

3 December 2018

Simpson Grierson
Lumley Centre
88 Shortland Street
Auckland 1010

Attn: James Craig

11.04/43493

Dear Partners

Letter of issues – DLF Seeds’ proposed acquisition of PGG Wrightson Seeds

1. We refer to the application from DLF Seeds A/S (DLF) seeking clearance to acquire 100% of the shares in PGG Wrightson Seeds Holdings Limited (PGW Seeds) from PGG Wrightson Limited (PGW) (the proposed merger).
2. At this stage, we are not satisfied that the proposed merger would not give the merged entity the ability to profitably raise prices and/or reduce quality to customers in New Zealand by removing a competitor in the production and supply of ryegrass seeds.
3. In reaching the preliminary views set out in this letter, we have considered information provided by DLF, PGW Seeds and other industry participants. We have not yet made any final decisions on the issues outlined below (or any other issue) and our views may change, and new competition issues may arise, as our investigation continues.
4. We will advise you if we identify any further issues during our investigation of the proposed merger that are not discussed in this letter.
5. We are available to meet with DLF to discuss this letter.

Timeline

6. The Commission would like to receive submissions and supporting evidence from DLF on the issues raised in this letter. We request that DLF provides this information by close of business on **14 December 2018**, including a public version of any submission.

7. If DLF considers it cannot adequately respond by this date, please contact us to discuss timing.
8. We will be requesting that other parties intending to make a submission on the issues in this letter provide their submission by **14 December 2018**, and that they provide a public version of their submission.
9. All submissions received will be published on our website with appropriate redactions. DLF will have the opportunity to cross submit on the public versions of submissions from other parties. Other parties will also have the opportunity to cross submit on DLF's submission. The Commission will not receive cross submissions after the close of business on **21 December 2018**.

Market definition

Relevant product dimension – forage markets

10. Our preliminary view is that the relevant forage seeds production and supply markets are:
 - 10.1 ryegrass;
 - 10.2 tall fescue;
 - 10.3 brassica/fodder beet;
 - 10.4 clover; and
 - 10.5 cocksfoot.
11. DLF, in its application, submitted that ryegrass and tall fescue are in the same market. We are of the preliminary view that the relevant market is narrower than the combined market for ryegrass and tall fescue seeds. Feedback from our initial inquiries indicates that tall fescue is slow to establish compared to ryegrass and is more sensitive to soil temperature. Further, although endophyte technology is used in the production of both ryegrass and tall fescue seeds, the endophytes used for ryegrass and tall fescue cannot necessarily be used interchangeably.
12. We are also assessing whether perennial, Italian, hybrid and annual ryegrass are each distinct product markets. We note that the characteristics of ryegrass cultivars vary across a range of different factors, such as persistence, endophyte choice and heading date. The degree of demand-side substitution between different ryegrass cultivars depends on whether the properties of the respective ryegrass cultivars are able to match individual farm systems and whether they can be used as alternatives from the perspective of end-users. Further, we note that annual ryegrass is not inoculated with endophyte technology, which differentiates it from perennial, Italian and hybrid ryegrasses. In any case, it is not clear whether the precise definition of any ryegrass market/s will have a material impact on our assessment of the competitive impact of the proposed merger.

19. The Commission is concerned that this loss of this competitive tension may impact both current and future competition in the production and supply of ryegrass seeds by:
- 19.1 enabling the merged entity to unilaterally increase the price of ryegrass varieties; and
 - 19.2 potentially slowing the pace of development of new endophytes and new endophytic ryegrass varieties, leading to a reduction in the quality and breadth of endophytes and endophytic ryegrass varieties that would otherwise be available in the future.

Market concentration in the production and supply of ryegrass seeds

20. The ryegrass market, in terms of supply volumes, is dominated by two major suppliers (PGW Seeds and Barenbrug Agriseeds), with a tail of minor suppliers including DLF, Cropmark and Seed Force. However, market share measures are insufficient in themselves to establish whether a merger is likely to have the effect of substantially lessening competition. The Commission must conduct a full analysis of a range of factors outlined in our guidelines.¹
21. The Commission considers that an analysis of current market shares is likely to understate the importance of DLF in the market and the future state of competition in the absence of the proposed merger. This is because DLF, despite being a relative newcomer to New Zealand, has through its research and development programme, been successful in developing novel ryegrass endophytes as well as high performing ryegrass cultivars specifically for New Zealand conditions.
22. The Commission understands that in the last few years,
[]. We note that in the 2018 Dairy NZ Forage Value index, DLF had more highly performing cultivars than other minor players, and our preliminary view is that in the absence of the proposed merger,
[].

Endophyte research and development

23. The Commission understands that DLF owns the two most recent novel endophytes that have been inoculated into commercial perennial ryegrass varieties.²
24. PGW Seeds (through its joint venture with AgResearch) and Barenbrug Agriseeds are the only other suppliers with endophyte research and development programmes that have produced novel endophytes (since AR1 in 2000) that have been successfully inoculated into commercial ryegrass varieties.

¹ Merger and Acquisition Guidelines, 2013 at 3.49.

² [].

