

## Competition merger brief Issue 1/2024 - May

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# **Competition** *merger brief*

## *Viasat/Inmarsat* - Star Wars: a competitive force awakens

Liam Biser

#### Introduction

On 25 May 2023, following an in-depth investigation, the Commission unconditionally approved the acquisition of Inmarsat by Viasat (referred to below respectively as the 'Transaction' and the 'Parties'). This case is an example where the Commission faced the challenge of performing a forward-looking assessment in an industry undergoing a 'once-in-a-generation' transition.

Both companies are providers of 'two-way' satellite-based communication services, which allow the end-to-end exchange of voice and data via satellite(s) to and from terminals on Earth, which are usually located in areas where other telecommunications networks have either no coverage or insufficient coverage (e.g., air, sea, remote areas, etc.). These satellite-based communication services have various end-uses in different industry segments. Viasat owns and operates four geostationary earth orbit ('GEO') satellites and Inmarsat owns and operates fifteen GEO satellites.<sup>1</sup> In addition to providing satellite capacity to third party satellite service providers worldwide. Inmarsat and Viasat use capacity from their own GEO satellites to provide two-way satellite-based communication services to customers across a range of industry segments; including in the maritime, energy, government, and business aviation sectors.

An in-depth investigation was necessary since Viasat and Inmarsat held significant market shares in certain markets where their activities overlapped. This in-depth investigation allowed the Commission to comprehensively assess the satellite industry, which is undergoing a transition with new technologies and new players developing. In the near future, it is likely that the

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competitive landscape will look significantly different to the competitive landscape of the past, and this is why the case was unconditionally cleared.

This brief focusses on some of the most interesting features of this case, which allowed the Commission to clear concerns in (i) the market for the supply of broadband satellite capacity, where the significant growth of the market as well entry from a new as technology would sufficiently constrain the Parties; and (ii) the market for the supply of broadband in-flight services connectivity to commercial aviation customers, where the nascent nature of the market meant there would be sufficient alternatives in future tenders, despite the Parties appearing to be historically strong and close competitors (based on the limited number of past tenders organised by airlines).

## 1. The market for broadband satellite capacity

Viasat and Inmarsat are both

active in the worldwide market for the supply of broadband satellite capacity. In this market, Satellite Network Operators ('SNOs'), which own and manage their own satellite fleets, lease satellite capacity at the wholesale level. SNOs are therefore active at the upstream level of the satellite economic chain.

### In a nutshell

The investigation of the USD 7.3 billion satellite merger between Viasat and Inmarsat required detailed а understanding of the significant transition the satellite industry is undergoing.

As regards satellite capacity, the Commission found that. with the 'explosive' growth of satellite launches, there would be sufficient supply to constrain the Parties. And in the nascent market for inflight connectivity, whilst Viasat and Inmarsat hold high (but not 'stratospheric') market shares based on a limited number of past tenders. the Commission found there would be sufficient bidders in the future.

An in-depth investigation allowed the Commission to take a close look and gather firm evidence before approving the merger unconditionally.

<sup>&</sup>lt;sup>1</sup> GEO satellites circle Earth above the equator from west to east following the Earth's rotation by travelling at exactly the same rate as Earth. This makes satellites in GEO appear to be 'stationary' over a fixed position on Earth. In order to perfectly match Earth's rotation, the speed of GEOs should be about 3 km per second at an altitude of 35 786 km.

The Commission assessed the horizontal non-coordinated effects of the Transaction on this market. Despite a growing share of satellite capacity held by the Parties, the Commission did not have concerns on this market due to the following reasons (amongst others).

#### 1.1 Spare capacity and 'pivotal' capacity

The market for broadband satellite capacity is undergoing a period of rapid growth with both existing and new SNOs launching thousands of satellites in the coming years. As a result, the supply of satellite capacity is expected to increase significantly. And whilst demand for satellite capacity is also expected to increase, supply is set to outgrow demand significantly. As such, this market is characterized by significant and growing levels of spare or excess capacity (i.e., supply outweighing demand).

Therefore, even though the Parties' combined share of total capacity was moderately high and growing, forthcoming spare capacity amongst rivals would constrain the Parties from exercising any appreciable market power. In this regard, the concept of 'pivotal' capacity was key in assessing the degree to which the merged entity's moderately high combined capacity post-Transaction would lead to appreciable market power.

It is well known from the economics literature, and consistent with the Commission's case practice, that in markets with capacity constraints, pivotal firms (those who cover the residual demand that cannot be covered by competitors) enjoy an appreciable degree of market power.<sup>2</sup> That is because even in a theoretical scenario, where rivals successfully win orders filling their entire capacity, the pivotal supplier would nonetheless be *de facto* the only supplier for the remaining part of demand that cannot be served by rivals. Pivotal suppliers are therefore in a position to exercise an appreciable degree of pricing power in the market, being aware that the market (i.e., customers) are dependent on their supply.

To illustrate, small suppliers facing competitors with large capacities have a strong incentive to undercut competitors, because if they fail to do so they risk ending up with no sales (as their competitors can fully cover the entire market demand); such non-pivotal suppliers therefore do not exercise any market power. To the contrary, pivotal suppliers (those who face some degree of residual demand that cannot be covered by competitors) face a trade-off between (i) pricing aggressively to capture some of the demand for which they face competition from competitors, and (ii) keeping prices high to exploit the portion of (residual) demand that cannot be covered by rivals. The larger the portion of residual demand faced by the pivotal supplier, the larger the

amount of demand for which the pivotal firm knows it is *de facto* the monopolist supplier, and therefore the larger the incentive to keep prices high and avoid undercutting competitors.

The degree of market power exercised by a pivotal supplier depends on its degree of pivotality (i.e., on the extent to which rivals are insufficient to cover total market demand). A merger may therefore cause anti-competitive effects by making a supplier pivotal that previously was not, or by conferring to a supplier that was already pivotal even more control over indispensable production facilities.

In keeping with this concept of 'pivotal' capacity, the Commission's calculations indicated that the merged entity's competitors could easily cover the entire market demand, including the Parties' current customers. Therefore, it appears unlikely that the merged entity would have an appreciable degree of pricing power over its current customers or any potential customers, since these customers' demands could be met easily by the rest of the market. This is true even though the Parties' combined share of total capacity was moderately high and growing. The Commission concluded in this case that the significant and growing levels of spare or excess capacity (resulting from the increase in supply) prevented the Parties (or any other suppliers) from holding any 'pivotal' capacity.

