Application for clearance of a business acquisition under s66 of the Commerce Act 1986

Proposed acquisition by DLF Seeds A/S (or its nominee) of the shares in PGG Wrightson Seeds Holdings Limited

28 September 2018

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Table of Contents

Part A – Executive Summary	**4**
Parties	4
Proposed Transaction	4
Overlaps Between the Parties	4
Relevant Markets	4
Counterfactual	5
No Substantial Lessening of Competition for the Forage Seed Markets	6
No Substantial Lessening of Competition for the Turf Seed Markets	7
Part B – The Parties	**9**
Acquiring Party	9
Selling Party	9
Part C – Transaction Details	**11**
Proposed Transaction	11
Rationale for the Proposed Transaction	12
Other Competition Agencies Being Notified	13
Related Transactions	13
Part D – Horizontal Overlap	**14**
Activities of the Parties to the Proposed Transaction	14
Relevant Overlaps Between the Parties	15
Required Documents / Information	16
Part E – Market Definition	**17**
Overview of Relevant Markets	17
Previous Consideration by the Commission	17
Product Dimension in the Present Case	20
Functional Dimension	21
Geographic Dimension	21
Conclusion	21
Part F – Counterfactual	**23**
Status Quo	23
Alternative Purchaser	23

Part G – The Industry **24**
Overview of the Seeds Industry 24
Seed Products Provided by the Parties 36
Pipeline Products 40
Other Industry Participants 43
Recent Merger Activity 45

Part H – Competition Assessment for Forage Seed Markets **46**
Market Shares 46
Constraints from Existing Competition 51
Constraints on the Merged Entity Post-Acquisition from Potential Competition 56
Countervailing Power from Customers 60
Conclusion 61

Part I – Competition Assessment for Turf Seed Markets **62**
Market Shares 62
Constraints from Existing Competition 63
Constraints on the Merged Entity Post-Acquisition from Potential Competition 64
Countervailing Power from Customers 65

Part J – Confidentiality **67**

Part K – Declaration **68**

Appendix 1 – Transaction Documents 69
Appendix 2 – Corporate Structure Charts 70
Appendix 3 – Audited Financial Statements and Annual Report 71
Appendix 4 – Total Sales Revenues 72
Appendix 5 – New Zealand Competitors and Industry Associations 73
Appendix 6 – Key Customers 75
Appendix 7 – NZPBRA Survey Data 77
Appendix 8 – Glossary 78

Part A – Executive Summary

1. DLF Seeds A/S (**DLF**), or its nominee, is applying for clearance from the Commerce Commission to acquire 100% of the shares of PGG Wrightson Seeds Holdings Limited (**PGW Seeds**) (together, the **Parties**). PGW Seeds is wholly owned by PGG Wrightson Limited, who is the Vendor (**PGW**).

Parties

2. DLF is a Danish based company owned by a cooperative of Danish grass-seed farmers, dealing in forage and amenity seeds, and other crops. It is a private limited liability company incorporated in Denmark in 1872. It is the main operating company within the DLF Group, and operates either directly or through its subsidiaries in 20 countries around the globe. DLF began operations in New Zealand in 2004 and operates from two leased premises - an office based in Christchurch and a breeding station at Yaldhurst. DLF NZ employs 12 fulltime staff, as well as two skilled temporary staff during the busy harvest season at its Yaldhurst breeding station.

3. PGW Seeds is a New Zealand company formed in 1990. It is wholly owned by PGW, a company listed on the main equity securities board operated by NZX Limited (ticker code: PGW). 50.22% of PGW's shares are owned by Agria (Singapore) Pte Limited. The PGW Seeds business is one of the largest proprietary seed companies in the southern hemisphere, servicing both New Zealand and global markets, encompassing many facets of the seed market, including research and development, seed supply and on-farm support. The PGW Seeds business focuses on Australasian and South American seed growing and producing, and it has a strong presence in New Zealand, Australia, Argentina, Uruguay and Brazil.

Proposed Transaction

4. The proposed transaction involves the acquisition of PGW Seeds (**Proposed Transaction**) by way of an Agreement for Sale and Purchase of Shares (the **SPA**). The Proposed Transaction will result in PGW Seeds becoming a subsidiary of DLF.

Overlaps Between the Parties

5. The overlaps between the Parties are restricted to certain types of forage seeds and turf seeds. In relation to forage seeds, DLF and PGW both sell the following seeds: ryegrass, clover and fodder beet, as well as minor volumes of tall fescue and cocksfoot. In relation to turf seeds, DLF and PGW both sell the following seeds: ryegrass, tall fescue, and fine fescue.

Relevant Markets

6. The Parties consider that the relevant markets in this case are:

6.1 a national market for the production or importation and wholesale supply of ryegrass/tall fescue seeds (the **Ryegrass/Tall Fescue Seed Market**);

6.2 a national market for the production or importation and wholesale supply of clover seeds (both red and white) (the **Clover Seed Market**);

6.3 a national market for the production or importation and wholesale supply of brassica/fodder beet seeds (the **Brassica/Fodder Beet Seed Market**);

6.4 a national market for the production or importation and wholesale supply of cocksfoot seeds (the **Cocksfoot Seed Market**);

(together referred to as the **Forage Seed Markets**); and

6.5 a national market for the production or importation and wholesale or retail supply of turf seeds (the **Turf Seed Market**).

7. These market definitions broadly accord with the ryegrass, clover and brassica seed market definitions adopted by the Commission in Decision 556 of 31 August 2005, which related to the merger of Pyne Gould Guinness Limited and Wrightson Limited. The only differences are that in that Decision the Commission did not have to consider in any detail tall fescue, fodder beet, cocksfoot or turf seeds. The Parties maintain that tall fescue seeds are substitutable with and form part of the ryegrass market adopted by the Commission in Decision 556, while the same applies for fodder beet being substitutable with and form part of the brassica market adopted by the Commission. The Parties have adopted separate markets for cocksfoot and turf seeds.

8. DLF is not acquiring the retail business of PGW and is not itself involved in retail sales (except to a very limited extent for turf seeds), so there is no overlap between DLF and PGW Seeds at the retail level. Accordingly, no vertical integration is taking place as a result of the Proposed Transaction.

Counterfactual

9. DLF considers that, in the absence of the Proposed Transaction, there are two possible counterfactuals, involving either the continuation of the current status quo or the purchase of PGW Seeds (**[ ]**) by an alternative purchaser.

10. Under the status quo counterfactual, PGW Seeds' business would continue to be owned and operated as it currently is, at least in the short term. However, DLF understands that PGW Seeds' business is in a capital constrained position. PGW Seeds' ongoing research and development (R&D) programme is significant, with a high demand on investment capital. The current capital structure places demands on the business to yield dividends at a level which restricts its capacity to invest in the business adequately to maintain its market position. **[**

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11. Under the alternative purchaser counterfactual, **[**

]. DLF understands that PGW has not identified a suitable New Zealand party as a credible prospective purchaser, despite conducting a sales process and receiving some New Zealand interest. Other potential overseas purchasers mentioned in the media have been Elders, Ruralco and Dutch-based Barenbrug. **[**

]. DLF believes that it has a much stronger scientific focus than Elders and Ruralco as potential purchasers, particularly in areas such as genomic selection and endophyte technology, meaning DLF will be better positioned to

progress opportunities arising from this. In relation to Barenbrug, as the owner of Agriseeds in New Zealand it would face more competition issues than DLF due to its much larger existing presence in New Zealand for forage seeds.

No Substantial Lessening of Competition for the Forage Seed Markets

12. DLF generally has a small role in the supply of forage seed products in New Zealand. As a result, the proposed acquisition leads to limited aggregation beyond PGW Seeds' existing strong market position. In particular, based on the 2017 market share figures:

12.1 Ryegrass/Tall Fescue – the combined entity would have around **[ ]** market share for proprietary seeds, but DLF's market share is only **[ ]** so the level of aggregation is small. These shares do not include non-proprietary seeds. In addition, there would continue to be significant competition provided by Agriseeds with **[ ]** market share and smaller suppliers like Cropmark and Seed Force that are similar in size to DLF;

12.2 Clover – the combined entity would have around **[ ]** market share, but DLF's market share for proprietary seeds is only **[ ]** so the level of aggregation is minimal. There would continue to be substantial competition provided by Agriseeds with around **[ ]** market share and smaller suppliers that are similar in size to DLF like Seed Force;

12.3 Brassica/Fodder Beet - the combined entity would have around **[ ]** market share for proprietary seeds, but DLF's market share is only **[ ]** so the level of aggregation is again minimal. There would continue to be substantial competition provided by Seed Force with around **[ ]** market share, together with other players like Agriseeds and Cropmark both of whom supply larger volumes of brassicas / fodder beet seeds than DLF;

12.4 Even if the market were narrower and just included fodder beet and not brassicas as well, then the largest supplier of fodder beet seeds would be Seed Force, with PGW Seeds the number two supplier. DLF and Agriseeds would be the number three and four suppliers by volume supplied, but both would be substantially smaller than Seed Force and PGW Seeds. Cropmark also provides reasonable volumes of fodder beet seeds;

12.5 Cocksfoot - the combined entity would have around **[ ]** market share for proprietary seeds, but DLF's market share is only around **[ ]** so the level of aggregation is small. There would continue to be substantial competition provided by Agriseeds with around **[ ]** market share, and other suppliers like Seed Force and Cropmark that are similar in size to DLF;

12.6 It is also worth noting that the volumes of cocksfoot supplied are small compared with the other markets above – i.e. an estimated **[ ]** in total of cocksfoot supplied in 2017, compared with **[ ]** for ryegrass/tall fescue and **[ ]** for clover.

13. Post-acquisition there will continue to be strong constraints placed on the merged entity by existing large competitors such as Agriseeds and Seed Force, together with smaller participants such as Cropmark and Germinal. Barriers to expansion by existing competitors are low, as was recognised by the Commission in its 2005 Decision 556. That position remains the case today. Imports are also readily

available for existing participants to use to expand supply. By way of example, DLF imports all of its cocksfoot seed, and both PGW Seeds and DLF import all of their fodder beet already. There is also competition from suppliers of non-proprietary seeds such as Cridge Seeds, Wesco, Frame Grain & Seeds and others.

14. In terms of potential competition there are very low barriers to entry for breeders and wholesalers of seeds in New Zealand, and no regulatory impediments to operating seed research or distribution activities in New Zealand. This has been recognised by the Commission in earlier Decisions involving seed markets – and again that position remains accurate. Accordingly, there are a number of multinational seed organisations that are likely to enter the market in the short term, or could do so in response to a price increase by the merged entity (particularly those whose operations are based in countries with similar climatic conditions to New Zealand – such as Western Europe and Great Britain, parts of Australia, west South America and parts of North America). The Parties consider that in particular Deutsche Saatveredelung AG and KWS SAAT AG (both ultimately German owned) could establish a presence in New Zealand and Australia. Either entrant could bring in significant supply, as each is a large global company.

15. Lastly, customers can (and will continue to be able to) constrain price increases by suppliers through their ability to switch suppliers and the availability of imports. Among farmers there is some, but not much, loyalty to particular seed brands so farmers are willing to switch brands. The bulk of the supply of the merged entity's seed products will be to a limited number of large customers who will have the resources to exert countervailing buyer power. Unlike the current situation where PGW Seeds is part of the same PGW group that contains PGW retail operations, PGW's retail business is not being acquired by DLF so there will be no vertical integration at the retail level as a result of the acquisition.

No Substantial Lessening of Competition for the Turf Seed Markets

16. In relation to turf seeds, there is no reliable data that DLF is aware of on turf seed market size. The market is extremely diverse, comprising domestic lawn seed sales, parks and sports fields, stadia, golf courses, grass verges in urban areas, "roll-out" turf, orchards and vineyards, roadside applications (eg motorway embankments), reclamation of spent industrial land (forestry, mining) and airports. There are multiple channels to market (eg contractors to building companies, landscapers, hydro-seeders[1], agricultural contractors, council-owned operations, regional and countrywide contractors to councils, sports turf specialists, national retail chains (both hardware and farming), local hardware stores, garden centres). The market utilises both proprietary and "common" cultivars and there is a strong demand for forage-type grasses as well. The market is supplied by local production (proprietary and commons (i.e. non-proprietary)) as well as imports (mainly proprietary). The civil/amenity sector is the largest sector of the turf seed market and is particularly diverse in terms of customer base (including councils, contractors, local authorities, local clubs), with significant change from year to year (e.g. contractors disappearing etc). All of this makes it very difficult to assess the market size.

17. Subject to this caveat regarding the difficulty of estimating market shares, PGW Seeds' estimates of the shares of the key participants for the wholesale/retail functional dimension of the turf seed market in 2017 would indicate that the combined market share of both Parties would be around **[ ]**, but DLF's market share would only be around **[ ]**. There would continue to be significant

1 Hydroseeding is "a planting process that uses a slurry of seed and mulch" and is "often used as an erosion control technique on construction sites, as an alternative to the traditional process of broadcasting or sowing dry seed" (see https://en.wikipedia.org/wiki/Hydroseeding).

competition at the wholesale/retail level provided by Prebble Seeds (with around **[ ]** share), Turf Grass Specialists and Village Green / Evans Turf (while acknowledging that these companies do receive supply of turf seeds from **[ ]** and other suppliers).

18. The Parties are not able to provide market share estimates of the key participants for the production/importation/wholesale functional dimension of the turf seed market. While the Parties have some idea of what brands the other wholesale/retail participants sell (because they observe them in the market), they do not have a good sense of the quantities. For its part, DLF supplied in total **[ ]** of turf seeds in 2017, **[ ]** in 2016 and **[ ]** in 2015. PGW Seeds supplied in total **[ ]** of turf seeds in 2017, **[ ]** in 2016 and **[ ]** in 2015. What is evident from this is that **[ ]**.

