with the computerized data exchange system that is being used. **This assessment should focus on whether the prohibition of Article 101(1) TFEU applies or is likely to apply in the near future, once BI&A systems with their current state-of-the-art features have been incorporated into existing agreements/arrangements that benefit from the exemption under the Consortia BER.**

This assessment should include possible anticompetitive effects of the semantic interoperability of these systems with the computer programs of other actors that have been engaged for the implementation of the agreements/arrangements.

Alliances are using vessel-sharing agreements and consider that those agreements will not affect mutual competition. The basic rationale for alliances is the facilitation of low rates and broad service coverage.[4] The deployment of data that is allowed to be exchanged under the Consortia BER gives a line the possibility of attaining these objectives in a way that seriously threatens fair and undistorted competition if the exchange takes place within the context of a BI&A system with current state-of-the-art features which is semantically interoperable with the computer programs used by the parties that have been engaged for the implementation of its services.

All lines that participate in one of the three mega-alliances - 2M, Ocean Alliance and THE Alliance - also participate in one or more of the vast number of conference and discussion agreements that exist worldwide.[5] **These agreements serve as vehicles for exchanging strategically sensitive data. They are exempt from the application of antitrust laws in the United States and some Asian countries, like Singapore, but they were never exempt from application in the EU.[6] In light of the global coverage of global end-to-end services there can be no doubt that the data exchanged between members of an alliance on the key parameters of the rates for the non-EU leg of the route provides an important indicator, indeed if not the basis, for the pricing policy adopted for the global services inclusive of the EU-leg of the route.** BI&A systems with their current state-of-the-art features offer a major improvement for analyzing this data. As a result, the deployment of these systems may seriously aggravate the anticompetitive effects of the data exchanged.

[4] The impact of alliances in container shipping. OECD/ITF 2018, p.11.

[5] August Braakman in Splash, https://splash247.com/digitalisation-globalisation-and-monopolisation-lines-create-trinity /

[6] See Competition issues in liner shipping: Note by the Secretariat. Document DAF/COMP/WP(2015)3. Organisation for Economic Cooperation and Development, Paris, 10 June 2015.
Available http://www.oecd.org/officialdocuments/publicdisplaydocumentpdf/?cote=DAF/COMP/WP2(2015)3&docLanguage=En.

The above anticompetitive effects are particularly apparent if the exchange of data takes place within the context of services that are being implemented by a line together with other actors and the BI&A system used by the line has been made semantically interoperable with the computer programs of the latter.

The deployment of BI&A systems with their current state-of-the-art features on the market of containerized liner shipping services[7] may well result in pushing exchanges of information that conform to the exemption conditions of the consortia BER in its current version into the area of hard core restrictions.

This may be illustrated by the following, hypothetical example: An alliance, either directly or indirectly through one of the participating lines, acquires exclusive rights on a new BI&A product protected by IP rights.

This product substantially improves the joint coordination of sailing timetables within the alliance and thereby the determination of ports-of-call. As such, these activities fall within the exemption of the Consortia BER. However, the alliance offers the new product to third parties as part of its liner shipping services at a price that was fixed by the parties to the alliance who conjointly own the product in mutual consultation. **In doing so, the alliance and the participating lines violate the hard-core restriction of Article 4 sub 1 of the consortia BER. Furthermore, if other lines or alliances cannot come up with a timely response by bringing up a product that "leapfrogs" the new BI&A product, this may cause shippers to disproportionally opt for the services offered by the alliance that disposes of this latter product.** As a result, other lines and alliances lose their competitiveness for the duration of the validity of this new product's IP rights. This will give the alliance that disposes of the new product entrenched market power [8] which, in turn, may well encourage it to raise the price of its services, arguing that it has the right to do so in order to recoup the investments that had to be made.

In the above hypothetical situation, the new BI&A product transforms the coordination of sailing timetables within the alliance disposing of this product into conduct that has immediate, substantial and foreseeable anti-competitive effects on the EU market[9]. Such conduct falls within the prohibition of Article 101(1) and Article 4 sub 1 of the current consortia BER and/or 102 TFEU, at least during the validity of the IP rights.

It has been argued above that an effective and smooth implementation of a global end-to-end contract requires a line/alliance to be made privy to confidential data - possibly protected by IP rights - owned by actors that have been engaged for the implementation thereof. Thus, within the framework of these contracts the free pass for exchanges of information as provided by the current Consortia BER extends to data that has been developed and protected by actors whose activities relate to sections of the shipping industry where market and competitive conditions fundamentally differ from those that lines are confronted with in the context of their core business.