#### 1.2 Merchant market shares vs. capacity shares

The Parties are not significantly active on the merchant market, i.e., they do not have significant sales to third parties and instead use most of their capacity captively downstream (in particular compared to competitors). In other words, the Parties lease only a part of their total capacity. On the other hand, many of the Parties' competitors in this market are not vertically integrated SNOs, and therefore focus entirely on leasing satellite capacity.

In this light, the Commission considered that the Parties do not significantly compete to lease out their satellite capacity in the market for broadband satellite capacity. Furthermore, the Commission considered the volume-based capacity market shares to be conservative (i.e., that they would be higher than the Parties' market shares on the merchant market). These points also supported the Commission's conclusion that there were no concerns on this market.

### 2. The market for broadband IFC services to commercial aviation customers

Both Viasat and Inmarsat are active in the nascent market for the supply of broadband in-flight connectivity ('IFC') services to commercial airlines in the EEA and globally. Commercial airlines use these services to provide in-flight Wi-Fi to passengers, which is expected to become increasingly common on both long-haul and short-haul flights in Europe. In this market, providers assemble a package of satellite connectivity solutions consisting of satellite capacity (either purchased from third-party SNOs or sourced internally in the case of vertically-integrated SNOs, such as the Parties) and related services and equipment (e.g. satellite

<sup>&</sup>lt;sup>2</sup> Commission decision in Case M.9076 – Novelis / Aleris (2019), paragraphs 528-531. For example, see Daisuke Hirata (2009), 'Asymmetric Bertrand-Edgeworth Oligopoly and Mergers', B.E. Journal of Theoretical Economics, Vol. 9, No. 1, pp. 1935-1704. See also Case M.6471 Outukumpu/Inoxum (Commission decision of 7 November 2012).

terminals for the airplanes). These providers are therefore active at the midstream/downstream level of the satellite economic chain.

The Parties were two of the leading providers of these IFC services to commercial airlines, often competing head-to-head in tenders for IFC contracts. The Commission therefore assessed the horizontal non-coordinated effects of the Transaction on this market. Despite the Parties competing closely in a market with high barriers to entry and few alternative suppliers currently, the Commission did not raise concerns on this market, mainly due to the following reasons.

#### 2.1 Competitive assessment in a nascent market

The supply of IFC services to commercial airlines is still a nascent and growing market with a particularly low penetration rate in the EEA. The number of connected aircraft globally is expected to more than double over the next decade. More generally, the satellite industry is also undergoing a period of change, with existing players launching new satellites to improve their capacity and coverage, as well as new players entering the industry with new technologies. One key change in the industry is the emergence of low-earth orbit satellites ('LEOs') constellations.<sup>3</sup> According to a Credit Suisse report provided in the context of the Commission's assessment, "[t]he satellite sector is now entering a once-in-a-generation period of disruption with the launch of numerous Low-Earth Orbit (LEO) constellations. High-profile backers of these mega-constellations include Elon Musk's SpaceX (Starlink), Jeff Bezos's Amazon (Kuiper) and Bharti Airtel's (OneWeb)".4 These industry movements are reflected in the market for the supply of IFC services, which is undergoing a transition with operators of LEO constellations having entered or planning to enter the market.

Assessing competition and the impact of a merger on competition in a nascent market or a market going through a transition presents particular complexities. These complexities mainly stem from added uncertainty and the fact that the situation premerger may not be a good indicator of the situation post-merger. As such, it was necessary to undertake an in-depth investigation to properly assess the impact of the Transaction on this nascent market in a forward-looking manner.

### 2.2 Assessment of existing competitors in a nascent market

The nascent nature of the market presented several challenges when assessing the competitive constraint of existing

competitors, such as Intelsat, Panasonic, and Anuvu, on the Parties going forward.

First, market shares may have limited evidentiary value in a nascent market since they are based on historical data that may not reflect the future well. In a market where consumers' needs and the available offerings are evolving, winning a certain share of tenders (based on parameters of competition that were relevant in the past) may not necessarily indicate a similar chance of success in future tenders. Therefore, the Commission undertook a more in-depth analysis of competitors, focussing on the most recent tenders, ongoing developments in the market such as any new technologies/innovations offered, and the ability for each competitor to easily expand in this nascent market (either by launching additional own satellites or through cooperations with other SNOs). Indeed, multiple tenders were won during the Commission's investigation, some of which would have significantly changed the market shares, and so the assessment needed to be updated almost on a rolling basis.

Second, what is important for consumers may change and so key parameters of competition may shift. The market investigation indicated that passengers' needs were evolving and so were key parameters of competition for IFC contracts. In addition, the Commission found that demand from airlines is significantly differentiated (with airlines placing varying levels of importance on different parameters of competition, e.g., some put greater importance on lower latency, others on geographical coverage or technical expertise, etc.). As such, the Commission found that different competitors have different advantages depending on the parameters of competition valued by the specific airline organising the tender. The Commission came to the conclusion, in a forward-looking manner, that the Parties will not have a particular competitive advantage for a given set of key parameters of competition that would distinguish them from rivals; and as such, the Parties' market position would remain moderate.

For example, some market participants indicated that the Parties were particularly strong because they were both vertically integrated players (whilst some other competitors were not). However, the market investigation indicated that the transition the satellite industry was undergoing, and the growing excess supply of satellite capacity would make it even more likely that SNOs will lease out additional capacity at IFC providers' requests. As such, and in view of evidence that IFC providers can successfully compete and win tenders with leased capacity, the Commission concluded that going forward vertical integration will not provide a significant advantage to effectively compete in this nascent market.

The Commission therefore concluded that Intelsat, Panasonic and Anuvu each constituted a credible alternative to the merged entity post-Transaction, and that a sufficient number of credible competitors would therefore remain.

<sup>&</sup>lt;sup>3</sup> LEOs are positioned c. 500 – 2 000 km above the ground and orbit around the Earth. LEOs often work as part of a large combination or constellation of multiple satellites to give constant coverage. Compared to GEOs, LEO constellations are more technologically challenging and more expensive to deploy and maintain, but offer lower latency, higher capacity over the entire satellite network and the potential to offer truly global coverage.

<sup>&</sup>lt;sup>4</sup> Commission decision in Case M.10807 – Viasat / Inmarsat (2023), paragraph 43.

### 2.3 Assessment of (recent) entry in a nascent market

The nascent nature of the market also presented several challenges when assessing the competitive constraint of recent or new competitors on the Parties going forward.

This was especially so for the assessment of SpaceX, which had recently entered the market. SpaceX is the frontrunner of the new LEO satellite constellations, with thousands of satellites already in orbit as of September 2022. It is expected that SpaceX alone will account for well over half of all broadband satellite capacity worldwide by 2025. However, SpaceX only announced its entry into the IFC services market in April 2022 and was not an established player. The results of the market investigation were nuanced as to SpaceX's current competitive strength in the market. SpaceX itself noted that as a new market entrant it does not have, at this stage, the necessary certifications, and licenses to compete with the Parties.