19. Post acquisition the merged entity will continue to be constrained by other market participants at the wholesale/retail level such as Turf Grass Specialists, Prebble Seeds, and Evans Turf. These other market participants obtain turf seeds from DLF and PGW Seeds, but still supply them in competition to DLF and PGW Seeds at the wholesale/retail level including setting their own prices. They also source material from third party suppliers (including **[ ]**).

20. Various mid-Canterbury seed production companies also sell turf (or off-spec seed into the turf market). Imports also impose a constraint and are readily available. DLF imports the tall fescue and fine fescue seeds that form its turf seed product offerings. Evans Turf, Turf Grass Specialists and Prebble Seeds import seed mainly from the USA and some from Australia.

21. As is the case for the forage seed markets, there are low barriers to entry into the turf seed market, and there are a number of large turf seed producers which DLF considers could well enter the New Zealand market.

22. The turf seed market also faces constraint from the ability to substitute turf cultivars with those originally grown for forage seed applications. Suppliers of forage seeds are able to expand into turf. Good examples of this are roadside mixes, “economy” packs for home lawns, hydroseeding, racecourses and council sports fields. This behaviour is widely prevalent and potentially represents two thirds of the total NZ turf market.

23. Lastly, in relation to customer countervailing power, turf sales to customers tend to be made through short term contracts and so customers have an opportunity to switch frequently and easily. **[ ]**.

Part B – The Parties

Acquiring Party

24. The acquirer is DLF Seeds A/S, or any of its interconnected bodies corporate or nominees. Its contact details are:

DLF Seeds A/S
Ny Østergade 9
4000 Roskilde
DENMARK

Attention: Lars Johansen
Telephone: +45 4013 3338
Email: lj@dlf.dk

25. All correspondence and notices to DLF in respect of this application should be directed in the first instance to:

Simpson Grierson
Lumley Centre
88 Shortland Street
Private Bag 92518
Auckland 1010
NEW ZEALAND

Attention: James Craig / Nina Blomfield
Telephone: (09) 977 5125
Mobile: (021) 497 713
Email: james.craig@simpsongrierson.com
nina.blomfield@simpsongrierson.com

Selling Party

26. The seller is PGG Wrightson Limited (**PGW**). Its contact details are:

PGG Wrightson Limited
57 Waterloo Road
Hornby
Christchurch 8042
NEW ZEALAND

Attention: Julian Daly, General Manager Strategy & Corporate Affairs / John McKenzie, Group General Manager
Telephone: 03 372 0972 / 03 372 0822
Email: jdaly@pggwrightson.co.nz / jmckenzie@pggwrightsonseeds.co.nz

27. All correspondence and notices to PGW in respect of this application should be directed in the first instance to:

Chapman Tripp
Level 17
10 Customhouse Quay
Wellington 6011
NEW ZEALAND

Attention: Lucy Cooper/Hilary Beattie
Telephone: (04) 498 2406
Mobile: (027) 948 1748
Email: lucy.cooper@chapmantripp.com
hilary.beattie@chapmantripp.com

Part C – Transaction Details

Proposed Transaction

28. DLF (either directly or through its nominee) is proposing to purchase 100% of the shares in PGG Wrightson Seeds Holdings Limited, and its subsidiaries (as set out below) (**PGW Seeds**). PGG Wrightson Seeds Holdings Limited is wholly owned by PGG Wrightson Limited, who is the Vendor (**PGW**).

29. Shares in the following New Zealand incorporated subsidiaries of PGW Seeds will be acquired indirectly by DLF as part of the Proposed Transaction:

29.1 51% of Forage Innovations Limited (with the remaining 49% being held by The New Zealand Institute for Plant and Food Research Limited);

29.2 70% of Grasslands Innovation Limited (with the remaining 30% being held by Grasslanz Technology Limited);

29.3 100% of PGG Wrightson Seeds New Zealand Limited;

29.4 100% of PGG Wrightson Seeds South America Holdings Limited;

29.5 100% of PGG Wrightson Seeds Limited;

29.6 100% of Agricom Limited;

29.7 100% of Wrightson Seeds Limited;

29.8 100% of PGG Wrightson Consortia Research Limited;

29.9 12.5% of Pastoral Greenhouse Gas Research Limited (with the remaining shares being held in equal 12.5% shareholdings by Agresearch (PPGR Consortia) Limited, Deeresearch Emissions Mitigation Company Limited, Fonterra PGGRC Limited, B+LNZ Emissions Company Limited, Dairy Insight (PGGR Consortia) Limited, New Zealand Fertiliser Manufacturers' Research Association Incorporated, and Landcorp Farming Limited);

29.10 14.29% of Pastoral Genomics Limited (with the remaining shares being held in equal 14.29% shareholdings by Deeresearch Limited, Agresearch (Pastoral Genomics Consortia) Limited, B+LNZ Clover Company Limited, Insight Genomics Limited, New Zealand Agriseeds Limited, and Dairy Australia Limited).

30. Shares in overseas subsidiaries of PGW Seeds will be acquired indirectly as a result of the Proposed Transaction, including entities in Australia, Uruguay, Argentina and Brazil.

31. A copy of the Agreement for Sale & Purchase of Shares in PGW Seeds (the **SPA**) is attached at **Appendix 1.** A diagram showing the target entities to be acquired under the Proposed Transaction is attached at **Appendix 2**.

32. Neither DLF nor any of its subsidiaries have any existing interest in PGW Seeds.

33. The Proposed Transaction is subject to the satisfaction or waiver of customary conditions, including but not limited to:

33.1 approval from the Overseas Investment Office;

33.2 consent of the shareholders of PGW to the Proposed Transaction;

33.3 **[**
];

33.4 consents from the required regulatory authorities in South America;

33.5 counterparty consents from joint venture parties; and

33.6 counterparty consents to product licensing arrangements.

34. The Proposed Transaction is expected to close during the second half of 2018.

Rationale for the Proposed Transaction

35. DLF is the market leader within the turf seed and cool season forage industries in the northern hemisphere, while PGW Seeds' business holds that position in the southern hemisphere.

36. Through DLF's investment in PGW Seeds' business, the two businesses will obtain significant critical mass and business scope that will:

36.1 allow the combination of two global market leading genetic resources, increasing crossing diversity and further investment in R&D, including in new biotechnology methods;

36.2 have a unique global supply chain, utilising DLF's northern hemisphere presence and PGW Seeds' business in Australasia, and in the three countries in South America with a PGW Seeds Business presence;

36.3 access the most comprehensive distribution platform in the seed and grain industry across the globe;

36.4 allow a comprehensive sharing of market intelligence across geographies; and

36.5 combine the skill sets of the two businesses, which will greatly enhance the professional environment inside the combined organisation and management teams through knowledge sharing, best practices and business development (including operations, tactics and strategy).

37. The combined strength of DLF's and PGW Seeds' businesses will result in increased seed production and exports from New Zealand, including utilisation of counter season production opportunities in the southern hemisphere to speed up potential shortages within DLF's network in the northern hemisphere.

38. DLF considers that the total increase in export receipts over a five-year period from completion of the Proposed Transaction will be around **[ ]**. This is conservative, as it takes several years to establish a critical mass and presence. It is therefore possible that the level of exports will be **[ ]** than reflected here. Over a five-year timeframe, DLF expects exports to the following markets to **[ ]** by the approximate amounts set out below:

38.1 **[ ]** in exports to Africa and South Africa;

38.2 **[ ]** in exports to Latin America;

38.3 **[ ]** in exports of MaxQ endophytes to Africa and Latin America;

38.4 **[ ]** increase in exports to North America;

38.5 **[ ]** increase in exports to Europe; and

38.6 **[ ]** increase in exports to China.

39. It is estimated that the total increased export receipts, over a five-year period, from the investment, will be approximately split as follows:

Expected increase in export receipts (in NZ$ millions)	**FY 2020**	**FY 2021**	**FY 2022**	**FY 2023**	**FY 2024**
Southern Hemisphere	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
Europe	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
North America	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**
China / North Asia	**[ ]**	**[ ]**	**[ ]**	**[ ]**	**[ ]**

40. The combination of genetic resources and technologies should allow more distinct and improved products to be marketed in New Zealand and exported abroad.

Other Competition Agencies Being Notified

41. **[**

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Related Transactions

42. There are no related transactions between DLF and PGW affecting New Zealand, **[**

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Part D – Horizontal Overlap

Activities of the Parties to the Proposed Transaction

DLF

43. DLF is a Danish based company owned by a cooperative of Danish grass-seed farmers, dealing in forage and amenity seeds, and other crops. It is a private limited liability company incorporated in Denmark in 1872. It is the main operating company within the DLF Group, and operates either directly or through its subsidiaries in 20 countries around the globe.

44. DLF is a global seed company dealing in forage and amenity seeds, and other crops with plant research and development (**R&D**) field multiplication (on contract), processing, distribution and sales and marketing. DLF ranks among the world's 10 largest seed companies measured by revenue.

45. DLF Group's revenue in the financial year ended 30 June 2017 amounted to 3,527 million (DKK) (approximately NZ$740 million). The group revenue for the year ended 30 June 2017 was allocated amongst the following divisions internationally:

45.1 Forage and turf seed – 77%;

45.2 Sugar and fodder beets – 14%;

45.3 Potato division – 5%;

45.4 Vegetable seed – 4%.

46. Geographically, Greater Europe accounted for 61% of DLF Group revenue, North America for 36% and the rest of the world for 3%.

47. The DLF Group has expanded considerably over the past few decades and, while essentially remaining a co-operative owned by Danish farmers (through DLF AmbA and DLG AmbA), the DLF Group is a key breeder, producer and marketer in the global seed industry.

48. DLF began operations in New Zealand in 2004 with imported seeds, including ryegrass and clover. It then started its own local breeding programme, with the first product released from that programme in around 2011/2012 (being Jeta, a long-rotation ryegrass). This was followed over the next couple of years by the release of both perennial and Italian ryegrasses.

49. DLF NZ operates from two leased premises - an office based in Christchurch and a breeding station at Yaldhurst. DLF's storage and distribution services are mainly undertaken by South Island Seed Dressing Limited (**SISD**), based in Ashburton, which is New Zealand's largest such facility. DLF accounts for approximately 10% of SISD's activity.

50. DLF NZ employs 12 fulltime staff, as well as two skilled temporary staff during the busy harvest season at its Yaldhurst breeding station.

51. In New Zealand DLF produces ryegrass, clover and tall fescue. It imports fodder beet and cocksfoot. DLF then wholesales the following: ryegrass, clover and fodder beet, as well as minor volumes of tall fescue and cocksfoot. DLF exports both forage and turf seeds from New Zealand directly to Australia, South Africa, Chile and Uruguay, as well as exporting via DLF A/S in Europe to Denmark, France, Holland and the United Kingdom.

52. DLF is not active in the following forage seed areas: grain, brassica (swede, turnip, kale, rape), herbs (chicory, plantain), or lucerne.

53. As regards turf seeds, DLF produces ryegrass and imports tall fescue and fine fescues. DLF wholesales the following: ryegrass, tall fescue, fine fescues. DLF is not active in chemicals, fertilisers, wetting agents, line paint, hardware etc (mainly for golf courses).

54. Additional information on DLF and its business can be obtained from its website at https://www.dlfseeds.co.nz/.

PGG Wrightson Seeds

PGW Seeds

55. PGW Seeds is a New Zealand company formed in 2005 as a result of the merger of Wrightson Limited and Pyne Gould Guinness Limited. It is wholly owned by PGW, a company listed on the main equity securities board operated by NZX Limited (ticker code: PGW). 50.22% of PGW's shares are owned by Agria (Singapore) Pte Limited. PGW has been involved with seeds in New Zealand since the 1800's.

56. The PGW Seeds business is one of the largest proprietary seed companies in the southern hemisphere, servicing both New Zealand and global markets, encompassing many facets of the seed market, including research and development, seed supply and on-farm support. The PGW Seeds business focuses on Australasian and South American seed growing and producing, and it has a strong presence in New Zealand, Australia, Argentina, Uruguay and Brazil.

57. In relation to forage seeds, PGW Seeds produces ryegrass, clover, tall fescue and cocksfoot. It imports fodder beet. PGW Seeds then wholesales the following: ryegrass, clover and fodder beet, as well as limited volumes of tall fescue and cocksfoot.

58. In relation to turf seeds, PGW Seeds produces ryegrass, tall fescue and fine fescues. PGW Seeds wholesales the following: ryegrass, tall fescue, fine fescues. PGW Seeds is also active in chemicals, fertilisers, wetting agents, line paint, and hardware etc.

59. Additional information on PGW Seeds and its business can be obtained from its website https://www.pggwrightsonseeds.com/.

Relevant Overlaps Between the Parties

60. The overlaps between the Parties are restricted to certain types of forage seeds and turf seeds.

61. In relation to forage seeds, DLF and PGW Seeds both sell the following seeds: ryegrass, clover and fodder beet, as well as minor volumes of tall fescue and cocksfoot.

62. In relation to turf seeds, DLF and PGW Seeds both sell the following seeds: ryegrass, tall fescue, fine fescues.

Required Documents / Information

63. We provide in **Appendices 2** to **6**:

63.1 a copy of, or link to, the most recent annual report, audited financial statements and management accounts for the relevant business unit(s);

63.2 each Party's total sales revenues, and volumes;

63.3 the names and contact details for the Parties' main competitors, and any trade or industry associations in which one or both of the Parties participate; and

63.4 the names and contact details for each Party's key customers, and the revenue earned from each customer in the last financial year.

Part E – Market Definition

Overview of Relevant Markets

64. DLF considers there is a reasonable basis for adopting national markets for the production or importation and wholesale supply of forage seeds generally and turf seeds. However, it appreciates that the Commission adopted narrower forage seed markets in Decision 556 in 2005,[2] and is content to adopt a similar approach in the present application.