[7] The Impact of alliances in container shipping, OECD/ITF 2018, p. 88.
[8] This example is based on the decision of the Commission of 4 September 2012 in the case named Telefonica, Vodafone and Everything Everywhere, case No COMP/M.6314 (JV).
[9] August Braakman in Splash, https://splash247.com/digitalisation-globalisation-and-monopolisation-lines-create-trinity /

The inclusion of this data in a new BI&A product that substantially improves the coordination of sailing timetables will further reinforce the market position of the alliance that disposes of this product, as well as anticompetitive issues.

Self-assessments from the perspective of the global market in which lines operate should also relate to data on issues that are allowed under some jurisdictions but prohibited under EU antitrust law. Thus, the possibilities for the Commission to monitor distortions of competition from the perspective of the extra-territorial application of EU antitrust law and the qualified effects doctrine would be improved. This could facilitate other actors in the maritime transport in their attempts to challenge agreements implying undesirable market effects.[10]

The legal vacuum

As yet, the EU Commission does not dispose of tools that are sufficiently adequate and effective to guarantee fair and undistorted competition and a level playing field to all the stakeholders in the competitive environment of containerized liner shipping services that has been unlocked by Big Data and BI&A systems. The ensuing legal vacuum creates a complex legal border area

The present circumstances, however unfortunate they may be, do not absolve undertakings from the obligation to assess whether the agreements/arrangements to which they are party, directly or indirectly, in isolation or in combination with other factors under their control, have as their object or effect distortions of competition that emerge in the realm of the major parameters that govern the BI&A systems which underlie the logistics chain of their services.

This implies that, apart from prices, account should be taken of common information technology standards, engagement of actors in the implementation of services, implementation of services as such and trust. Irrespective of the Consortia BER being now prolonged in what manner, this assessment should be made in light of the impact BI&A systems with their current and anticipated state-of-the-art features together with the surrounding Big Data have on the promotion of competition that must be generated in order for agreements/arrangements to be considered for an exemption from the prohibition of Article 101(1) TFEU.

EU antitrust law as laid in Articles 101 and 102 of the Treaty on the Functioning of the European Union (TFEU) is addressed to undertakings. Article 101 TFEU also applies to associations of undertakings, insofar as their own activities or the activities of the undertakings of which they are composed have as their object the prevention, restriction or distortion of competition.

The definition of the term undertaking includes all natural or legal persons engaged in an independent commercial activity, either as suppliers or customers of goods or commercial services. Such activity must have a certain regularity and duration. The pursuit of profit is not essential.

[10] The Impact of alliances in container shipping, OECD/ITF 2018, p. 88.

With the introduction of Regulation 1/2003[11] on May 1, 2004, the general procedure applicable to antitrust investigations is fully applicable to the maritime sector. Under this new system, not only the prohibition of cartels contained in Article 101(1) TFEU but also the possible exemptions to this prohibition contained in Article 101(3) TFEU are directly applicable. This implies that self-assessment by companies and their advisor constitutes the true cornerstone of the system. The block exemption regulations and the notices by the Commission on the substantive criteria for the application of the EU antitrust rules provide guidance.

For different contract types the EU Commission has adopted the Consortia BER which should be interpreted in close conjunction with the Horizontal Guidelines.[12]

The relevant market

The relevant market within which to assess a given competition issue is established by the combination of the *product* and *geographic* market.

"The relevant *product* market comprises all those products and/or services which are regarded as interchangeable or substitutable by the consumer, by reason of their characteristics, their prices and their intended use."[13]

The Commission and the ECJ held that the relevant product market comprises containerized liner shipping services.[14] The decisions and judgements relate to maritime transport in deep-sea trades.

The above case law on the definition of the relevant product and geographic market relates to a time when lines could not yet avail themselves of BI&A systems, certainly not of BI&A systems with the current level of technical sophistication. The current definition of the relevant product and geographic market is not valid anymore as ***the relevant product market*** is the market of containerized liner shipping global end-to-end services.[15]

This implies that in the geographic market of containerized liner shipping global end-to-end services the EU-end of the market is not a range of ports either in Northern Europe or in the Mediterranean, but the inland terminal where the customer takes possession of the cargo.

The proposed definition of the relevant ***product*** and ***geographic market*** entails that, in assessing competition issues, no distinction can be made between the deep-sea and the inland leg of the services. Both services relate to one and the same relevant market. Therefore, assessment of competition issues must be made from the perspective of one and the same legal regime. This implies that the judgement of the General Court, making a

[11] Council Regulation (EC) No 1/2003 of 16 December 2002 on the implementation of the rules on competition laid down in Articles 81 and 82 of the Treaty (Text with EEA relevance).