Taking a forward-looking approach, it was clear that SpaceX already represents a real constraint on the Parties. For example, despite SpaceX's lack of certification, six airlines had already awarded contracts to SpaceX, and other airlines indicated that they anticipate inviting SpaceX to forthcoming tenders or that they saw or expect to see SpaceX amongst the selected bidders in recent or upcoming tenders. Crucially, the majority of customers who expressed a view considered that SpaceX has the necessary capabilities to overcome the remaining barriers to entry. In addition, evidence from the Parties indicated that SpaceX has already been exerting a competitive constraint on the Parties.

Therefore, the Commission considered that SpaceX will at least constrain the merged entity in IFC tenders post-Transaction, if not constitute an additional credible alternative to the merged entity in the coming years.

With respect to potential entrants, the market investigation indicated that both GEO and LEO satellite operators are investing to expand their capabilities in a number of ways; this includes announcements of plans to enter the nascent IFC services market. In addition, a number of partnerships have been announced between players active in the supply of IFC services and operators of the new LEO satellites, with a view to providing new innovative IFC services. Indeed, the majority of airlines are already taking LEO-based potential entrants into account in their IFC tenders. The Commission therefore considered it likely that in the next three years, if not entry, at least partnerships with potential new entrants will occur.

The existence of potential entrants in the near future, as well as the constraints of existing players (Intelsat, Panasonic, Anuvu) and recent entrants (SpaceX), supported the Commission's conclusion that the Transaction would not significantly impede competition on this nascent market.

### Conclusions

Whilst the activities of Viasat and Inmarsat were largely complementary, the Parties held significant market shares in a few markets. These markets were in transition or nascent, which thereby presented complexities for the assessment.

An in-depth investigation allowed the Commission to take a close look and gather firm evidence, before concluding that there would be no competition concerns in the EEA following the merger. This conclusion relied on forecasts in relation to market size, excess capacity, and likely entry and expansions. The Commission therefore concluded on 25 May 2023 that the Transaction would raise no competition concerns in the EEA or any substantial part of it and cleared the case unconditionally.



# **Competition** *merger brief*

## *Microsoft/Activision Blizzard* – the video gaming cloud on the horizon

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#### Introduction

On 15 May 2023, following an in-depth investigation, the Commission conditionally approved the acquisition of Activision Blizzard by Microsoft (the "Transaction").

Activision Blizzard is a publicly listed company headquartered in Santa Monica, California, US, developing and publishing games for PCs, game consoles, and mobile devices as well as distributing games for PCs.

Microsoft is a global technology company headquartered in Redmond, Washington, US. It offers a wide range of products and services, including (i) productivity and business processes; (ii) cloud services; and (iii) personal computing. Microsoft also develops and publishes games for PCs, game consoles, and mobile devices as well as distributes games for PCs and consoles. In addition, it offers the Xbox gaming console and related services as well as the PC operating system Windows.

This article focuses on the key aspects of this case, namely (i) how important were Activision Blizzard's games, such as *Call of Duty*, for consoles, including those competing with Microsoft Xbox, in the EEA; (ii) what was the impact of nascent cloud game streaming on the assessment of the Transaction; (iii) why were the remedies offered accepted by the Commission; and (iv) what happened after the Commission's conditional clearance.

### The importance of Activision Blizzard's games for console platforms in the EEA

The Commission investigated whether Microsoft could withhold or degrade access to Activision Blizzard's console video games by rival console providers. Activision Blizzard develops several video games that are very popular among console players. One franchise, however, stands out. *Call of Duty*, a series of so-called first-person shooter (FPS) games, is widely regarded as one of the most successful franchises in the video gaming industry due to its longevity, profitability, and frequency of new content releases. Given their widespread popularity, the Commission investigated how important shooter games and the Call of Duty franchise are for consoles.1 The Commission found that shooter games attract a high portion of players and have a significant share of game-time on Xbox and PlayStation consoles. As a result, they have a strong impact on consumer choice for a console platform. On this basis, the Commission found that shooter games in general and Call of Duty in particular are an important input for consoles

Commission therefore The assessed whether Microsoft's foreclosure potential strategies regarding Activision Blizzard's shooter oames would effectively harm with consoles competing Microsoft's Xbox platform

### In a nutshell

Can Microsoft, a company owning a successful console platform, dominant in PC operating systems and one of the leading providers of cloud services, be allowed to acquire Activision Blizzard, the developer and publisher of popular video game franchises?

Yes, it can. The Commission assessed various nonhorizontal theories of harm and concluded that the potentially harmful impact nascent cloud game on streaming offers and their influence on competition PC between operating systems can be addressed by effective non-structural remedies.

(Sony's<sup>2</sup> PlayStation and Nintendo's Switch). This analysis focused on the effects on Sony's PlayStation as, at the time of the Commission's investigation, only a few of Activision Blizzard's game franchises were distributed on Nintendo. For example, Xbox and PlayStation were the only console platforms on which *Call of* 

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<sup>&</sup>lt;sup>1</sup> The Commission assessed in particular so-called AAA games. AAA games typically have more budget, a higher production value, more complex gameplay features and mechanics and a longer play time. However, the distinction between AAA and non-AAA titles is blurred. While the Call of Duty franchise consists of AAA titles, the Commission therefore left open whether AAA games form a separate segment within the overall market for the development and publishing of PC and console games.

<sup>&</sup>lt;sup>2</sup> In this Merger Brief, under "Sony" the Commission refers to Sony Interactive Entertainment, the video game and digital entertainment company of Sony.

*Duty* was distributed. As a consequence, it was unlikely that Nintendo's console business would be affected by Microsoft's potential restrictive practices.