65. Accordingly DLF has proceeded on the basis that the relevant seed markets for present purposes are the national markets for the production or importation and wholesale supply (and in the case of turf seeds only also retail supply) of each of:

65.1 Ryegrass/Tall Fescue Seed;

65.2 Clover Seed (including both red and white clover seed);

65.3 Brassica/Fodder Beet Seed;

65.4 Cocksfoot Seed; and

65.5 Turf Seed.

66. The basis for these market definitions is expanded on below. Before doing so, we briefly summarise the Commission's previous consideration of analogous seed markets.

Previous Consideration by the Commission

67. The Commission has looked specifically at the New Zealand seed industry four times before.

1996 application by Wrightson to acquire Hodder and Tolley Limited

68. In April 1996 the Commission considered the application by Wrightson to acquire Hodder and Tolley Limited. The Commission defined six markets:

68.1 research and development services in seed technology;

68.2 crop contracting and grain brokering services;

68.3 seed cleaning services;

68.4 wholesale/retail supply of grain and seeds;

68.5 grain drying and storage; and

68.6 seed coating services.

69. The Commission concluded that the presence of existing competitors, the relatively low barriers to entry and expansion and, in some markets, the availability of alternative methods or processes, would ensure that no person would acquire, or

2 At [2].

would be likely to acquire, a dominant position in any of the affected markets, as a result of the implementation of this acquisition.

1998 application by Yates New Zealand Limited to acquire Watkins New Zealand Limited (In receivership) and Smiths Horticultural Distributors Limited (In receivership) (Decision 320)

70. In March 1998 the Commission gave clearance for this acquisition. The relevant markets were not on all fours with the present application since they involved wholesale distribution of seeds to consumers. However the Commission did find that there was a market for the wholesale distribution of lawn seed to consumers, which excluded instant turf.[3]

2003 application by South Pacific Seeds Pty Limited to acquire the New Zealand vegetable seeds sales division of Yates Limited (Decision 508)

71. In September 2003 the Commission cleared an application by South Pacific Seeds Pty Limited to acquire the New Zealand vegetable seeds sales division of Yates Limited (Decision 508). The Commission defined separate markets for capsicum, tomato and cucumber seeds and concluded that the degree of existing competition in the market, the long and short term entry of potential competitors and the countervailing power of large suppliers would be sufficient to make a substantial lessening of competition unlikely as a result of the acquisition in any of the markets.

2005 application by Pyne Gould Guinness Ltd and Wrightson Ltd to merge (Decision 556)

72. The applicants Pyne Gould Guinness Ltd and Wrightson Ltd argued that the relevant product dimension was for forage seeds generally (following the approach in *Hodder and Tolley*). The main categories of forage seeds were perennial ryegrass; short rotation ryegrass; long rotation ryegrass; Italian ryegrass; white clover, red clover; and brassicas. Lesser utilised categories included tall fescue; cocksfoot; lucerne; and herbs.

73. However the Commission took the view in Decision 556[4] that this definition was too wide. Instead it adopted narrower product dimensions for each of:

73.1 Ryegrass - the Commission was of the view that a single market encompassing the different varieties of ryegrass was appropriate. This included the two broad categories of ryegrass, namely perennial ryegrass and Italian ryegrass with hybrids of these two forming a third category. This was on the basis that a farmer was likely to pick a particular variety based on the characteristics they desired, which in turn would be influenced by geography, type of stock, soil and other factors. From a supply perspective there was a high degree of substitutability between the seed varieties.

73.2 The Commission also considered whether it was necessary to define separate product markets for ryegrasses that were inoculated with different endophytes given that endophytes are inextricably linked to ryegrass. Specifically, the Commission considered whether it would be appropriate to define separate markets for AR1 and AR37 novel endophytes, given that their particular attributes would make them more suited to particular farmers' needs based on the pests that are problems for that farmer. However, the Commission concluded it was not necessary to define such narrow product dimensions. This was because in most

3 At [28]-[30] and [61].
4 At p 30 onwards.

instances there was likely to be a high degree of substitutability between the AR1 and AR37 endophyte ryegrasses such that it was appropriate to consider them falling within the same market. Also, based on the uptake figures of AR1 the Commission considered that there was some degree of substitutability between grasses containing other, or no, endophytes.

73.3 Clover - White clover grows on a network of stolons which allows it to spread, whereas red clover grows upright and spreads only through seed. Red clover is generally considered to have an inferior persistence to white clover and produces more dry matter in the summer months but less in the winter. Red and white clovers are often sown together in pasture seed mixes though, as a trend, white clover is now used much more than red clover. The Commission considered that there was a large degree of supply-side substitutability between them as a supplier could fairly readily and costlessly switch between the supply of such seeds given a small incentive to do so. The Commission was of the view that it was appropriate to consider a combined clover market for the purposes of its analysis, consisting of both red and white varieties.

73.4 Brassicas - Brassica crops are used as a supplementary feed for animals during times when grass growth is less than required. Brassicas are also often used to fatten lambs before slaughter and as a pasture break crop (although this latter use is a spin-off effect from their use as a supplementary feed). The decision to use a brassica, and ultimately which type of brassica, will depend on a number of factors including the time period in which the feed is needed, the type of stock to be fed, climatic conditions, soil conditions, farmer preference and other considerations. The Commission considered whether brassicas were more correctly viewed as a distinct product market or as components of a broader supplementary feed market. The Commission concluded that the degree of substitutability between the different varieties of brassica (although varying on a case by case basis) was such that it was not appropriate to disaggregate the market into distinct brassica varieties. Although there was a degree of substitutability between brassicas and other supplementary feed options, the Commission considered it was appropriate to define the market as including brassicas only. (DLF notes that fodder beet was not widely used in New Zealand at the time of this Decision.)

73.5 In Decision 556,[5] when defining the brassica product dimension, the Commission acknowledged that there was a degree of competition present at the margins of the market from other supplementary feed options, and also acknowledged that there were varying degrees of substitutability between the different brassica varieties. It went on to state that:[6]

> As discussed in the market definition, brassicas are primarily used as a supplementary feed in either the winter or summer. They are often chosen for their ability to produce high volumes of dry matter production in fairly short spaces of time. However, there are a number of other supplementary feed options that will constrain an exercise of market power in the factual at the margins of the market. These options include silage, hay, bailage, all winter grazing and to a lesser extent grain.

5 At [200].
6 At [436]-[437].

> Although in some cases these options vary in their degree of substitutability (for example, all winter grazing, due to climatic conditions, is likely to be difficult for a Southland farmer) they are all technically substitutable as a supplementary feed. As acknowledged earlier, one Southland farmer interviewed by the Commission, said that he had moved completely to silage as a supplementary feed with the view to save money in the long run.

74. In Decision 556 the Commission noted that it had not considered the categories of tall fescue, cocksfoot, lucerne or herbs.[7] That was because no party interviewed expressed any concerns for these categories.

Product Dimension in the Present Case

75. DLF is generally content to follow the Commission's approach to market definition in Decision 556, but with the following changes to deal with additional categories of seeds not considered by the Commission in that Decision:

75.1 DLF agrees that a single product dimension encompassing the different varieties of ryegrass (i.e. perennial, Italian, hybrid and annual) is appropriate. However DLF considers that tall fescue is substitutable with these ryegrasses and forms part of the same product dimension, as expanded on in the next section of this application. DLF notes that endophyte technology is inoculated into both ryegrass and tall fescue;

75.2 DLF agrees that it is appropriate to consider a combined clover product dimension consisting of both red and white varieties;

75.1 DLF agrees that it is not appropriate to disaggregate the brassica product dimension into distinct brassica varieties. However, consistent with the Commission's acknowledgement in Decision 556 that there is a degree of substitutability between brassica and other supplementary feed options, DLF considers that the relevant product dimension here is a combined one for brassicas and fodder beet, with both being winter feed crops. Although fodder beet (*Beta vulgaris*) is not a brassica, it has emerged as an alternative to traditional brassica winter crops such as the similar-looking root crops of swedes and turnips, as well as stemmed/leafy brassicas such as kale. Farmers can alternate from brassica to fodder beet as part of normal paddock rotation;

75.2 The Commission did not consider whether cocksfoot was a separate product dimension in Decision 556. DLF considers that it is. In particular cocksfoot is not readily substitutable for ryegrass, as it is generally sold mixed with ryegrass or another product;

75.3 The Commission did not consider turf seed markets in Decision 556, and they were only considered tangentially in Decision 320. "Turf" comprises perennial ryegrass or fescue, or a mix of the two. Ryegrass and fescue turf are interchangeable in the market, as well as being sold as a mix. Seed produced for turf is not substitutable with the equivalent seed produced for animals, as turf is sold with special characteristics including, for example, colour and disease resistance (whereas for animals, the main goal is to ensure as much of the product grows as possible). That said, forage seeds produced for animals can be used for turf applications, and suppliers of forage seeds are able to expand into turf. Good examples of this are roadside mixes, "economy" packs for home lawns, hydroseeding,

7 At [171].

racecourses and council sports fields. DLF has adopted a separate product dimension for turf seed in the present application.

Functional Dimension

76. In Decision 556 the Commission noted that forage seeds are either locally grown or imported for re-sale within New Zealand. The method for obtaining seed will vary depending on the type of seed, the nature of the business and the quantity required. The Commission was of the view that in respect of all of the seed markets the appropriate functional dimension was that for the production or importation and wholesale or retail supply.[8]

77. DLF is content to adopt a similar approach in this case. The appropriate functional dimension is that for the production or importation and wholesale supply of seeds. DLF is not acquiring the retail business of PGW and is not itself involved in retail sales (except to a very limited extent for turf seeds), so there is no overlap between DLF and PGW Seeds at the retail level. As a result, no vertical integration is taking place as a result of the Proposed Transaction.

Geographic Dimension

78. In Decision 556 the Commission concluded that, for all of the seed markets defined, the relevant geographic market was the national market.[9] This was because:

78.1 As seeds can be packed in a way that eliminates wasted freight space, grass seeds can be easily transported between regions domestically (and even imported) at relatively low cost compared to the retail value of the seed. This enables all of New Zealand's seed companies to operate on a nationwide basis;

78.2 The Commission analysed whether it would be appropriate to define separate regional markets based on the comparative characteristics of different endophytes, particularly AR1 and AR37. In determining this the Commission considered whether it would be possible for price discrimination to occur between regions based on the varying degrees of substitutability between different endophytes in varying places around the country. However, due to the low transportation costs and the relatively small area affected by the black beetle in New Zealand, the Commission considered that any price discrimination between geographic areas would be very difficult to sustain.

79. Again DLF is content to adopt that approach for this application.

Conclusion

80. For the above reasons DLF submits that the relevant seed markets in this case are the national markets for the production or importation and wholesale supply (and in the case of turf seeds only also retail supply) of each of:

80.1 Ryegrass/Tall Fescue Seed;

80.2 Clover Seed (including both red and white clover seed);

80.3 Brassica/Fodder Beet Seed;

8 At [246]-[247].
9 At [269]-[272].

80.4 Cocksfoot Seed; and

80.5 Turf Seed.

Part F – Counterfactual

81. DLF considers that, in the absence of the Proposed Transaction, there are two possible counterfactuals, either involving the continuation of the current status quo or the purchase of PGW Seeds ([ ]) by an alternative purchaser. These are expanded on below.

Status Quo

82. PGW Seeds' business would continue to be owned and operated as it currently is, at least in the short term.

83. However, DLF understands that PGW Seeds' business is in a capital constrained position. PGW Seeds' ongoing research and development (R&D) programme is significant, with a high demand on investment capital. The current capital structure places demands on the business to yield dividends at a level which restricts its capacity to invest in the business adequately to maintain its market position. **[**

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Alternative Purchaser

84. **[**

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However, DLF understands that PGW has not identified a suitable New Zealand party as a credible prospective purchaser, despite conducting a sales process and receiving some New Zealand interest.

85. The media has speculated in the past that at least three other overseas purchasers showed interest in purchasing the PGW Seeds business (although not necessarily by the same transaction structure), being Australian-based Elders and Ruralco, and Dutch-based Barenbrug.[10] DLF does not know whether or not these entities did, in fact, meaningfully engage in the sales process.

86. **[**

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87. DLF believes that it has a much stronger scientific focus than Elders and Ruralco as potential purchasers, particularly in areas such as genomic selection and endophyte technology, meaning DLF will be better positioned to progress opportunities arising from this. In relation to Barenbrug, as noted below it is the owner of Agriseeds in New Zealand and would face more competition issues than DLF due to its much larger existing presence in New Zealand for forage seeds.

10 Refer for instance to https://www.stuff.co.nz/business/farming/105373475/elders-remains-tightlipped-over-bid-for-pgg-wrightson; and to https://www.afr.com/street-talk/ruralco-elders-line-up-for-livestock-seeds-showdown-at-pgg-wrightson-20180313-h0xfqp .

Part G – The Industry

88. In this section we deal with the following topics:

88.1 an overview of the seeds industry;

88.2 the products provided by the Parties;

88.3 other industry participants; and

88.4 recent merger activity in the industry.

Overview of the Seeds Industry

89. The Commission has set out the relevant background on the seeds industry in Decision 556.[11] The key points are summarised and expanded on below.

Ryegrass

90. Ryegrass is the most widely sown pasture species in New Zealand and is used throughout most of the country.[12] In planting pasture grasses a farmer will generally select a variety of *Lolium perenne* (perennial ryegrass) or *Lolium multiflorum* (Italian or annual ryegrass) or a hybrid of these two. Perennial ryegrass is, in general, preferred to Italian ryegrass because of its persistence. However, Italian ryegrass can establish slightly more quickly than perennial ryegrass and therefore is used commonly in areas where re-sowing of ryegrass is more frequent (i.e. Southern, cooler regions).

91. Ryegrass varies from the most persistent (perennial ryegrass) to the least persistent (annual ryegrass) and can be broadly categorised by how long it lives or persists:[13]

91.1 *Annual* - Less than one year;
91.2 *Italian* - 1-2 years;
91.3 *Short rotation* - 2-5 years;
91.4 *Perennial* - 5 years.