25. At this stage of its investigation, the Commission is not aware of any other endophyte research programme that has resulted in commercially viable ryegrass cultivars being inoculated with new novel endophytes. We note that other parties have been granted, or have filed for, Plant Variety Rights in relation to new novel endophytes. However, based on our market inquiries with industry participants, we understand that identifying an endophyte is in no way a guarantee of successfully inoculating that endophyte into a commercial viable ryegrass cultivar. It can take years of further research to make the endophyte live in the seed, and may ultimately come to nothing.
26. Although we are assessing the size and investment of all competitors' endophyte research and development programmes, the lack of certainty of success and long time periods for development means that the competitors that currently own endophytes are at a significant advantage.
27. DLF submitted that:

while there are inevitably some differences between each endophyte in the market, there is nothing that is highly unique about any one endophyte. There are a lot of overlapping properties between the different endophytes that are currently available and this tends to cancel out any significant competitive advantage.
28. However, we understand that the only novel endophyte that is not controlled by DLF, PGW Seeds or Barenbrug Agriseeds and generally used in commercial ryegrass varieties is AR1. The Commission's initial market inquiries have identified AR1 as largely superseded by more recent novel endophytes, and that it is hard to compete with cultivars relying on this endophyte.
29. As a result of its endophyte programme, high quality cultivars, and increasing volume of supply, our preliminary view is that DLF is a close competitor to PGW Seeds in the market for the production and supply of ryegrass and is generating competitive tension which may not be replicated by other competitors that have relatively small market shares.

New entry and expansion

30. The Commission's preliminary view is that the likelihood of timely new entry or expansion into endophyte research and development for ryegrass and subsequent production of new ryegrass varieties is low, and that the threat of new entry or expansion is unlikely to sufficiently constrain DLF post-merger.
31. Ryegrass seed breeding encompasses significant barriers, even for a multinational. The length of time it takes to bring a new seed variety to market, and the long period of investment before any costs can be recovered may be in excess of a decade. The Commission's market inquiries have identified that in relation to ryegrass it is not possible for an imported variety to compete effectively with a variety that has been adapted to local growing conditions.
32. Furthermore, while DLF has suggested a 10 year period, market participants have generally suggested that the time required to identify and commercialise a new

novel endophyte is even longer and can take up to 15 years with no certainty of success. Our market inquiries to date have not identified any players who would be likely to commence or who would credibly threaten to enter or expand in a manner that would be likely to constrain the merged entity.

Countervailing power

33. The Commission's preliminary view is that customers do not have the ability or the incentive to exercise any countervailing power in a manner that could constrain the merged firm post-merger. The evidence collected to date suggests that DLF and PGW's customers are likely to pass through any price rises to customers.

Other issues

AgResearch and PGW Seeds

34. The Commission is also exploring AgResearch and PGW Seed's joint venture in relation to endophyte research and development, and whether any concerns in relation to the arrangement would be augmented by the proposed merger.

Industry bodies

35. Some interested parties have suggested that PGW Seeds, through its various relationships, currently has the ability to influence industry bodies in an anti-competitive manner and that the proposed merger may increase the merged firm's ability to do so in the future.
36. PGW Seeds, PGW Seeds' subsidiary Agricom, PGW Seeds' joint venture partner AgResearch, and DLF currently sit on several industry bodies. The Commission is considering whether the proposed merger may give the merged entity the ability to hamper entry or expansion by current and/or future competitors. For instance, whether the control of PGW Seeds' vote on technical committees would enable DLF to slow or even thwart the passage of rival's new novel endophytes to market.

Competition assessment (coordinated effects) – ryegrass seeds

37. We are also considering whether the proposed merger may make coordination more likely, complete or sustainable. A merger may do this by reducing the number of firms among which to coordinate (thereby reducing the likelihood of deviation from the consensus), by removing or weakening competitive constraints or by altering certain market conditions that make coordination more likely.
38. Post-merger, the merged entity and Barenbrug Agriseeds would be:
- 38.1 two world leaders in forage seeds;
 - 38.2 the two largest players in ryegrass seeds in New Zealand;
 - 38.3 operating the two largest endophyte research programmes in New Zealand;
 - 38.4 the only two suppliers with access to the AR37 endophyte; and

38.5 regularly meeting each other at various industry fora.

39. The Commission notes that to some extent, this market structure exists now between PGW Seeds and Barenbrug Agriseeds. The Commission is considering the extent to which the ability and incentive for the two main players to coordinate their behavior might be augmented by the proposed merger.

Turf seeds markets

40. The Commission understands that DLF and PGW Seeds are the only suppliers that produce turf seeds locally. We are continuing to assess the impact of the proposed merger on the turf seeds market/s, including whether there are sufficient overseas suppliers and whether imported turf seeds are substitutable for all end uses. In relation to turf seeds, we do not seek further information from DLF at this stage, but are continuing to obtain information from other sources. Should issues arise, we will advise DLF as soon as possible.

Next steps

41. We are continuing to undertake inquiries and seek information from industry participants about the impact of the proposed merger in New Zealand. However, we welcome any further evidence and other relevant information and documents that DLF is able to provide regarding the issues identified in this letter.
42. Please contact me if you have any questions about this letter.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Andy Gallagher', written in a cursive style.

Andy Gallagher
Senior Investigator