Despite the importance of shooter games for consoles, the Commission found that Microsoft would likely not have any incentive to restrict access to Activision Blizzard's shooter games to its main competitors, including to Sony's PlayStation. The Commission carried out a quantitative analysis to determine the profitability of such strategy by Microsoft. If Microsoft restricted Sony's PlayStation access to Call of Duty, this would increase Microsoft's Xbox console sales because a proportion of customers would switch to the Xbox console in order to (continue to) play the game. However, such a strategy would also make Activision Blizzard lose Call of Duty revenue from PlayStation customers who would no longer purchase the game and would not buy Microsoft's Xbox console. To assess the strategy's profitability, the Commission estimated the switching rate, i.e., the proportion of users that would switch from PlayStation to Xbox because of the foreclosure. In its quantitative analysis, the Commission first computed the so-called "critical" switching rate (a switching rate where the gain in downstream console sales from foreclosure would exceed the loss in Activision Blizzard's upstream sales of Call of Duty) and compared it with the likely switching rate of PlayStation users. Absent a reliable estimate of the likely switching rate, the Commission relied on information about user engagement with *Call of Duty* to assess the post-merger behaviour of customers. The Commission considered that gamers who spend more than a certain percentage of their total game time playing *Call of Duty* on PlayStation are likely to buy an Xbox in case the game was no longer available on PlayStation. Applying these assumptions on four different scenarios, the Commission's quantitative analysis showed that the rate of gamers switching to Microsoft's Xbox from PlayStation to play Call of Duty would likely be too low to make up for the losses Microsoft would incur by no longer offering Call of Duty on PlayStation.

In addition, the Commission assessed whether Sony could successfully fend off any negative effects resulting from a potentially restricted availability and quality of Activision Blizzard's shooter games on PlayStation. In this assessment, the Commission considered that PlayStation is a very successful console, particularly in the EEA. Over the past years, Sony's PlayStation has been the leading distributor of console games and provider of console hardware, with a significant market share worldwide, which is even higher in the EEA. In fact, when comparing only PlayStation and Xbox consoles, Sony has been considerably more successful than Microsoft: there are about 4 PlayStations for every Xbox in the EEA. Furthermore, the number of exclusive titles on PlayStation is considerably higher than on Xbox. Therefore, the Commission concluded that even if it could no longer offer Activision Blizzard's shooter games, Sony could leverage its size, extensive games catalogue and market position to fend off any potential attempt to weaken its competitive position.

Finally, even though *Call of Duty* is a popular title on consoles, it is less popular in the EEA than in other regions of the world (e.g., based on industry reports, *Call of Duty* is consistently a leading console title in the US). In addition, shooter games as a whole are less popular in the EEA compared to other regions (e.g., based on industry reports, the US and the UK are "top shooter markets" by monthly active users).

Therefore, the Commission concluded that Microsoft would not be able to negatively impact competing console game distributors (and particularly Sony's PlayStation) in the EEA by restricting their access to Activision Blizzard's console games and particularly AAA shooter games.

### Looking at the cloud(s) or how to assess the effects on competition in an innovative segment

Cloud game streaming, while still nascent, represents a growing industry trend, with increasing availability of streaming platforms, also EU-based ones. Thanks to this technology, games can run on remote servers and do not need to be installed in gamers' end devices. Therefore, cloud game streaming allows gamers to play a game on any device, even on devices that would not normally support the game (e.g., PCs with an operating system other than Microsoft's Windows, Smart TVs, smartphones, and tablets). Despite its potential, cloud game streaming represented a very limited part of the overall market for the distribution of games at the time of the decision, accounting for only around 1% of the total global market in 2022.

The Commission assessed whether to define a separate market for cloud game streaming services. During its market investigation, market participants reported to the Commission that cloud game streaming represented a minimal part of the overall video game distribution market. Importantly, market participants indicated that, from the demand side, cloud game streaming is considered as just another way of accessing games, which competes with the more traditional access to games via download. Therefore, the Commission concluded that cloud game streaming did not represent a separate product market, but rather a segment of the overall market for the distribution of PC and console video games.

Against this background, the Commission assessed whether a potential negative impact on the nascent cloud game streaming segment would harm competition in the overall game distribution market. It found that cloud streaming is an innovative and growing technology that could transform the way many gamers play video games. It has the potential to disrupt the traditional distribution of video games by allowing gamers to play complex games without needing expensive dedicated gaming hardware. Harming rival cloud game streaming providers would therefore have a significant impact also on the overall market for the distribution of console and PC video games.

The Commission further found that, while Activision Blizzard's games were not available for streaming prior to the Transaction,

it was likely that Activision Blizzard would have started licensing its video games to cloud game streaming services absent the Transaction. Therefore, the Commission was concerned that, post-Transaction, Microsoft would make Activision Blizzard's games exclusive to its own cloud game streaming service, Game Pass Ultimate, and withhold them from rival cloud game streaming providers.

The Commission considered that a restricted access to Activision Blizzard's console and PC games would reduce rival cloud game streaming providers' ability to compete against Microsoft. This strategy could even encourage the exit of competing cloud game streaming providers, who would not have sufficient attractive content to gain and keep users.

The Commission therefore concluded that by harming competing cloud game streaming providers, the Transaction would reduce competition in a disruptive segment of the market for the distribution of PC and console games, and therefore have a significant negative impact on this overall market.

### Cloud gaming: a potential game-changer that could undermine Windows' PC dominance

Over the past few decades, Microsoft has successfully established and sustained Windows' dominant position in the market for PC operating systems, maintaining markets shares of 70-80% in the EEA in recent years. Potentially because of this popularity, a significant majority of PC games are specifically designed for and are only available on Windows. Notably, many renowned PC titles from Activision-Blizzard, including their flagship franchises, *Call of Duty* and *World of Warcraft*, were already pre-Transaction typically exclusive to Windows PCs, with no releases on non-Windows PC operating systems. Since the availability of games is one important factor influencing users' preferences when choosing between different operating systems, the dominance of Windows-native games can therefore reinforce Windows' dominance.

The Commission assessed concerns due to the unavailability of Activision-Blizzard games natively on non-Windows PC operating systems, but ultimately rejected such concerns since Activision-Blizzard did not generally develop PC games for non-Windows operating systems even before the Transaction.

However, the Commission found that, because of their disruptive potential, the emerging cloud game streaming distribution model presented a competitive risk for Windows as a PC gaming platform. Namely, cloud game streaming services enable streaming of Windows-exclusive games to non-Windows PCs. In this way, cloud game streaming gives rival PC operating systems the means to compete more effectively against Windows. In light of this, the Commission examined the potential impact of the deal on Microsoft's ability to defend or expand Windows' dominant position in PC operating systems. Specifically, the Commission was concerned that Microsoft could use its cloud game streaming service to tie Activision Blizzard's games exclusively to Windows. By controlling on which PC operating system its own cloud game streaming service is made available and by not making Activision Blizzard games available on any other cloud game streaming platform, Microsoft would have been able to restrict access to Activision Blizzard games on competing PC operating systems.

The Commission found that, apart from having the ability, Microsoft would also have the incentive to foreclose rival providers of PC operating systems. This is because, in addition to benefitting Microsoft's cloud game streaming service, revenues from protecting Windows' position in the market for PC operating systems would likely offset foregone revenues from distributing Activision's games via cloud game streaming services on non-Windows operating systems in the future. Considering Microsoft's very strong position in the market for PC operating systems, even a moderate increase of barriers to compete would have significant effects on competition between PC operating systems.