11 At p 23 onwards.
12 https://www.dairynz.co.nz/feed/pasture-renewal/select-pasture-species/ .
13 https://www.dairynz.co.nz/feed/pasture-renewal/select-pasture-species/ryegrass/

92. Based on survey data from the New Zealand Plant Breeders Research Association for proprietary cultivars, the total volumes of the various types of ryegrass seed supplied in New Zealand for 2017 were:

92.1 Perennial ryegrass – **[ ]**;

92.2 Hybrid ryegrass – **[ ]**;

92.3 Italian ryegrass – **[ ]**;

92.4 Annual ryegrass – **[ ]**.

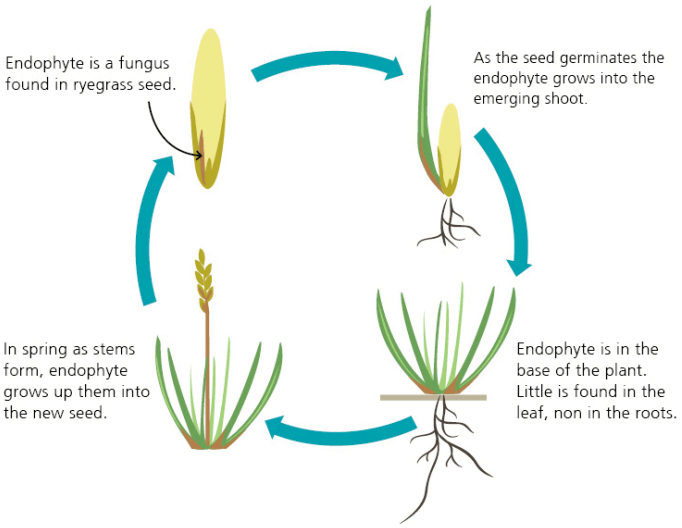
93. Further detail on the NZPBRA data is provided in **Appendix 7**.

Endophytes

94. The New Zealand pasture seed industry has changed significantly in recent decades with a focus on technology developments leading to increased productivity gains. One of the most notable advancements is the commercial identification of endophytes and the sale of ryegrass incorporating endophytes.

95. Endophyte technology is inoculated into ryegrass and tall fescue. Endophytes are sold with about 90% of perennial ryegrass (the exception is certain sales to customers in Southland and parts of Otago, due to climate) and about 80% of Italian ryegrass, but only 20% of hybrid ryegrass. All annual ryegrass is sold without endophytes.

96. An endophyte is a naturally occurring fungus that is found in ryegrass and tall fescue pastures and which grows in a symbiotic relationship with the grass, protecting it from certain pests. Endophytes are known to fight-off certain pests such as Listronotus bonariensis (the Argentine stem weevil) by producing certain alkaloids such as Peramine that have pest repelling, or pest killing, qualities. A diagram showing how the endophyte works is set out below:[14]



97. The endophyte protects plants from a range of insects but can be associated with animal health problems, especially ryegrass staggers. There are different types of endophyte and each varies in persistence, yield, and insect protection.

14 https://www.dairynz.co.nz/feed/pasture-renewal/select-pasture-species/ryegrass/.

98. Some endophytes are known to produce the Ergovaline and Lolitrem B alkaloids which are generally avoided wherever possible due to their adverse impact on animal health. Lolitrem B is known to cause ryegrass staggers which presents in the form of animal twitching, and in moderate cases the animal can fall over. Ergovaline is known to cause some heat stress to animals, reductions in liveweight gains, and lameness. However, Ergovaline has been identified as an alkaloid that offers protection against Heteronychus arator (black beetle). As such, endophytes that produce these alkaloids are often seen as 'compromises' in that they offer better pest protection, but are not as safe from an animal health perspective.

99. Endosafe was the first novel (commercially identified and marketed) endophyte marketed in the 1990s. Endosafe contained the Peramine alkaloid and, being free of Lolitrem B, was thought to be completely safe for animals. However, it was later discovered to contain Ergovaline which can cause serious health issues to the grazing animal. This ultimately caused some of the cultivars (producing the higher levels of Ergovaline) to be withdrawn from the market.

100. In 2001, Grasslanz introduced the AR1 endophyte which was seen as the break-through endophyte as it offered protection against the Argentine stem weevil (through the presence of the animal-safe Peramine alkaloid), but it did not produce the undesirable Ergovaline and Lolitrem B alkaloids. As a result, it increased pasture growth significantly without the adverse animal health issues of wild endophytes or Endosafe. AR1 was seen as the break-through development and is now the dominant novel endophyte used in ryegrass seed throughout New Zealand.

101. PGW Seeds has a relationship with AgResearch in relation to the development of the AR37 endophyte.

102. DLF has an endophyte programme in Denmark, and has commercialised endophytes in both Australia and New Zealand. DLF's ryegrass endophytes are Happe and Edge. DLF has also commercialised the tall fescue endophyte "Protek".

103. In addition, in New Zealand:

103.1 Agriseeds (PGW Seed's next-largest competitor in ryegrasses) utilises the AR37 endophyte pursuant to a licence agreement with PGW. This licence will expire at the later of the last patent's expiry (2028), or when all know-how has entered the public domain;

103.2 Agriseeds has developed the NEA endophytes in collaboration with German Spangenburg in Melbourne. These endophytes compete directly with AR37. Agriseeds also licences the NEA endophytes to Cropmark;

103.3 While the AR1 endophyte is less popular than it was, it continues to be sold in a wide range of cultivars by five suppliers (Germinal, PGW Seeds, Agriseeds, DLF and Seed Force), and is available to licence by all market participants on reasonable commercial terms;

103.4 Cropmark has commercialised the U2 endophyte, which it developed (although it currently has limited market penetration).

104. The following table shows the suppliers of the various endophytes in New Zealand

Endophyte	Suppliers
U2	Cropmark
NEA	Agriseeds, Cropmark
AR1	PGW, Agriseeds, Germinal, DLF, Seed Force
AR37	PGW, Agriseeds
Happe, Edge & Protek	DLF
Standard (i.e. naturally occurring wild) endophyte	Unrestricted
Without endophyte	Unrestricted

105. The effectiveness of these endophytes in relation to the most common pests is set out in the following table, which has been derived from the Dairy NZ insect tolerance data[15] and updated to include DLF's endophytes.

	ARGENTINE STEM WEEVIL	PASTURE MEALY BUG	BLACK BEETLE	ROOT APHID	PORINA	GRASS GRUB	FIELD CRICKET
			Ryegrass				
AR1	++++	++++	+	-[2]	-	-	Not tested
NEA2	+++	(++++)	+++	++	Not tested	-	Not tested
AR37	++++[1]	++++	+++	++++	+++	+	Not tested
Standard endophyte	++++	++++	+++	++	+	-	Not tested
U2	++++	(++++)	++++[3]	++++	(++)	+++	+++
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
			Tall fescue				
MaxP®	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

15 https://www.dairynz.co.nz/feed/pasture-renewal/select-pasture-species/endophyte/

	ARGENTINE STEM WEEVIL	PASTURE MEALY BUG	BLACK BEETLE	ROOT APHID	PORINA	GRASS GRUB	FIELD CRICKET
Without endophyte	-	-	-	-	-	-	-

Notes on Tables

-	No control.
+	Low level control: Endophyte may provide a measureable effect, but is unlikely to give any practical control.
++	Moderate control: Endophyte may provide some practical protection, with a low to moderate reduction in insect population.
+++	Good control: Endophyte markedly reduces insect damage under low to moderate insect pressures. Damage may still occur when insect pressure is high.
++++	Very good control: Endophyte consistently reduces insect populations and keeps pasture damage to low levels, even under high insect pressure.
( )	Provisional result: Further results needed to support the rating. Testing is ongoing.

106. For ryegrass, there is a four-star rating system indicating the comparative insect tolerance properties conferred to the grass host. There is a large overlap between endophyte performance. Edge is broadly similar to AR1 and Happe is broadly similar to AR37. Edge and Happe are similar for most insect groups, but Edge is better against Argentine Stem Weevil and Happe is better versus porina.

107. DLF's endophyte work is done in Denmark. Breeder seeds from the New Zealand breeding programme are sent to Denmark for inoculation, with the endophyte then returned to New Zealand for propagation, trialling and eventual commercialisation.

108. There are three other endophytes (MaxP, AR601 and AR95), but each represents only small volumes.

Tall Fescue

109. Tall fescue (*Lolium arundinaceum* or *Festuca arundinacea*) is a high-quality alternative to traditional perennial ryegrass. It is capable of providing summer or winter production, and can have the advantage of being more persistent in warm months. The choice of tall fescue is typically based on climatic conditions and the feed requirements of the farm. For example, it is well suited to the warmer conditions in Northland as its longer root structure means it is better able to withstand drought.

110. In particular, tall fescue is an alternative to ryegrasses in parts of the country which suffer from dry conditions.[16] As stated by Dairy NZ:[17]

> Tall fescue is an alternative to perennial ryegrass, particularly where summer growth is limited by high soil temperatures, or where perennial ryegrass persistence is an issue.

111. As noted on Dairy NZ's website:

- Tall fescue has greater summer growth than perennial ryegrass, with at least similar nutritive value.
- Grazing of tall fescue needs to be more strictly managed than perennial ryegrass to achieve its potential nutritive value.
- It is better adapted to hot and dry conditions than perennial ryegrass due to its deeper root system and higher temperature ceiling. This gives it a potential role in low rainfall regions.
- It can grow in less-fertile soils, is tolerant to a wider range of pH and waterlogging conditions, and can achieve higher persistency than perennial ryegrass.

112. Ryegrass is a successful grass when there is good summer rainfall, or unlimited irrigation, but it is not always the best pasture base in other climates. A strong endophyte will improve the performance in these climates, where insect pressure often combines with drought to ruin pastures. Alternatively farmers can already increase the heat tolerance and summer production of their pastures by using tall fescue. Tall fescue is just as easy to manage as ryegrass with similar or better animal performance, and with increased production.

113. As noted in the promotional material for DLF's Tower Tall Fescue seeds:[18]

> The late heading date and palatability of Tower makes it an ideal alternative where perennial ryegrass struggles to grow or persist due to dry weather, grass grub, or porina.
>
> Tower has very good total growth compared with standards, … and is particularly productive from spring to autumn.
>
> Tower is now available with Protek - a novel endophyte that is safe for animals, increases pasture production (+15%) and provides tolerance to black beetle.

114. There is no limitation on suppliers' ability to supply both ryegrass and tall fescue types of seeds. PGW Seeds, DLF and Seed Force supply both, but not Cropmark and Agriseeds. **[**

]. Similarly, on the demand side, both ryegrass and tall fescue are perennial pastures, and so can each be used to achieve the same goal.

115. It is worth noting that the total volumes supplied of tall fescue are much smaller than those supplied for ryegrass. As noted above, the total volumes of ryegrass supplied in New Zealand for 2017 were **[ ]**. This compares with only **[ ]** supplied in total for tall fescue – i.e. tall fescue volumes were only **[ ]** of ryegrass volumes. Further information on this is contained in **Appendix 7**.

16 https://www.dlfseeds.co.nz/management-info/tall-fescue-info/a-grass-for-dry-climates.
17 Refer to https://www.dairynz.co.nz/feed/pasture-renewal/select-pasture-species/tall-fescue/.
18 https://www.dlfseeds.co.nz/management-info.

Clover

116. Clovers are different both in appearance and function than ryegrass. Clover, particularly white clover, is used extensively in New Zealand to affix nitrogen to the soil. Clover is also high in protein and a relatively easy way to provide grazing animals with such nutrients.

117. Whilst some technological advancements are being made in white clover through the breeding and development of better cultivars, technological development in this area is less pronounced than in ryegrass. The main advancements in white clover are generally around better seed persistence, increased stolon density and leaf size.

Cocksfoot

118. Cocksfoot seed is also used for forage. Cocksfoot has the ability to persist and be productive in dry, moderately fertile, light and free-draining soils. As an endophyte-free pasture, it can be a good summer pasture for the grazing of sheep, cattle and dry stock. It is an option to be considered in areas where ryegrass persistence is unachievable. Cocksfoot exhibits better drought tolerance and improved tolerance to acidic soils, compared with perennial ryegrass and tall fescue.

119. Cocksfoot has traditionally been used predominantly in hill country used for sheep and beef grazing. As noted in DLF's promotional material for cocksfoot:[19]

> Athos [cocksfoot] is an ideal grass to use in environments where ryegrass and tall fescue struggle to survive due to dry or infertile soils. It is also more tolerant of grass grub and porina than ryegrass.

19 https://www.dlfseeds.co.nz/cultivars-species/test-species-gdm/other-grasses/athos-cocksfoot-prod1233

120. It is not as easy to re-sow hilly terrain, so sheep and beef farmers often have more persistent varieties such as cocksfoot. Traditionally-prevalent lower profitability levels of sheep and beef farming has also been a factor in minimising re-grassing costs, both in the application of seed (i.e. drilling) and the actual seed costs.

121. However, a trend towards the use of more productive species (i.e. ryegrass) has been evident in recent years, particularly driven by good prices for beef. Seed companies are breeding ryegrass with extra persistence for sheep and beef farms (eg Rohan spreading perennial ryegrass from Agriseeds NZ https://www.agriseeds.co.nz/sheep-beef-deer/cultivars/grass/perennial-ryegrass). Poor availability of cocksfoot on the global market and accompanying higher prices have also seen a trend towards cheaper ryegrass cultivars.

122. Again, the total volumes supplied of cocksfoot are much smaller than those supplied for ryegrass. As noted above, the total volumes of ryegrass supplied in New Zealand for 2017 were **[ ]**. This compares with only **[ ]** supplied in total for cocksfoot. Further information on this is contained in **Appendix 7**.

123. It is also worth noting that there are significant volumes of non-proprietary cocksfoot supplied. Analysis by BERL is that in 2015 uncertified "production" cocksfoot accounted for around 26% of all cocksfoot seed produced in New Zealand.[20] (Certification is not compulsory but can be undertaken by AsureQuality, which is the leading provider of testing, inspection, certification and verification services to the Australasian seed and grain industry.[21])

Brassicas

124. Several major (non-grass) crops are used by farmers to feed cattle during winter. These may be grazed in-situ during winter (beet, brassica) or else harvested during autumn, ensilaged and fed out during winter (maize).