[12] Guidelines on the applicability of Article 101 TFEU to horizontal cooperation agreements, OJ C11/1 of 14 January 2011

[13] Commission Notice on the definition of relevant market for the purposes of Community competition law, *OJ C 372, 9.12.1997*

[14] Commission Decision 1999/485/EC of 30 April 1999 (Case IV/34.250 — *Europe Asia Trades Agreement*) (OJ L 193, 26.7.1999, p. 23); TAA decision, Commission Decision 94/980/EC of 19 October 1994 in Case IV/34.446 — *Trans-Atlantic Agreement* (OJ L 376, 31.12.1994, p. 1) and the TACA decision, Commission Decision 1999/243/EC of 16 September 1998 (Case IV/35.134 — *Trans-Atlantic Conference Agreement*) (OJ L 95, 9.4.1999, p. 1) paragraphs 60-84. The market definition in the TACA decision was confirmed by the General Court in its Judgment in Joined Cases T-191/98, T-212/98 to T-214/98, *Atlantic Container Line AB and Others* v *Commission* ECLI:EU:T:2003:245, paragraphs 781-883.

[15] See e.g. The impact of alliances on container shipping, OECD/ITF 2018, p. 89.

distinction between the legal regimes that govern deep-sea and inland services, has become obsolete with regard to containerized liner shipping global end-to-end services.

Considering the above, the definition of the relevant market should be completed by an assessment of the interconnection between the services that are offered and the Big Data and BI&A systems that are used for their implementation. In that way the logistics areas can be identified where conditions of competition are sufficiently homogenous for a customer to regard the services that are offered as interchangeable because of their characteristics.

Managing the impact on competition brought about by the proposed definition of the relevant market is a crucial issue that will guarantee fair and undistorted competition and a level playing field for all stakeholders. It should be a priority for the EU Commission with a new tool.

The definition of the relevant market as provided by the Commission Notice of 1997 has become obsolete, particularly in regard to the market of containerized liner shipping global end-to-end contracts.[16] **This Notice should be amended by including a definition of the temporal market as an independent dimension, and by tailoring the definitions of the relevant product, geographic and temporal market to the developments in the field of Big Data and BI&A.**

From the perspective of the proposed definition of the relevant market, the qualified effects doctrine should provide the Commission with an adequate and effective tool for acting against distortions of competition that originate from conduct outside the EU, even if such application of EU antitrust law were to be in conflict with antitrust laws of other jurisdictions.[17]

Common standards

Common information technology standards lie at the heart of the interoperability of the BI&A system that a line/alliance uses for governing containerized liner shipping global end-to-end services and the computer programs of the actors that have been engaged for the implementation thereof. It is important to assess whether common industry-wide standards and the way in which they are deployed would raise antitrust concerns.

Antitrust concerns are among those that may emerge if common standards are developed and managed exclusively by lines. Other actors on the market of containerized liner shipping services can register for the purpose of receiving the data required for using the standards, but they will have no say in the further development of the underlying technology.

This will increase their dependence, particularly if new standards have been developed in which valuable data and processes have been encoded that were used in standards that governed previous global end-to-end contracts. If the latter standards had defects and quirks and/or technical limitations, new forms of industry actors will be obliged to replicate them to maintain interoperability.

[16] See A.J. Braakman, Brexit and its consequences for containerized liner shipping services, (2017) 23 JMIL, pp. 1-12.
[17] Guidelines on the application of the EC Treaty to maritime transports services, OJ C 245/2 of 26 September 2008.

Antitrust concerns may also emerge from the need for other industry actors to have access to the technical data underlying the common, industry-wide standards in order to be able to research and develop new standards. This will be particularly difficult if industry-wide standards are protected by IP-rights, lines may prevent access by demanding unreasonable royalties or expensive licensing terms.

Finally, antitrust concerns may emerge from the fact that common, industry-wide standards progressively increase the dependence of their users on one and the same eco-system.

Conclusion

Big Data and BI&A systems are here to stay. The ways in which shipping lines deploy them pose a serious threat to fair and undistorted competition and a level playing field to all stakeholders on the market of containerized liner shipping global end-to-end services.

The tools the Commission possess for measuring, evaluating, and neutralizing the anticompetitive effects of Big Data and BI&A systems have been formulated in an era when these phenomena were still a vision for the future. Therefore, the current tools are unfit to do the job.

There is a need for the regulator to take into account the impact of Big Data and the ensuing BI&A systems on the competitive environment of containerized liner shipping global end-to-end services.