The Commission therefore concluded that, by tying Activision-Blizzard games exclusively to Windows via Microsoft's cloud game streaming service, the acquisition would harm competition in the market for PC operating systems.

This theory of harm extends beyond the evaluation of a conventional conglomerate relationship, which typically focuses on direct links between two closely related markets.<sup>3</sup> A novel aspect in this case is that the relevant conglomerate link between the development and distribution of PC games, on the one hand, and PC operating systems, on the other hand, only exists via intermediate providers of cloud game streaming services since they make games available across PC operating systems. In its assessment the Commission therefore expanded what it typically considers as a conglomerate relationship, taking into account that within the ecosystems of companies with broad portfolios there can be complex connections between different products.<sup>4</sup> By assessing the impact of the transaction not only on the vertically related market for cloud game streaming but also on the market for PC operating systems, the Commission undertook a "multidirectional"<sup>5</sup> examination to fully reflect the possible interactions of Activision Blizzard's game developing activities with the existing product portfolio of Microsoft.

<sup>&</sup>lt;sup>3</sup> As discussed above, a theory of harm based on the direct conglomerate relationship between the development and distribution of PC games and PC operating systems was assessed but ultimately rejected by the Commission.

<sup>&</sup>lt;sup>4</sup> See the finding of the General Court in the Android case that "the relevant markets that make up that ecosystem may overlap or be connected to each other on the basis of their horizontal or vertical complementarity". Judgment of 14.09.22, Google v European Commission, T-604/18, paragraph 116.

<sup>&</sup>lt;sup>5</sup> The General Court stated in the Android case that ecosystems "may therefore require multi-level or multi-directional examination". Judgment of 14.09.22, Google v European Commission, T-604/18, paragraph 117.

### Remedies: enabling cloud game streaming to grow

To address the competition concerns identified by the Commission in the market for the distribution of PC and console games via cloud game streaming services, Microsoft offered the following licensing commitments (the so-called 'EC commitments'):

- A free license to consumers in the EEA that allows them to stream, via any cloud game streaming service of their choice that might opt to offer Activision Blizzard's games for streaming (see point below), all current and future Activision Blizzard PC and console games that will be released in the next 10 years.
- A corresponding free license to cloud game streaming service providers to allow EEA-based gamers to stream any of those Activision Blizzard's PC and console games.

As explained above, at the time of the decision, Activision Blizzard did not license its games to cloud game streaming services, nor did it stream the games itself. The licenses under the commitments aim to ensure that (i) gamers have the right to stream Activision Blizzard games with any cloud game streaming service of their choice that might opt to distribute Activision Blizzard games and play them on any device using any operating system, and (ii) independent cloud game streaming operators will distribute Activision Blizzard games via streaming as they have an incentive to add the very popular and successful Activision Blizzard franchises to their cloud streaming portfolios. The remedies also ensure that Activision Blizzard's games available for streaming will have the same quality and content as games installed locally.

The Commission carefully investigated the effectiveness of the remedy proposal, collecting views from a large number of market participants and stakeholders during two market tests. In particular, cloud game streaming service providers gave positive feedback and showed interest in the licenses. Some of these providers entered into bilateral license agreements with Microsoft based on the proposed commitments during the Commission's investigation.

While the proposed remedies were not structural in nature, the Commission considered that they addressed the competition concerns in this case more effectively than a divestiture would have done. In reaching this conclusion, the Commission took into account the positive feedback from the market and the real-world example of the agreements that were already concluded. Another important factor was that the license to consumers and the license for competing cloud game streaming services are free of charge and can be implemented immediately and automatically as of the closing of the transaction.<sup>6</sup> These licenses

represent a significant improvement for cloud game streaming providers as well as for consumers compared to the situation pre-merger, considering that Activision Blizzard was not offering its games for cloud streaming. The licenses empower millions of EEA consumers to stream Activision Blizzard's games using any cloud gaming service operating in the EEA. In addition, the availability of Activision Blizzard's popular games for streaming via all cloud game streaming services that might choose to offer them will likely boost the development of this dynamic technology in the EEA.

### Approval... but the game ain't over

Given the geographic scope of the businesses of both Microsoft and Activision Blizzard, the transaction was reviewed in multiple jurisdictions. By the time the Commission adopted its conditional phase II clearance decision, most other jurisdictions had cleared the transaction unconditionally, with a few exceptions including the US (Federal Trade Commission) and the UK (Competition and Markets Authority or "CMA"). In the UK, the CMA first decided not to accept the remedies submitted by Microsoft after an in-depth investigation and blocked the merger. A couple of months after the prohibition by the CMA, Microsoft licensed Activision Blizzard's global cloud streaming rights (excluding the EEA) to a legal entity to be sold to Ubisoft Entertainment SA (Ubisoft). Ubisoft can therefore commercialise those rights to cloud game streaming providers. The transaction was subsequently re-notified to the CMA and cleared conditionally on 13 October 2023.

Against this background, the Commission assessed whether the modifications made after the conditional clearance by the Commission were covered by the Commission's conditional clearance decision of 15 May 2023. The Commission concluded that such license did not change the transactional structure in a manner that it could be considered a new concentration under the Merger Regulation (in line with paragraph 123 of the Consolidated Jurisdictional Notice). This is in because the changes made to the transaction consisted in the conclusion of a license agreement between Activision Blizzard and a subsidiary that was then purchased by Ubisoft. Therefore, the transaction, as such, was not modified under the meaning of EU law and did not require a new notification to the Commission.

The Commission further investigated whether the changes made to the transaction and the commitments Microsoft presented to the CMA had any impact on the implementation of the commitments accepted by the Commission. The Commission found that the EEA rights as well as the existing agreements Microsoft already entered into had not been transferred to Ubisoft. In addition, the final agreements between Activision Blizzard and Ubisoft as well as the final commitments submitted by Microsoft to the CMA provide that Ubisoft and any of its sublicensees will license the streaming rights in the EEA under the EC

<sup>&</sup>lt;sup>6</sup> Microsoft published a website with further information about the licenses: <u>https://www.xbox.com/en-US/legal/activision-blizzard-cloud-</u>

<sup>&</sup>lt;u>game-streaming-eu</u>. The website contains a link where streaming providers can register automatically as licensee.

commitments like any other streaming provider. Therefore, the Commission concluded that the CMA commitments did not interfere with Microsoft's EU commitments.