125. In respect of brassica seed, four main varieties are grown in New Zealand as supplementary animal feed options:[22]

125.1 Brassica Campestris rapifera (turnip). Turnips are a brassica root crop commonly used as a fast-maturing single-graze crop to bridge a summer feed gap and maintain milk production;

20 August 2016 report by BERL "Economic Impact Assessment of Arable Production in 2015", at p17.
21 https://www.asurequality.com/our-industries/seeds/
22 Refer to "https://www.dairynz.co.nz/feed/crops".

125.2 Brassica Napus napobrassica (swede). Swedes are normally used as a winter feed crop. As they have a low tolerance to drought, swedes perform best in cooler, moist environments. However they do not like waterlogging;

125.3 Brassica Napus oleifera (rape). Rape seeds produce a summer/autumn/winter feed suitable for all stock classes; and

125.4 Brassica Oleracea acephala (kale). Kale is normally used as a winter feed crop. With a deep root system; it has good drought tolerance.

126. The different varieties have different physical characteristics and the best crop to grow in a particular situation may well vary with geographic location, soil conditions, climatic conditions and other factors.

127. Brassica crops are often grown due to their ability to produce relatively high levels of dry matter production in relatively short time periods. Brassica seeds are particularly utilised in the cooler regions of New Zealand (such as Southland) where all-grass based wintering systems are more difficult.

128. Around 300,000 ha of forage brassica is grown each year in New Zealand (Lincoln University), with kale and swedes the main winter crop species used. Before fodder beet was introduced, an estimated 600 MT/year of kale seed was sold, equating to 150,000 ha grown, and about 30,000 ha of swedes. The balance of forage brassica area (120,000 ha) was a combination of other brassica species (e.g. rape, turnips) grown for autumn and winter feeding, and these are also alternatives to fodder beet.

Fodder Beet

129. Fodder beet (*Beta vulgaris*) is a fodder crop which provides bulk late autumn and winter feed for all stock, and is mostly used by farmers in the South Island. It provides a consistent, reliable output, and is regarded as potentially the highest yielding forage crop. Fodder beet has been successfully grown in beef, dairy and sheep finishing systems in New Zealand, Tasmania and Western Victoria.

130. Although fodder beet is not a brassica, it is an alternative to traditional brassica winter crops such as the similar-looking root crops of swedes and turnips, as well as stemmed/leafy brassicas such as kale. As noted by Dairy NZ:[23]

> **Why fodder beet?**
>
> - Flexibility, i.e. grazed or lifted and fodder beet has a long shelf life - in ground or harvested
> - Consistent and high quality feed, and a high yield potential when grown well
> - Alternative crop rotations and an alternative to brassicas, including winter swedes and kale

131. Most major forage seed suppliers (PGW Seeds, Seed Force, Cropmark, Agriseeds, Wholesale Seeds) supply both brassicas and fodder beet, except for DLF which does not supply brassicas.

132. On the demand side, brassicas and fodder beet are substitutable as winter feeds, and can also each be used on the "shoulders" of the season (i.e. either side of the peak growing period). Disease problems (e.g. dry rot or club root) often arise where brassicas are sown for a few years in a row, so farmers will often switch to fodder beet as a "break crop" in managing those issues. Historically, an increase in fodder beet area over time has correlated with a drop in brassicas.

133. Brassicas are much more common than fodder beet. For example Pasture Renewal Workshop Briefing Notes from 2016 estimated that **[ ]** of brassicas are sown annually in New Zealand, compared to **[ ]** of fodder beet. Another important winter feed crop is maize which is harvested in late summer and fed out in winter as silage. Latest estimates put the size of the maize crop at **[ ]**.

134. Fodder beet acreage was down significantly in 2017 from its peak in 2015. The rapid increase in acreage occurred in the 2013-2015 sowing years, and acreages have plateaued since then. There is no reliable independent data on consumption

23 https://www.dairynz.co.nz/feed/crops/fodder-beet/.

- however industry consensus suggests around 50-55,000ha sown, which broadly equates to 45-50,000 units of beet seed. 'Units' correspond to packs of 100,000 seeds, each sufficient for sowing approx. 1.10ha, and the typical seed weight is 2.5kg/unit. This has grown from less than 20,000 ha in 2012.

135. Some of the current estimate of around 50,000 ha of fodder beet represents a replacement of kale or swedes (or other types of brassicas), but some also represents additional winter crop areas that have been made available due to the extra uses of fodder beet.

136. Farmers who grow winter crops make choices between kale, swedes, fodder beet and other species (e.g. oats, triticale, rape, turnips). Farmers who use fodder beet are attracted to higher yield potential and utilisation (see the table below), which allows them to winter animals on less land area.

COMPARISON	KALE	SWEDES	FODDER BEET
Yield (t DM/ha)	10	13	22
Utilisation (% consumed)	80	90	95

Non Proprietary Seeds

137. Proprietary seeds are the product of a seed producer's research and development programme, and no one else has the right to multiply these particular types of seeds.

138. However, once intellectual property protection lapses, they become non-proprietary seeds and anyone is able to multiply them. Non-proprietary seeds may also include second grade seeds.

139. In New Zealand, non-proprietary seed sales make up a reasonable percentage of the overall sales of seeds. Information that DLF has obtained from a Pasture Renewal Workshop in 2016 suggests this could be over one third of total forage seed sales, comprised of:

Non-Proprietary Grasses

	Total	Proprietary	Non-proprietary	Non-proprietary %
Perennial Ryegrass	[ ]	[ ]	[ ]	[ ]
Italian Ryegrass	[ ]	[ ]	[ ]	[ ]
Annual Ryegrass	[ ]	[ ]	[ ]	[ ]
Hybrid Ryegrass	[ ]	[ ]		[ ]
Tall Fescue	[ ]	[ ]	[ ]	[ ]
Cocksfoot	[ ]	[ ]		[ ]
White clover	[ ]	[ ]	[ ]	[ ]

[ ]	[ ]	[ ]	[ ]

Source: Pasture Renewal Workshop Briefing Notes, July 2016

140. A number of suppliers specialise in non-proprietary seeds (e.g. Cridge Seeds, Wesco, and Frame Grain & Seeds). Other suppliers have non-proprietary seeds as an important part of their portfolio (e.g. Specialty Seeds, Wholesale Seeds Ltd, Agriplus and Cates Grain & Seed).

Turf Seeds

141. Turf seeds comprise perennial ryegrass or fescue, or a mixture of the two varieties. Therefore, ryegrass and fescue turf may be interchangeable in the market and are often sold as a mix. Seed produced for turf, however, has been developed for its own characteristics (such as colour, disease resistance) and is not substitutable with seed produced for animals.

142. Turf seeds can be supplied to commercial and household customers due to their use in growing grass for such purposes ranging from golf courses and sporting fields to lawns for commercial and private use. The characteristics of the variety of turf seeds have been developed in accordance with its intended use (for example, robustness and shade tolerance).

143. The base turf seed product is the same, except that professional ("pro") turf used in sports stadia etc requires a higher quality specification (specifically, it cannot contain any "contaminants" such as weeds) than that for domestic lawns (the "box trade"). The seed production process controls the quality.

144. There is no reason a supplier of the box trade market could not also supply pro turf. The supplier would need to take off the top end of its product and allocate that to pro turf customers. Rather than requiring new or specialised equipment, this requires more intensive use of existing equipment (for example, running seeds through a cleaning machine twice instead of once). The only extra requirement to target that customer segment would be building relationships with the contractors or distributors who service end customers, and being in a position to offer them the "right product at the right time".

145. Civil/amenity turf suppliers are best placed to make this transition because they are accustomed to supplying higher-volume orders. Because they are already servicing large orders for civil/amenity seeds, they will have greater capacity to manage the risk of seeds not meeting the quality specifications for pro turf. There is also a greater number of these suppliers, partly because it is a higher-margin business than box trade sales.

146. The same transition is also possible for participants who supply to big box retailers for domestic "box trade" customers, because as noted above the product is the same, except that it has not been separated based on quality. There are fewer players in box trade sales, which do not require similar investments in relationships or customer service. As such, the transition to pro turf is likely to be slightly greater. As above, it is also lower-margin, meaning participants tend to have a lower risk appetite.

147. DLF mainly supplies proprietary turf seed but often it does not know the final end-use. DLF's customers are typically active in many different sectors and will often mix proprietary turf seed with non-proprietary commons seed in order to meet particular price points. As an example, consumers purchasing turf seed for their lawn can buy premium quality products that contain only proprietary turf seed -

these generally being elite cultivars that have scored well in the USA National Turfgrass Evaluation Program or in comparable New Zealand and Australian studies. However consumers can also buy much cheaper lawn seed packs, and most of these likely will largely be comprised of forage-type grasses.

Seed Production

148. The seed production process in New Zealand typically occurs in the following way in any given year:

148.1 November/December: Seed producers (none of whom have their own growing operations) will approach contract growers to ascertain what areas they have available that are suitable for grass seed crops, and the certification history of those areas. Contracts are entered into between the seed producers and the growers;

148.2 February/March: Seeds go into the ground into the paddocks, and livestock will graze in the paddocks over the coming months;

148.3 October: Livestock are removed from the paddocks, which are shut up, and the plants are allowed to go to seed;

148.4 January/February: Instead of being cut for hay, the paddocks are cut for seed. The seeds are collected and taken to silos on the farm for further drying (if needed), before being sent for cleaning using sieves.

149. All proprietary seed is grown under contract, including new varieties. Some production contracts are for "basic seed" which is the step immediately prior to commercial production – in effect this is small-scale production with extra care and attention required to maximize yield and quality.

150. Where a new variety of proprietary seed is being developed, it takes on average approximately 10 to 12 years from the first stage of research and development to when it is subsequently available commercially in the marketplace (although this could be shorter, say 7 years, for an annual ryegrass where less growing time is required).

151. As far as DLF is aware, all germplasm used in the production of seeds in New Zealand is imported.

Seed Products Provided by the Parties

DLF

152. DLF supplies the following relevant types of seeds:[24]

Seed	Varieties	
Ryegrass	24 Seven, Ansa, Bronte, Evans, Jackpot, Jeta, Jivet, Mona and Perun	

24 https://www.dlfseeds.co.nz/cultivars-species.

Tall Fescue	Tower and Tower LE	
Clover	Ceibo (Red), and Klondike and Riesling (White)	
Cocksfoot	Athos	
Fodder Beet	Bangor, Bergman, Enermax, Feldherr, Kyros and Troya	
Turf	The relevant turf seeds supplied by DLF are described in its Turf Variety Product Guide[25]	

153. In terms of where DLF draws its revenue from the different types of seeds (and the estimated percentage of imports), this is as follows:

Product	% proprietary sales revenue	% market made up by imports
Perennial Ryegrass	[ ]	[ ]
Forage brassicas	[ ]	[ ]
Hybrid ryegrass	[ ]	[ ]
Annual ryegrass	[ ]	[ ]
Italian ryegrass	[ ]	[ ]
White clover	[ ]	[ ]
Red clover	[ ]	[ ]
Cocksfoot	[ ]	[ ]
Tall fescue	[ ]	[ ]
Fodder beet	[ ]	[ ]
Pro turf	[ ]	[ ]

25 https://www.dlfseeds.co.nz/Files/Images/_Websites/dlfseeds.co.nz/PhotosNZ/Turf-Variety-Product-Guide-Edition-2-JUNE16-ƒEM.pdf

Product	% proprietary sales revenue	% market made up by imports
Domestic turf	[ ]	

PGW Seeds

154. PGW Seeds supplies the following relevant types of seeds:[26]

Seed	Varieties	
Ryegrass	Short Rotation Ryegrass – Delish and Maverick G2 Agricom – Ohau and Supreme	
	Italian Ryegrass – Feast II, Lush and Supercruise Agricom - Asset	
	Annual Ryegrass – Winter Star II Agricom - Progrow	
	Perennial Ryegrass – Base, Excess, Rely, Expo, Pacific and Platform Agricom – One50, Prospect, Samson, Request, Halo and Kingston	
Tall Fescue	Quantum II Tall Fescue Agricom – Easton and Hummer	
Clover	Sub Clover – Bindoon Agricom - Coolamon	

26 https://www.pggwrightsonseeds.com/ and https://www.agricom.co.nz/Products.

	White Clover – Bounty, Hilltop, Kopu II, Legacy, Quartz, Tahora II and Taipan White Clover Agricom – Nomad, Tribute and Mainstay	
	Red Clover – Agricom – Sensation and Relish	
Cocksfoot	Tekapo Cocksfoot Agricom - Savvy	
Brassica	Raphno – Pallaton	
	Kale – Corsa, Gruner, Kestrel and Regal Agricom – SovGold and Sovereign	
	Swede – Aparima Gold, Clutha Gold and Major Plus Agricom – Domain and Triumph	
	Rape – Goliath and Titan Agricom – Mainstar and Spitfire	
	Turnip – Barkant, Green Globe and Pasja II Agricom – Hunter, Rival and New York	

Fodder Beet	Agricom – Jamon, Cerise and Monro	
Turf	The relevant turf seeds supplied by PGW Seeds are described on its turf website.[27]	

155. In terms of where PGW Seeds draws its revenue from the different types of seeds (and the estimated percentage of imports), PGW has advised:

Product	% proprietary sales revenue	% market made up by imports
Perennial ryegrass	[ ]	[ ]
Forage brassicas	[ ]	[ ]
Hybrid ryegrass	[ ]	[ ]
Annual ryegrass	[ ]	[ ]
Italian ryegrass	[ ]	[ ]
White clover	[ ]	[ ]
Red clover	[ ]	[ ]
Cocksfoot	[ ]	[ ]
Tall fescue	[ ]	[ ]
Fodder beet	[ ]	[ ]
Pro turf	[ ]	[ ]
Domestic turf	[ ]	[ ]

Pipeline Products

DLF

156. **[**

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156.1 **[**

];

156.2 **[**

];

27 https://www.pggwrightsonturf.co.nz/

156.3 [

].

157. [

].

PGW Seeds

158. [

]

159. **[**

].

Other Industry Participants

160. In addition to the Parties, there are multiple other suppliers of seed products, both around the world and in New Zealand.

161. **Appendix 5** to this application sets out key New Zealand competitors.

162. Some of the largest forage seed competitors and recent entrants in New Zealand are described below:

162.1 Agriseeds Limited is owned by the Royal Barenbrug Group, a multinational headquartered in the Netherlands with 14 research locations. It states it is the largest privately owned seed company in the world. It operates in Australia through Heritage and Seedmark. Apart from Australia and New Zealand, it also operates a number of seed companies in Argentina, North America, China and Europe. Agriseeds has operated as a plant breeding and research company in New Zealand for over 30 years. It specialises in pasture, and claims to have access to technology not available in New Zealand. Previously, Agriseeds was the dominant seeds firm in New Zealand, but has seen its market share diluted over the past decade due to high levels of competition in the market. DLF is not aware of this lost market share being picked up by any one participant, but rather understands that it has been split among a number of different participants. See www.agriseeds.co.nz for more information on Agriseeds;

162.2 Cropmark Seeds Limited is New Zealand-based and has been in operation since around 2000. Its shareholders include Ravensdown Limited which has a 25.62% shareholding. It is involved in all aspects of seed research, multiplication, and distribution throughout New Zealand and internationally (including Australia). Cropmark is based in Christchurch. See www.cropmark.co.nz for more information on Cropmark;

162.3 Seed Force Limited is a New Zealand-based company established in 2006 that also supplies to Australia. It is affiliated with RAGT, a large European supplier. Seed Force was the first competitor to sell fodder beet on a commercial scale in New Zealand, and currently supplies the market-leading cultivar for fodder beet (Brigadier). Further information about Seed Force can be found at https://www.seedforce.co.nz;

162.4 Germinal - Germinal Holdings New Zealand Limited (Germinal Seeds) was established in the United Kingdom in 1983 and specialises in cereal and fodder seeds. It began its New Zealand operations in around 2002, and many of its cultivars originate from Wales. It is a large international company and has development partnerships in more than 15 other countries. Germinal Seeds has a 50% ownership in Canterbury based Cates Grain & Seed Limited (formerly Peter Cates Limited). Further information about Germinal can be found on its website https://www.germinal.com/nz/about/overview;

162.5 Specialty Seeds is an independent seed supplier based in Christchurch. Further information about it can be found at http://www.specseed.co.nz/;

162.6 Other smaller suppliers are Wholesale Seeds (http://www.wholesaleseeds.co.nz/), and Carrfields Grain & Seed (http://www.carrfields.co.nz/grain-seed/) which includes Canterbury Seed and Winseed.

163. As noted above, a number of suppliers specialise in non-proprietary seeds. These include:

163.1 Cridge Seeds – refer to https://www.cridgeseeds.co.nz/; and

163.2 Wesco Seeds – refer to https://wesco.co.nz/.

164. As for competing suppliers of turf seeds, these include:

164.1 Turf Grass Specialists: It is linked with Barenbrug, referred to above. Refer to https://www.turfgrass.co.nz/;

164.2 Prebble Seeds: Prebble Seeds has been operating for over 50 years while the Turf Division of Prebble Seeds has been operating for over 25 years. Prebble Seeds' website states that its "*ICL Fertilisers and grass seeds have a huge reputation and deservedly so*", while "*The Seed Research Grass Seed Range offered has been instrumental in Prebble Seeds being chosen as sole supplier to most of the new developments in the Golf and Sports Market*". Its website states that they are "*heavily involved in the supply of the above products to nearly every Golf Course, Bowling Club, Council School and Landscaper in New Zealand on a daily basis and for individual projects. We have also been Major/Sole Suppliers of products to new construction projects such as Millbrook Country Club, Paratiho Lodge, Clearwater Resort, Omaha Beach Golf, Real Golf, Formosa Golf, Cape Kidnappers Golf, Monterey Golf and Jacks Point Golf*." For further information on Prebble Seeds, refer to "www.turfworld.co.nz/about".

164.3 Evans Turf / Village Green Seed: Evans Turf's website states that they were established in 1996, bringing together a team with over 25 years of experience in the sports turf industry. Further information can be found at "http://evansturf.co.nz/aboutus.php". Village Green Seeds' website states they were established in 2003 as an independent turf seed company, and their principal Tony Evans has 30 years of experience in selling turf seed in Australasia.[28] They have a combination of New Zealand and US bred varieties in their range.

165. In terms of other relevant industry participants, these include:

165.1 AgResearch Limited (**AgResearch** – https://www.agresearch.co.nz) - is a Crown Research Institute and has the objectives of underpinning the sustainability and profitability of New Zealand's pastoral sector, establishing a range of biotechnologies and systems and exporting those where appropriate. Research and development in the area of grass seed cultivars is done by Grasslanz Limited (Grasslanz) in Palmerston North, which is owned by AgResearch – refer to http://www.grasslanz.com/;

165.2 Plant & Food Research (https://www.plantandfood.co.nz) was formed in late 2008 following the merger of former Crown Research Institutes HortResearch and Crop & Food Research. It undertakes research in the areas of sustainable land and water use, high performance plants, personalised food, high value marine products, biomolecules and biomaterials. In respect of plant development it undertakes research into

28 http://www.villagegreenseed.com/about-us/

the development of arable and fodder crop cultivars and issues licences to industry participants to market these;

165.3 New Zealand Grain and Seed Trade Association Incorporated (**NZGSTA** – https://www.nzgsta.co.nz/) - is an industry body that exists to represent its members, totalling over 80 companies, all of which are involved in the New Zealand grain and seed industries;

165.4 The New Zealand Plant Breeding and Research Association (**NZPBRA** – https://www.nzpbra.org/) – represents plant breeders, intellectual property owners and managers of proprietary agricultural seed. The NZPBRA's members are seed companies substantially involved in the development and marketing of plant intellectual property on the strength of research proven standards of performance. NZPBRA survey data on total volumes of proprietary cultivars supplied within New Zealand for the 2009-2017 years is included in **Appendix 7**.

Recent Merger Activity

166. Pyne Gould Guinness Limited merged with Wrightson Limited in 2005. Clearance was obtained from the Commission for that merger in Decision 556 of 31 August 2005.

Part H – Competition Assessment for Forage Seeds Markets

168. This section deals with:

168.1 the relevant market shares for each of the Forage Seeds Markets, namely:

168.1.1 the Ryegrass/Tall Fescue Seed Market;

168.1.2 the Clover Seed Market;

168.1.3 the Brassica/Fodder Beet Seed Market; and

168.1.4 the Cocksfoot Seed Market;

168.2 the constraints on the merged entity post-acquisition from existing competition in those markets;

168.3 the constraints on the merged entity post-acquisition from potential competition; and

168.4 countervailing power from major customers.

Market Shares

169. The Commission noted in Decision 556 that the calculation of market share figures relating to the domestic presence of a particular industry participant was difficult to distil.[29] This has been DLF's (and PGW Seeds') experience in the present case.

170. The market shares below (and in the following sections for the other seed markets) represent the Parties' best assessment of market shares by volume of proprietary seeds sold. The total market size figures are based on the NZPBRA Annual Proprietary Sales Survey, with the exception of red clover, brassicas, fodder beet and turf (for which NZPBRA does not publish figures) which are based on management best estimates. The NZPBRA data is set out in **Appendix 7**. PGW Seeds' and DLF's sales figures in the tables below are actual figures, and other competitors' figures are management estimates.

171. The market shares do not take into account sales of non-proprietary seeds since that information is not readily available. However we have provided information about the volume of non-proprietary seeds sold by each of DLF and PGW Seeds in the relevant markets where this is available.

Ryegrass/Tall Fescue Seed Market

172. The estimated market shares for the Ryegrass/Tall Fescue Seed Market are set out in the following table:

29 At [392].

Company	2017		2016		2015		
	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%	Endophytes
PGW	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Yes, AR1, AR37
DLF	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Yes, Happe, Edge, Protek
Agriseeds	[ ][30]	[ ]	[ ]	[ ]	[ ]	[ ]	Yes, NEA, AR1, AR37
Cropmark	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Yes, U2, NEA
Seed Force	[ ][31]	[ ]	[ ]	[ ]	[ ]	[ ]	Yes, AR1
Germinal	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	Yes, AR1
Specialty Seeds	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	
Carrfields	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	
TOTAL	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	

173. The **[ ]** MT of ryegrass/tall fescue seeds supplied by PGW Seeds in 2017 is comprised of **[ ]** MT perennial ryegrass, **[ ]** MT of hybrid ryegrass, **[ ]** MT of Italian ryegrass, **[ ]** MT of annual ryegrass, and **[ ]** MT of tall fescue.

174. The **[ ]** MT of ryegrass/tall fescue seeds supplied by DLF in 2017 is comprised of **[ ]** MT perennial ryegrass, **[ ]** MT of hybrid ryegrass, **[ ]** MT of Italian ryegrass, **[ ]** MT of annual ryegrass, and **[ ]** MT of tall fescue.

175. As set out below in **Appendix 7**, based on NZPBRA data the total volume of proprietary tall fescue supplied in New Zealand for 2017 was only around **[ ]** MT. So, if tall fescue is split out from the ryegrass figures above, then that would indicate that PGW Seeds would have around **[ ]** share of supply of proprietary tall fescue (based on its volume supplied of **[ ]** MT of tall fescue). DLF would be substantially smaller at around **[ ]** share of supply of proprietary tall fescue (based on its volume supplied of only **[ ]** MT of tall fescue). The Parties understand that Seed Force would be similar in size to DLF for supply of tall fescue.

176. As noted above, these market share figures (both for ryegrass/tall fescue, and for tall fescue separately) do not include non-proprietary sales volumes. DLF's volume of non-proprietary ryegrass and tall fescue seeds for 2017 was **[ ]** MT (comprised of **[ ]** MT perennial ryegrass, **[ ]** MT of hybrid ryegrass, **[ ]** MT of Italian ryegrass, **[ ]** MT of annual ryegrass, and **[ ]** MT of tall fescue). PGW Seeds' volume of non-proprietary ryegrass and tall fescue seeds for 2017 was **[ ]** MT (comprised of **[ ]** MT perennial ryegrass, **[ ]** of hybrid ryegrass, **[ ]** MT of Italian ryegrass, **[ ]** MT of annual ryegrass, and **[ ]** of tall fescue). As noted above at para. 139,

30 The estimate is just for ryegrass, with no supply of tall fescue. Agriseeds does not market a tall fescue as far as DLF is aware.

31 Seed Force has a range of ryegrass including Stellar (perennial), Sultan (annual) and Indulgence (Italian), as well as tall fescue.

the volume of non-proprietary sales of ryegrass and tall fescue ranged between **[ ]** for the different types.[32]

Clover Seed Market

177. The estimated market shares for the Clover Seed Market (both white clover seeds and red clover seeds) are set out in the following table:

Company	2017		2016		2015	
	Volume (MT)	%	Volume (MT)	%	Volume (MT)	%
PGW	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
DLF	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Agriseeds	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Cropmark	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Seed Force	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Germinal	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
TOTAL	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

178. Out of the **[ ]** MT total clover seed figure for PGW in 2017 above, PGW supplied **[ ]** MT of White Clover Seed and **[ ]** MT of Red Clover Seed.

179. For DLF's part, out of the **[ ]** MT total clover seed figure in 2017 above, DLF supplied **[ ]** MT of White Clover Seed and **[ ]** MT of Red Clover Seed.

180. As noted above, these market share figures do not include non-proprietary sales volumes of Clover Seeds. DLF's volume of non-proprietary Clover Seeds for 2017 was **[ ]** MT (**[ ]**). PGW Seeds' volume of non-proprietary Clover Seeds for 2017 was **[ ]** MT.

Brassica/Fodder Beet Seed Market

181. DLF's estimate of market shares based on the 2016 NZ market size estimation for a combined brassica/fodder beet seed market is set out below. DLF does not have figures for 2017:

Fodder Beet and Brassicas	kg	% market share
Seed Force	[ ]	[ ]
PGW Seeds (Agricom)	[ ]	[ ]
DLF	[ ]	[ ]

32 This is supported by the August 2016 BERL report "Economic Impact Assessment of Arable Production in 2015", at p17 which indicates that for 2015 uncertified "production" ryegrasses made up around 54% of total ryegrass seed production, and 45% of fescue production.

Cropmark	[ ]	[ ]
Agriseeds	[ ]	[ ]
Germinal	[ ]	[ ]
Others (local production)	[ ]	[ ]
TOTAL	[ ]	**100**

182. PGW Seeds' estimates of market shares for a combined brassica/fodder beet seed market are **[ ]**. For 2017, PGW Seeds' estimates (using DLF's actual volumes) are:

Fodder Beet and Brassicas	**Hectares**[33]	**% market share**
Seed Force	[ ]	[ ]
PGW Seeds	[ ]	[ ]
DLF	[ ]	[ ]
Cropmark	[ ]	[ ]
Agriseeds	[ ]	[ ]
Wholesale Seeds	[ ]	[ ]
Specialty Seeds	[ ]	[ ]
Upbeet Seed Co	[ ]	[ ]
TOTAL	[ ]	[ ]

183. Even if the market were narrower and just included fodder beet and not brassicas as well, then the largest supplier of fodder beet seeds would be Seed Force, with PGW Seeds the number two supplier. DLF and Agriseeds would be the number three and four suppliers by volume supplied, but both would be substantially smaller than Seed Force and PGW Seeds. Cropmark also provides reasonable volumes of fodder beet seeds. This is illustrated in the following estimate of fodder beet market shares provided by PGW Seeds for 2017 (using DLF's actual volumes):

Fodder Beet	**Boxes**[34]	**% market share**
Seed Force	[ ]	[ ]
PGW Seeds	[ ]	[ ]

33 PGW Seeds considers hectares is a better way to aggregate fodder beet and brassica market shares than volume weight. 1 "box" (2.4kg) is approximately 1ha-worth of fodder beet. The sowing rate of brassicas depends on the species, but an average has been taken of 3kg/ha (the range is between approximately 0.5/ha and approximately 5kg/ha depending on the species). In order to compare PGW Seeds' figures in hectares with DLF's estimates in kilograms, the ratio is 1:3.