### Conclusion

This case illustrates the need to intervene even if a concentration directly affects only a small part of a larger market that is however particularly innovative and has the potential to disrupt the way competition works in the overall market. In ever more complex links between different products within the portfolio of very large companies, the Commission may review conglomerate relationships between two markets even in situations in which such links depend on an intermediate service.

In certain situations, non-structural remedies can be at least as effective as a divestiture. This is particularly the case if such remedies respond to the needs of the market and are straightforward to implement and to monitor. In worldwide markets, the implementation of a remedy can be complicated when other competition authorities accept a different remedy. It is in the best interest of the merging parties to allow for close cooperation between competition authorities to find a solution that complies with requirements in different jurisdictions.



# **Competition** *merger brief*

## *Hitachi Rail/Thales GTS*: signalling the need for structural remedies

Céline Rizzoli, Rita Motta, Thibault Sire, Andreas Sowa

#### Introduction

On 30 October 2023, the Commission conditionally approved the acquisition of Thales' ground transportation systems ('GTS') business by Hitachi Rail ('Hitachi').<sup>1</sup>

Hitachi and Thales GTS were active in the supply of railway signalling systems in the EEA – both mainline signalling (*i.e.*, for national railway networks, including conventional and high-speed lines) and urban rail signalling (*i.e.*, for metros and light rail). The Commission expressed serious doubts that competition concerns would arise in certain mainline signalling markets in France and Germany, because there are very few competitors active in these countries, the Parties had significant combined market shares and the Commission found high barriers to enter these national markets. Hitachi offered structural remedies that removed the horizontal overlap between the Parties in France and Germany and enabled the entry of a new competitor on these markets.

### Horizontal effects for wayside signalling systems in France and Germany

Railway signalling systems play a critical role in the safe operation of any railway network as they avoid collisions between trains on any given section. A distinction can be made between mainline systems used on national railway networks, and urban systems installed on local networks for metros or trams.

When opening a new line or revamping the signalling systems of a pre-existing line, national railway infrastructure managers typically launch calls for tenders for their entire project, including the development of a bespoke solution, the procurement, testing, installation, and maintenance of the equipment. It is possible to distinguish three types of projects, namely (i) interlockings

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projects (ii) overlay projects (concerning everything but interlockings) and (iii) resignalling projects (including interlockings).

Historically, mainline signalling systems used to differ across Member States However, over the vears. several initiatives have led to progressive rollthe out of European standards and authorization procedures for signalling wavside systems. Most of these initiatives focused on the development of a European Rail Traffic Management System ('ERTMS') which includes sinale а standard for Automated Train ('ATP') Protection

### In a nutshell

Despite the progressive rollout of European standards and authorization procedures, national barriers to entry remain significant for mainline railway signalling projects in the EEA.

At national level. the combination of Hitachi Rail and Thales GTS would have combined two close competitors highly on concentrated markets for several types of mainline signalling projects in France and Germany.

To alleviate these concerns, Hitachi Rail offered structural remedies which contain important elements to address potential viability and implementation risks with respect to the completion of development of future rail signalling platforms.

systems called European Train Control System ('ETCS').

Yet, despite this harmonisation trend, the investigation revealed that mainline signalling systems continue to present strong national features both in terms of price and homologation. In addition, Member States have introduced adaptations to EU standards requiring ETCS systems (used on major railways across the EEA) to be compatible with or include national legacy systems (used on smaller rail lines). These developments hamper the harmonisation of competitive conditions across the EEA and make it more difficult for signalling players to enter new Member

<sup>&</sup>lt;sup>1</sup> Commission decision of 30 October 2023 in Case M.10507 – Hitachi Rail/Ground Transportation Systems Business of Thales ('Hitachi/Thales GTS').

States and for customers to switch suppliers. In view of these significant technical barriers, the Commission found that mainline signalling projects remain national in scope.

When purchasing signalling systems, rail operators typically launch formal calls for tender and invite several signalling players to bid. On such markets, the Parties' bidding data is particularly relevant to assess the effect of a concentration. In the case at hand, the Parties' activities overlapped mainly in France and Germany. In France, the transaction would have reduced the number of bidders from 4-to-3 for interlockings projects and from 3-to-2 for overlay and resignalling projects. Likewise, based on the number of suppliers that have participated over the past 10 years in tenders for mainline railway signalling projects in Germany, the transaction would have reduced the number of bidders from 4-to-3, both for overlay and resignalling projects. On these highly concentrated markets, the Parties competed closely and/or the new entity would have had particularly high market shares. In this context, the Commission expressed serious doubts on the compatibility of the transaction with the internal market for the supply of mainline signalling projects in France (for interlockings, overlay and resignalling projects) and Germany (for overlay and resignalling projects).

### Bidding data analysis

The Commission also relied on the Parties' bidding data for the assessment of horizontal non-coordinated effects with respect to urban rail signalling, as well as conglomerate effects.

As to urban rail signalling, the Commission relied on bidding data to measure the closeness of competition between the Parties. In view of this data, the Commission found that the Parties rarely participated to the same tenders and, when they did, the participation of Hitachi had no significant impact on the winning rate of Thales and vice versa. Overall, Siemens and Alstom are larger players, and closer competitors of both Thales and Hitachi. On this basis, the Commission was able to rule out serious doubts with respect to urban rail signalling.

The Commission also examined the Parties' bidding data to assess conglomerate effects with respect to signalling projects and rolling stock. This is because Hitachi Rail is active in the supply of both signalling systems and rolling stock, whereas Thales GTS is only active in signalling systems. In the course of the investigation, some market participants expressed concerns that the transaction would remove Thales GTS as the only pure signalling player left on the market, which could foreclose Hitachi's competitors for the supply of mainline or urban rolling stocks that do not have their own signalling division.

However, the parties' data and the results of the market investigation showed that over the past 10 years (i) nonintegrated rolling stock manufacturers partnered with integrated players (e.g. Alstom, Siemens, Hitachi) in a number of cases while they partnered with Thales GTS only rarely, (ii) these rolling stock manufacturers were not close competitors of Hitachi Rail and (iii) the winning rate of non-integrated manufacturers was higher when they partnered with integrated players than when they partnered with Thales GTS. As a result, the Commission concluded that the new entity would not have the ability and incentive to foreclose non-integrated rolling stock manufacturers.

### Structural remedy

In order to address the Commission's competition concerns, Hitachi offered to divest its international mainline signalling platforms used in France and Germany for interlockings, overlay and resignalling projects.

Divestiture commitments are the most effective and clear-cut remedies to alleviate competition concerns resulting from a horizontal overlap, which is why the Commission has a strong preference for this type of remedies.