34 As noted above, one box of fodder beet broadly equates to 1ha-worth of fodder beet.

DLF	[ ]	[ ]
Cropmark	[ ]	[ ]
Agriseeds	[ ]	[ ]
Wholesale Seeds	[ ]	[ ]
Specialty Seeds	[ ]	[ ]
Upbeet Seed Co	[ ]	[ ]
TOTAL	[ ]	[ ]

184. From the figures above, it is evident that the total volumes of fodder beet seeds supplied are substantially smaller than those supplied for brassicas – the latter making up the bulk of a combined brassica / fodder beet seed market.

185. **[**

]. Two non-proprietary varieties of fodder beet have been available for sale in New Zealand, including "Upbeet". Anecdotally these may involve around 5% of fodder beet seed sales.

Cocksfoot Seed Market

186. The Parties' estimated market shares for the Cocksfoot Seed Market are set out in the following table:

Company	**2017**		**2016**		**2015**	
	Volume (MT)	**%**	**Volume (MT)**	**%**	**Volume (MT)**	**%**
PGW	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
DLF	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Agriseeds	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Seed Force	[ ]	[ ]	[ ]	[ ]		
Cropmark	[ ]	[ ]	[ ]	[ ]		
TOTAL	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

187. There are likely to be significant volumes of non-proprietary cocksfoot supplied in New Zealand. Analysis by BERL is that in 2015 uncertified "production" cocksfoot accounted for around 26% of all cocksfoot seed produced in New Zealand.[35] BERL assessed the relevant tonnages to be 146MT of uncertified "production" cocksfoot in 2015, which is **[ ]** for supply of proprietary cocksfoot in 2015 set out above.

188. **[ ]**. As a result, its market share of **[ ]** will overstate DLF's actual position once non-proprietary

35 August 2016 report by BERL "Economic Impact Assessment of Arable Production in 2015", at p17.

supply is also taken into account. **[ ]**.

Constraints from Existing Competition

189. The Parties consider that there will be strong constraints on them post-acquisition from existing competition. The reasons for this are set out below.

Minimal Aggregation

190. As is evident in the market shares above, DLF generally has a small role in the supply of forage seed products in New Zealand. As a result, the proposed acquisition leads to limited aggregation beyond PGW Seeds' existing strong market position. In particular, based on the 2017 market share figures:

190.1 Ryegrass/Tall Fescue – the combined entity would have around **[ ]** market share for proprietary seeds, but DLF's market share is only **[ ]** so the level of aggregation is small. In addition, there would continue to be significant competition provided by Agriseeds with **[ ]** market share, and smaller suppliers like Cropmark and Seed Force that are similar in size to DLF. As noted above, the volumes of tall fescue supplied are small compared with the volumes of ryegrass, and the shares above do not include non-proprietary seeds;

190.2 Clover – the combined entity would have around **[ ]** market share for proprietary seeds, but DLF's market share is only **[ ]** so the level of aggregation is minimal. There would continue to be substantial competition provided by Agriseeds with around **[ ]** market share, and smaller suppliers that are similar in size to DLF like Seed Force;

190.3 Brassica/Fodder Beet - the combined entity would have around **[ ]** market share for proprietary seeds, but DLF's market share is only **[ ]** so the level of aggregation is again minimal. There would continue to be substantial competition provided by Seed Force with around **[ ]** market share, together with other players like Agriseeds and Cropmark both of whom supply larger volumes of brassicas / fodder beet seeds than DLF;

190.4 Even if the market were narrower and just included fodder beet and not brassicas as well, then as noted above the largest supplier of fodder beet seeds would be Seed Force, with PGW Seeds the number two supplier. DLF and Agriseeds would be the number three and four suppliers by volume supplied, but both would be substantially smaller than Seed Force and PGW Seeds. Cropmark also provides reasonable volumes of fodder beet seeds;

190.5 Cocksfoot - the combined entity would have around **[ ]** market share for proprietary seeds, but DLF's market share is only around **[ ]** so the level of aggregation is small. There would continue to be substantial competition provided by Agriseeds with around **[ ]** market share, and other suppliers like Seed Force and Cropmark that are similar in size to DLF.

190.6 It is also worth noting that the volumes of cocksfoot supplied are small compared with the other markets above – i.e. an estimated **[ ]** in total of cocksfoot supplied in 2017, compared with **[ ]** for ryegrass/tall

fescue and **[ ]** for clover. As noted above, DLF only supplied **[ ]** of cocksfoot in 2017, **[ ]** in 2016 and **[ ]** in 2015.

Strong Existing Competitors

191. The merged entity will continue to face strong competition from existing large competitors. These include:

191.1 Agriseeds - as noted above, Agriseeds is linked into the Royal Barenbrug Group, a fourth generation family business based in the Netherlands. As stated on Agriseeds' website, "*Barenbrug is the largest privately owned seed company in the world, with 14 research stations across all the main climatic zones*". Agriseeds itself has been part of New Zealand's pastoral landscape for over 30 years as a plant breeding and research company. They employ nearly 60 staff nationwide including plant breeders and agronomists, plus seed laboratory, microbiology and seed production specialists. They also work with expert research partners including DairyNZ, Lincoln University, AgResearch, Massey University, PG+ and DairyBio Australia.[36] The cultivars they supply include all types of ryegrass, cocksfoot, clover, brassica and fodder beet;

191.2 Seed Force - Seed Force describes itself as "*part of a world leading seed group and is recognised as a leader in New Zealand in bringing the best genetics to market along with technologies that optimise farm productivity and profitability*". It is linked with the RAGT (Rouergue Auvergne Gevaudan Tarnais) group, and as part of that has access to a world class breeding programme covering 24 species. It supplies ryegrass, tall fescue, cocksfoot, clover, brassica, fodder beet;

191.3 Cropmark - which supplies ryegrass, cocksfoot, clover, brassicas and fodder beet.[37] Its website states: "*Our plant breeding programme is one of the most extensive, highly innovative and professional breeding programmes being run anywhere in the world. The programme emphasis is on delivering inter-species crosses that capitalise on the best traits of each parent plant species. This enables us to create totally unique pasture varieties that will provide significant performance improvements over traditional alternatives*";[38] and

191.4 Germinal - in relation to ryegrass, and clover.[39] Its website notes: "*One of our key effective relationships is with the Institute of Biological Environmental and Rural Science (IBERS), in Wales. This gives Germinal its business edge and differentiation. We are not just a supplier, but a researcher with vital knowledge in seed development. With a focus on developing new varieties for New Zealand, in New Zealand, we can ensure future varieties will continue to offer the superior benefits to New Zealand farmers*".[40]

192. While Agriseeds and Cropmark do not currently supply tall fescue, PGW Seeds understands **[ ]**. Each company still has access to a wide range of fescue germplasm, meaning they could commence supply within 2-3

36 https://www.agriseeds.co.nz/about/barenbrug-agriseeds
37 https://www.cropmarkseeds.com/Forage-Products-from-Cropmark-Seeds
38 https://www.cropmarkseeds.com/
39 https://www.germinal.com/nz/products/overview
40 https://www.germinal.com/nz/about/history

months if the market proposition changed. For example, Barenbrug (Agriseeds' owner) is active in tall fescue in the United States and could consequently readily supply Agriseeds with product. A would-be new supplier of fescue could obtain supply within approximately 6 months: such a supplier would need to establish contact with an off-shore player, ensure the seed meets New Zealand quarantine requirements (which are well-understood overseas) and, finally, physically import the seed. The Argentine company Gentos is one possible supplier that could be approached for fescue germplasm, but several other suppliers can be found in the United States.

193. There is also competition from suppliers of non-proprietary seeds such as Cridge Seeds, Wesco, Frame Grain & Seeds and others.

Ability of Market Participants to Increase Supply

194. The Commission noted in Decision 556 that barriers to expansion in the supply of ryegrass seed were low.[41] It stated:

> Quantities of New Zealand produced seed can be fairly readily adjusted over a 12 to 14 month period allowing for the provision of seed to meet increased demand if forecast. In respect of imported seed, tested and proven in the New Zealand market, it is often the case that simply placing an order with the overseas supplier can provide access to large tonnages of seed within four weeks.

195. The Commission also found that the existing market participants had the ability to increase supply. It noted in relation to ryegrass that:[42]

> The Commission is of the view that there is a sufficient degree of existing competition within this market, considering that barriers to expansion are low, such that a substantial lessening of competition is unlikely to result in the factual scenario.

196. In relation to the Clover Seed Market, the Commission noted in Decision 556 that:[43]

> The Commission considers that barriers to expansion in the clover market are low and, similar to ryegrass, volumes of seed produced can be adjusted to meet demand easily over the short to medium term. In many cases volumes of seed can be imported to meet excess demand.

197. Similarly the Commission stated in Decision 556 that:[44]

> The Commission considers that barriers to expansion in the brassica market are low. Existing suppliers of brassica seed could relatively easily and quickly increase production of seed (through either domestic production, overseas multiplication or importation) such that large quantities of seed could be available, given demand for them.

198. This assessment that existing participants could expand supply easily remains the case today. Current suppliers are able to expand into supplying additional seed types. They have two options:

198.1 Planting and growing seeds in New Zealand. This would have a lead time of approximately 12-15 months, due to seasonality constraints. More than 95% of seed types are currently grown locally; or

41 At [394].
42 At [408].
43 At [415].
44 At [435].

198.2 Importing seeds from an international supplier from the USA, Europe, South America or Australia. This is expanded on below.

Ability to Import Seeds

199. Farmers and other wholesalers have the ability to import proprietary seed from overseas (under a licence arrangement) for multiplication and/or pastoral use. The progeny of the multiplication is sent to a nominated destination or distributed on the New Zealand market. Some seed companies test seeds prior to committing to multiplication (as some species do not adapt to the New Zealand environment). Testing usually takes between one and three years. Examples of companies that utilise local firms for multiplication and distribution include RAGT Semences, Enforce Limagrain (both large French multinational seed breeders and distributors) and Joorden. In particular, the existence of a variety of wholesalers with established distribution networks makes entry by large international breeders very easy.

200. There are a number of suppliers which are able to supply all of the relevant seed types. Some international suppliers have an exclusive relationship with a player in New Zealand (e.g. Seed Force has an exclusive relationship with its supplier RAGT), but there are a number of international suppliers that do not have an exclusive relationship with a local supplier (e.g. several French, Dutch and United States-based companies).

201. The maximum lead time from ordering the seed to it arriving is approximately 12 months. The maximum time applies when the international supplier has to grow the seed to fulfil the order. There are no additional regulatory hurdles for importing seeds to New Zealand.

202. If a company is importing a seed that has not previously been sold in New Zealand, it may wish to do some marketing, including carrying out trials in New Zealand, to improve credibility and market penetration, but this is not essential and all seed types have been sold without trials in the past. Trials take approximately three years for perennial ryegrass, and one year for annual ryegrass.

203. For a participant to increase the quantity of imports of a seed that is already sold in New Zealand, and that does not need to be grown to order, could take as little as 6 weeks.

204. Imports are already readily available. PGW Seeds estimates that imports already make up the following percentages of the relevant Forage Seed Markets:

204.1 Ryegrass/Tall Fescue: **[ ]** for ryegrasses but up to **[ ]** for tall fescue;

204.2 Clover: **[ ]** depending on the type;

204.3 Brassica/Fodder Beet: **[ ]** for forage brassicas but up to **[ ]** for fodder beet;

204.4 Cocksfoot: **[ ]**;

205. DLF's assessment of import volumes (as set out earlier) is **[ ]**.

206. By way of example, DLF imports all of its cocksfoot seed. Both PGW Seeds and DLF import all of their fodder beet already. The supply of Fodder Beet in New Zealand is very competitive with dozens of varieties marketed by five companies that compete against DLF and PGW Seeds (as set out below in the following list).

All the major known beet breeders (all from Europe) are represented, with the possible exception of Agri-Obtentions (France).

Breeder	Variety	NZ Seller
RAGT	Brigadier	Seed Force
Limagrain	Blaze	Seed Force
RAGT	Lifta	Seed Force
RAGT	Suga	Seed Force
Agri-Obtentions	Colosse	Seed Force
Malopolska	Solidar	Seed Force
??	Gitty	Seed Force
Momont	Lactimo	Cropmark/Ravensdown
Momont	Geronimo	Cropmark/Ravensdown
Momont	Summo	Cropmark/Ravensdown
Momont	Fortimo	Cropmark/Ravensdown
Momont	Rialto	Cropmark/Ravensdown
Limagrain	Blizzard	Agriseeds
Limagrain	Robbos	Agriseeds
Limagrain	Ribondo	Agriseeds
Desprez	Caribou	Agricom
Desprez	Jamon	Agricom
Desprez	Monro	Agricom
Desprez	Rivage	Agricom
Desprez	Cerise	Agricom
Desprez	Ribambelle	Agricom
Desprez	Splendide	Agricom
Desprez	Cagnotte	Agricom trial 2015
Desprez	Starmon	Agricom trial
Desprez	Merveille	Nil?