The divestiture commitment initially proposed by Hitachi corresponded to a standalone business that included manufacturing sites in France; offices in France and Germany; other tangible and intangible assets (including technology licenses and transfer of know-how); employees in France and Germany (including hundreds of personnel involved in engineering, R&D and project development), as well as seconded employees from other locations. Notably, the remedies also included new signalling platforms involving new technological standards that Hitachi had under ongoing development for France and Germany.

Following a market test of the proposed commitments, the Commission identified three main viability and implementation risks, with respect to: (i) the need to complete the development of future signalling platforms, (ii) the criteria to identify a suitable purchaser and (iii) the transfer of customer contracts to the divestment business.

The development of the future signalling platforms in France and Germany was a crucial element to ensure the viability of the divestment business. The Commission had concerns about whether the Purchaser would have sufficient resources and expertise to reach completion and homologation of such platforms, to be able to compete in future tenders in France and Germany. Hitachi gave significant assurances that it would provide all intelligence and support that the Purchaser may need to conclude their development. These included, notably: (i) the provision of specific project development milestones to be completed within a pre-established timeline, as well as the provision of contractual assurances for the Purchaser of the divestment business and for the divestment business' main customers to enforce such milestones; (ii) the transfer of knowhow, perpetual and royalty-free licenses, including new releases/upgrades/modifications of elements/components of each future platform; (iii) further to the engineers and other experts already transferred to the divestment business, the secondment of additional engineers as needed for a sufficient number of years, and the possibility for the Purchaser to permanently retain

the seconded engineers; (iv) the provision of training schemes and transitional service agreements to the benefit of the purchaser, for the time needed to complete the homologation of each platform and for a few years post-homologation.

With respect to the purchaser, the remedies included strict purchaser eligibility criteria: due to the technical nature of the activities under consideration and in order to preserve the viability and competitiveness of the divestment business, the purchaser was required to have experience not only in the railway industry, but specifically in rail infrastructure signalling. Moreover, the Purchaser must have financial strength and international presence. The Commission found that all these requirements were needed to ensure a suitable purchaser, able to operate assets, with an adequate business plan, with sufficient financial resources and incentives to make the necessary investments and develop the business.

With respect to customers, the remedies included the binding commitment that, prior to the Commission's approval of the remedy-taker, Hitachi would obtain the express consent of the main customers of its mainline signalling business, to transfer their contracts to the purchaser.

The Commission considered that Hitachi's improved remedy package proposed effective solutions to address each of the Commission's viability and implementation concerns and conditionally approved the transaction. In parallel, the Competition and Markets Authority ('CMA') also reviewed the transaction and expressed competition concerns with respect to the parties' overlap for mainline signalling projects in the UK. To alleviate these concerns, Hitachi Rail offered to divest its mainline signalling activities in the UK and, in order to ensure that these activities would remain viable, Hitachi Rail decided to include its UK activities in the scope of the business being divested to alleviate the Commission's serious doubts in France and Germany.

### Conclusion

In April 2024, the Commission approved Mer Mec as a suitable purchaser for the acquisition of the divestment business. The structural remedies offered for the approval of the Hitachi Rail/Thales GTS transaction shall enable Mer Mec to run the divestment business as a viable competitive force on the market on a lasting basis, replacing the competition that would have been lost as a result of the merger. The Commission considers that the approved remedies contribute to fostering effective competition in mainline signalling. Thanks to this conditional clearance decision, Hitachi and Thales GTS will be able to combine their complementary activities and increase their scale to compete with large players like Siemens and Alstom, without harming consumers.



# **Competition** *merger brief*

### *Novozymes/Chr. Hansen* - Potential competition remedy helps digest lactase merger

Henrik Holmstrom, Louise Riley, Aiste Slezeviciute

#### Introduction

On 12 December 2023 the Commission conditionally approved the merger between Novozymes A/S ('Novozymes') and Christian Hansen A/S ('Chr. Hansen') (referred to below as the 'Transaction' and the 'Parties'). Novozymes and Chr. Hansen are both global bioscience companies headquartered in Denmark. Novozymes is a publicly listed company solely controlled by Novo Holdings A/S. Novozymes develops, manufactures and supplies industrial enzymes to multiple industries, such as agriculture, animal health, and food and beverages. Chr. Hansen was a publicly listed company which developed natural ingredients solutions, in particular microbes and cultures for the food, nutritional, pharmaceutical and agricultural industries.

Overall, the investigation revealed that the Parties' activities were largely complementary and did not result in many horizontal overlaps. However, the Commission's investigation showed that the merger as initially notified would have reduced competition in the EEA market for the manufacture of lactase produced using genetically modified ("GM") production hosts which some market participants anticipate will become more important in the coming years due to an increasing demand.

In particular, the Commission found that while Novozymes is a leading manufacturer of lactase produced using GM production hosts, Chr. Hansen was a strong lactase distributor and had a project to start manufacturing its own lactase. The Commission's investigation indicated that Chr. Hansen would likely have grown into an effective competitor within a relatively short period of time and that post-merger there would not have been enough competitors to exert sufficient competitive pressure on the merged entity (see section 1).

To address the Commission's concerns with respect to the supply of lactase produced using GM production hosts in the EEA, the Parties committed to divest: (i) Chr. Hansen's project to enter the

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market for the manufacture of lactase; (ii) Chr. Hansen's lactase distribution business; and (iii) Novozymes' lactase production facility. The commitments ensure that the pre-Transaction level of competition is maintained in the EEA. Following a market test, the Commission concluded that the Transaction as modified by the commitments would no longer raise competition concerns (see section 2).

Given that the merger concerned two significant players in the biosolutions innovation space, the Commission also investigated the potential harm to innovation competition. Δn extensive benchmarking exercise of the R&D capabilities of the Parties compared to other players in the industry showed that the merger would not negatively impact innovation (see section 3).

### In a nutshell

EUR 12 billion The merger between the biotech companies Novozymes and Chr. Hansen was conditionally cleared in Phase I. The divestment remedy ensures the maintenance of effective competition in the market for the manufacture of lactase produced usina genetically modified production hosts.

Following an extensive benchmarking exercise to assess innovation, the Commission concluded that the merger would not have a negative impact on innovation in the relevant segments of

#### 1. Indigestion: a loss of potential lactase market entry

The Commission had serious doubts that the Transaction would raise competition concerns as a result of Chr. Hansen's plan to start manufacturing lactase (the 'Lactase Market Entry Project').

Lactase is an enzyme that breaks down lactose (the main sugar in milk) into its constituent simple sugars, galactose and glucose. It is naturally occurring but can also be used industrially to produce lactose free and lactose reduced dairy products. In addition to making dairy products easier to digest for individuals suffering from lactose intolerance (it is estimated that, globally, about 70% of the adult population is lactose intolerant) it can also be used to make products sweeter without the need for added sugar, as galactose and glucose taste sweeter than lactose. Lactase is produced using a production host (fungi, bacteria, or yeast) which either naturally produces lactase or has been genetically modified so that it produces lactase.

The Commission's market investigation showed that lactase is a separate product market as it has a unique role and cannot be substituted by another enzyme. It also found evidence that lactase produced using GM and non-GM production hosts form separate markets. First, while most lactase customers can use lactase produced using either production technology, other customer groups, such as those producing organic or bio certified products, are not able to use a lactase produced using GM production hosts. Second, for the customers that could use either product, there were indications that non-GM places only a limited competitive constraint on GM: (i) non-GM produced lactase may typically be materially more expensive with higher production costs; (ii) observed switching is mostly unidirectional from non-GM to GM; and (iii) only one player in the market can produce both. The Commission ultimately left the market definition open and focused the assessment on the narrowest plausible basis: the market for the manufacture of lactase produced using GM technology in the EEA.

The Commission identified competition issues within this subsegment. There are currently only two manufacturers with meaningful activities at EEA level: Novozymes and DSM. The merger removed Chr. Hansen which, through its Lactase Market Entry Project, was likely to grow into an effective competitive force in a relatively short period of time. First, internal documents and economic projections relating to the market for lactase produced using GM production hosts showed that it was likely that Chr. Hansen would have made the necessary investments to enter the market relatively quickly. Second, Chr. Hansen's Lactase Market Entry Project would benefit from Chr. Hansen's established position as one of the main lactase distributors in the EEA and globally, allowing it to become an effective competitive force in lactase manufacturing.

In addition, the Commission found that, without the Lactase Market Entry Project, there would not be enough other competitors that could have maintained sufficient competitive pressure on the merged entity. As noted above, the market is very concentrated with only two manufacturers meaningfully active in the EEA (Novozymes and DSM). Moreover, there are high barriers to entry in the market as manufacturers need to develop the required technology (a lactase enzyme and a GM production host), the required manufacturing capabilities, obtain a number of regulatory authorisations and develop market access. Consequently, the only other company that would have had the assets required to enter the EEA market was IFF, but it has a limited presence at global level and, according to the Parties, it may have avoided entering the EEA market because of the actual or perceived threat of infringing intellectual property rights.

### 2. Remedies: a cure for indigestion?

In order to effectively remedy the loss of potential competition in the lactase market, measures were needed to replicate the competitive constraint posed by Chr. Hansen pre-merger.

The Parties submitted a draft commitments package consisting of: (i) Chr. Hansen's project to enter the market for the manufacture of lactase; (ii) Chr. Hansen's lactase distribution business; and (iii) Novozymes' lactase production facility.

The Commission found that this package included all the assets which contributed to Chr. Hansen's existing lactase operations. Pre-merger, Chr. Hansen had not yet developed a production facility for its pipeline project and the GM lactase it was distributing was manufactured in Novozymes' lactase production facility. By including Novozymes' production assets, the Divestment Business would therefore be immediately viable in the hands of a suitable purchaser with the means to operate on a stand-alone basis, independently of the Parties.

The results of the market test were clear that the identity of the purchaser was an important factor in ensuring the viability of the divestment business as the market for the manufacture of lactase produced using GM production hosts is highly specialised. The commitments therefore included an up-front buyer clause<sup>1</sup> and criteria requiring that the purchaser of the divestment business have dairy industry experience as well as experience of developing and launching new enzyme products.

The Parties' reached an agreement to sell the divestment business to the Kerry Group PLC ('Kerry', Ireland). Kerry is a global food and beverage and ingredients business with significant experience in the dairy industry as well as in developing and marketing food and beverage enzymes. Following the Commission's analysis, Kerry was approved as a suitable purchaser of the divestment business on 26 January 2024.

### 3. The next meal: reinventing the food chain through biotech innovation

Given that the merger concerned two significant players in the bio-solutions innovation space, the Commission undertook a detailed assessment of the potential impact of the Transaction on innovation.

As biotechnology is used in a variety of economic sectors, it was necessary to analyse the market conditions and the impact of the Transaction on innovation in several different fields. Based on the internal documents of the Parties and its initial investigation, the Commission identified the following industry segments as

<sup>&</sup>lt;sup>1</sup> Specifying that the Parties will not complete the merger before having entered into a binding agreement with a purchaser for the divested business, approved by the Commission. See Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (Text with EEA relevance), *OJ C 267, 22.10.2008, p. 1–27* at paragraphs 53-55.

relevant for its assessment: (i) food & beverages ('F&B'); (ii) human health; (iii) animal health; (iv) industrial applications; (v) household care and (vi) bio agricultural ('BioAg') solutions. The Commission focused, in particular, on the F&B segment, where the Parties appeared as particularly strong players, both for marketed products and innovation.

The Commission assessed both the Parties' product pipelines and their overlaps with marketed products and pipeline-to-pipeline overlaps. This led to the finding of competition issues in relation to Chr. Hansen's lactase market entry project, for which the Parties offered the remedy described above.

To assess any further potential negative impact on innovation which may have been caused by the Transaction, the Commission carried out a benchmarking exercise collecting data from the Parties and their competitors on various R&D parameters, for example R&D spend, number of scientists, R&D centres per segment. The data showed that the merged entity's competitors have the equivalent ability to invest in R&D and that the Parties do not have any specific R&D capabilities that rivals could not otherwise access.

The Commission also assessed the assets and capabilities of the Parties and their rivals, such as patent portfolios, fermentation capacity, and strain banks and did not identify any concerns for the future innovation capabilities on the market. For example, the investigation confirmed that third parties do not rely to a significant degree on the merged entities' capabilities in fermentation capacity or use its strain banks for their own R&D purposes. By and large, the Commission found that Parties' R&D capabilities are complementary, in line with the large part of their product portfolio. In addition to the benchmarking exercise, the Commission also relied on the feedback obtained from the market investigation. Based on this evidence, the Commission concluded that the Transaction did not raise serious doubts as to its compatibility with the internal market as regards the loss of innovation between the Parties and in particular, Parties' rivals would not be hindered in their R&D efforts as a result of the merger.

### Conclusion

This case shows that where a divestment of pipeline products is required to address potential competition concerns, the Commission needs to be satisfied that the pipeline product is being divested with all of the assets required to replicate the constraint posed by the potential entrant and to enable the creation of a viable competitive force on the relevant market post-merger. In this case, the divestment package included a production facility. The case also highlights the Commission's thorough approach to assessing the impact of mergers on innovation competition, through the use of tools like benchmarking.