Desprez	Jauna	Nil?
Desprez	Corindon	Agricom
Desprez	Brunium	Agricom
Desprez	Rigour	Agricom
Desprez	Vermon	Agricom
Desprez	Viridis	Agricom
Agri-Obtentions	Minotaure	Nil?
Agri-Obtentions	Deesse	Nil?
Strube International	Rex	Germinal/Genetic Technologies
Strube International	Gillert	Germinal/Genetic Technologies
Strube International	Hadyn	Germinal/Genetic Technologies

207. Parallel imports of fodder beet have been seen outside of the established distribution channels. Local fodder beet seed production also occurs, generally involving older varieties that are now out of PVR protection. Two non-proprietary varieties of fodder beet have been available for sale in New Zealand, including "Upbeet". Anecdotally these may involve around 5% of fodder beet seed sales.

Constraints on the Merged Entity Post-Acquisition from Potential Competition

Low Barriers to Entry

208. There are very low barriers to entry for breeders and wholesalers of seeds in New Zealand. The Commission, when considering the market for wholesale distribution and retailing of grain and seeds in *Hodder & Tolley*, stated that:[45]

> There are no significant entry barriers for those planning to enter this market…Further, there are no impediments to prevent existing grain and seed merchants from expanding their market share, or for new firms to enter this market, or in relation to grain and non-proprietary seed varieties, for farmers to trade amongst themselves.

209. In relation to access to seed technology, the Commission stated:[46]

> …there are no significant entry barriers into this market. For example, technical expertise is widely available, both within New Zealand and overseas. While there is a requirement to obtain sufficient funding to finance the development of new strains of seeds, and several years are needed to develop a new seed variety, we do not consider that these requirements represent insurmountable barriers.

45 At [32] and [33].
46 At [45].

210. Similarly the Commission stated subsequently in Decision 556 that:[47]

> The Commission is of the view that barriers to entry into the brassica market are low subject to the ability to source an international supplier of brassica seed. Entry through the importation of seed, at least initially, would be significantly easier than the establishment of a breeding programme which may take a number of years. …
>
> The Commission is of the view that there are few barriers to entry into the brassica market other than sourcing brassica seed overseas and performing testing to ensure that the seeds are suited to the New Zealand environment, and encourage uptake of the seeds by New Zealand farmers. Based on the market enquiries, the Commission considers that entry is likely, would be sufficient in extent to constrain the actions of the merged entity and could be achieved within a two year time period.

211. The fact that there are low barriers to entry can be seen in the fact that Seed Force and Germinal entered the New Zealand forage seed markets following the merger of PGG and Wrightson in 2005, while DLF entered shortly before in 2004.

212. Some concern was expressed to the Commission at the time of Decision 556 regarding access to endophyte technology being developed by AgResearch, and whether competitors could be excluded from future investment and research.[48] The Commission concluded that the Applicants there would face strong competition from other industry participants marketing the AR1 endophyte, which was known in the market to be a safe and proven product,[49] and that incentives regarding the setting of the royalty component of the endophyte sale price were in no way altered by the merger.[50] There were a sufficient number of independent retailers and competing supply chains such as CRT which mitigated any market power of the combined entity.[51] For access to endophytes, AR1 is available for any supplier to license. Agriseeds' NEA endophytes have recently been licenced to Cropmark and PGW Seeds has licenced AR37 to Agriseeds.

213. In terms of research and development, all market participants may contract AgResearch or Plant and Food Research (or other private research bodies) to undertake applied research and testing on new proprietary cultivars. There are also a number of international institutions which provide similar services to seed companies based here, such as Agriseeds and Midlands Seed.

214. Nor does the availability of personnel and technical expertise act as a barrier to entry. Candidates working in New Zealand move between employers and within the industry. To the extent that suitable personnel are not available in New Zealand, there are many skilled candidates internationally, and plant breeding skills are generally transferrable (**[ ]**). The need for suitably qualified personnel would be less for a participant that only imported seeds rather than produced them locally.

No Regulatory Barriers

215. There are no regulatory impediments to operating seed research or distribution activities in New Zealand.

216. The Plant Variety Rights Act 1987 (**PVR Act**) governs the breeding and marketing of proprietary seeds, and provides for exclusive intellectual rights over the production of proprietary plant seed varieties covered by the PVR Act. After the

47 At [445] and [473].
48 At [396].
49 At [402].
50 At [405].
51 At [406].

expiration of three years of making a protective grant, the Commissioner of Plant Variety Rights may (on request) grant a compulsory licence for the reproduction and sale of the protected variety to the requestor, and order the grantee to sell that material at a reasonable price.

217. This legislation does not provide a barrier to entry to new entrants or existing competitors wanting to expand operations. Obtaining protection under the PVR Act is not necessary either for imports or domestic production. Plenty of seed is sold without PVR Act protection. The Commission agreed with this assessment in Hodder & Tolley, noting that the PVR Act did not provide "*any significant impediments to those wishing to enter into, or expand in the market*".[52]

218. While there are some biosecurity requirements (for example, the quarantining of certain seed lines that have not previously been cleared for import), these do not amount to a barrier to expansion or entry. The Ministry for Primary Industry's import health standards[53] cover all the requirements. Compliance with these requirements is straightforward. Overseas suppliers are fully accustomed to dealing with this kind of system and New Zealand does not pose any unusual barriers.

Near and New Entrants

219. New Zealand's location and conditions provide strong incentives for Northern hemisphere seed companies to expand operations to the Southern hemisphere. Establishing operations in New Zealand mitigates risks around seed multiplication and testing for Northern hemisphere based companies (the reverse is true of companies based in the Southern hemisphere), by reducing a 12 month production cycle to six months. It also helps currency and product risks, by running trials and multiplications in more than one geographic location (which might be afflicted by severe climatic conditions one year, etc).

220. Accordingly, there are a number of multinational seed organisations that are likely to enter the market in the short term, or could do so in response to a price increase by the merged entity (particularly those whose operations are based in countries with similar climatic conditions to New Zealand – such as Western Europe and Great Britain, parts of Australia, west South America and parts of North America).

221. For example, RAGT has established relationships with a number of New Zealand organisations, including Seed Force,[54] and is considered a likely entrant to the market in the short term.

222. The Parties consider that in particular:

222.1 Deutsche Saatveredelung AG (**DSV**); and

222.2 KWS SAAT AG (**KWS**);

(both ultimately German owned) could establish a presence in New Zealand and Australia.

223. Either entrant could bring in significant supply, as each is a large global company. Seeds grown in the Northern Hemisphere that are particularly suitable for the New Zealand climate include annual and Italian ryegrass, clover, tall fescue, fodder beet and cocksfoot.

52 At [46].
53 Refer to https://www.mpi.govt.nz/importing/overview/import-health-standards/ .
54 https://www.seedforce.co.nz/our-story/

224. DSV maintains shareholdings in seed enterprises worldwide and has a presence in more than 60 countries. Further information about DSV can be found on its website at https://www.dsv-seeds.com/.

225. Similarly, the KWS Group is present in more than 70 countries, and pursues research and breeding, production, distribution and administration activities in more than 100 locations. Further information about KWS can be found on its website at https://www.kws.com/go/id/cjvg/.

226. Other potential new entrants include:

226.1 Landmark Australia which is owned by Nutrien, a Canadian fertilizer company (the world's largest producer of potash, and the second largest producer of nitrogen fertilizer). Landmark is importing forage seed into Australia for sale through its network of several hundred rural retail outlets. Landmark has a small presence in NZ and is known to be evaluating this market as an importer/retailer. Further information about Landmark can be found at https://www.landmark.com.au/our-range/farm-supplies/seed;

226.2 Several collective buying groups exist (e.g. Groit Solutions)[55] which have already indicated their willingness to directly import forage seed into NZ;

226.3 The New Zealand Fodder Beet Company, which has left the door open to importing fodder beet directly into New Zealand. Further information about them is at http://nzfodderbeet.co.nz/.

226.4 French company Jouffray-Drillaud, which is a French seed marketing company created in 1967. It exports a large part of its production to many countries. Further information about them can be found at https://www.jouffray-drillaud.com/jouffray-drillaud/edito/1-50-en.html.

227. There are a number of other Australian seed breeders and wholesalers that could also easily enter the New Zealand market, including:

227.1 Vic Seeds (cooperatively owned by Australian farmers) – refer to http://vicseeds.com.au/;

227.2 Valley Seeds – refer to https://valleyseeds.com/;

227.3 Elders – refer to https://elders.com.au/;

227.4 Upper Murray Seeds – refer to https://www.uppermurrayseeds.com.au/; and

227.5 Pacific Seeds – refer to https://www.pacificseeds.com.au/.

228. Some of these companies are already involved in plant breeding here on a minor scale, or have an association with a New Zealand based plant breeding programme. DLF considers that these Australian companies could establish a presence here very easily, as New Zealand companies have done in Australia.

55 http://www.groitsolutions.co.nz/

Countervailing Power from Customers

229. Customers can (and will continue to be able to) constrain price increases by suppliers through their ability to switch suppliers and the availability of imports. Among farmers there is some, but not much loyalty to particular seed brands so farmers are willing to switch brands.

230. The success of a seed depends heavily on the loyalty the retailer enjoys with the farmer purchaser. As with other aspects of the rural services industry, a trusting relationship between seed retailer and farmer is paramount. Importantly, seed choice only comprises 10-20% of the pasture management equation (which also includes fertiliser, ground preparation, weed control, stock cycles, irrigation etc). Wholesalers and other consultants provide detailed pasture management advice (often on-farm), thereby building a strong relationship of trust with the farmer. Both wholesalers and retailers will stop recommending a cultivar if they do not believe it is the best option for their customers, in terms of either performance or value for money.

231. Similarly, farmer purchasers will vote with their feet if a particular cultivar is overpriced or does not perform well. There is visibility about the performance of cultivars for farmers through the DairyNZ Forage Value Index (an "*independent, region specific, profit-based index for short-term and perennial ryegrass cultivars*").[56] Farmers can also opt for non-proprietary seeds in a particular year if, say, the dairy pay-out or meat prices are low.

232. PGW Seeds' four largest customers for all seed types it sells make up approximately **[ ]** of its sales in New Zealand. These customers are **[ ]**[57], **[ ]**. The four next-largest customers (**[ ]**) together make up around **[ ]** of sales.

233. DLF's four largest customers for all seed types it sells make up approximately **[ ]** of its sales in New Zealand. These customers are **[ ]**. The four next-largest customers (**[ ]**) together make up around **[ ]** of sales.

234. The size of the large retail customers for both Parties gives those customers countervailing buyer power through their volume of purchases and ability to switch suppliers.

235. There are no long-term contracts – retailers purchase from the price list (with annual rebates based on volume). Retailers tend to buy mainly in spring and autumn, and typically buy weekly, based on the orders they have received from farmers. The retailers are largely a conduit for farmer choice. Farmers chose among all brands and varieties, and so the retailers may buy from all suppliers throughout the season. Individual farmers may have a preferred brand but tend to place greater significance on obtaining a seed quickly when they want it than on the brand.

236. It would also be possible for retailers to arrange their own imports as noted above.

56 https://www.dairynz.co.nz/feed/pasture-renewal/select-pasture-species/about-fvi/
57 **[**

]

Conclusion

237. For the above reasons DLF submits that there will be no substantial lessening of competition in any of the Forage Seed Markets. In particular there will remain competition from other existing market participants such as Agriseeds and Seed Force who already have strong market positions, there is no constraint on the ability of competitors to expand production, there are low barriers to entry for new entrants, and major customers have the ability to constrain price increases through switching suppliers.

Part I – Competition Assessment for Turf Seed Markets

238. This section deals with:

238.1 the relevant market shares for the Turf Seed Market;

238.2 the constraints on the merged entity post-acquisition from existing competition;

238.3 the constraints on the merged entity post-acquisition from potential competition; and

238.4 countervailing power from major customers.

Market Shares

239. There is no reliable data that DLF is aware of on turf seed market size. The market is extremely diverse, comprising domestic lawn seed sales, parks and sports fields, stadia, golf courses, grass verges in urban areas, 'roll-out' turf, orchards and vineyards, roadside applications (eg motorway embankments), reclamation of spent industrial land (forestry, mining) and airports. There are multiple channels to market (eg contractors to building companies, landscapers, hydro-seeders, agricultural contractors, council-owned operations, regional and countrywide contractors to councils, sports turf specialists, national retail chains (both hardware and farming), local hardware stores, garden centres). The market utilises both proprietary and 'common' cultivars and there is a strong demand for forage-type grasses as well. The market is supplied by local production (proprietary and commons (i.e. non-proprietary)) as well as imports (mainly proprietary). The civil/amenity sector is the largest sector of the turf seed market and is particularly diverse in terms of customer base (including councils, contractors, local authorities, local clubs), with significant change from year to year (e.g. contractors disappearing etc). All of this makes it very difficult to assess the market size.

240. Subject to this caveat regarding the difficulty of estimating market shares, PGW Seeds' estimates of the shares of the key participants for the wholesale/retail functional dimension of the turf seed market in 2017 (using for DLF's share DLF's actual volumes, but excluding volumes supplied by DLF to resellers) are set out below. Where the supplier of seeds to participants is known, that is set out in brackets.

Turf Seed Wholesale/Retail	Volume (MT)	% market share
PGW Seeds	[ ]	[ ]
DLF[58]	[ ]	[ ]
Turf Grass Specialists ([ ][59])	[ ]	[ ]

58 [ ].

59 [ ].

Village Green / Evans Turf ([ ][60])	[ ]	[ ]
Prebble Seeds ([ ][61], [ ])	[ ]	[ ]
Other	[ ]	[ ]
TOTAL	[ ]	[ ]

241. PGW Seeds' estimates above of the shares of the key participants for the wholesale/retail functional dimension of the turf seed market in 2017 would indicate that the combined market share of both Parties would be around **[ ]**, but DLF's market share would only be around **[ ]**. There would continue to be significant competition at the wholesale/retail level provided by Prebble Seeds (with around **[ ]** share), Turf Grass Specialists and Village Green / Evans Turf (while acknowledging that these companies do receive supply of turf seeds from **[ ]** and other suppliers).

242. The Parties are not able to provide market share estimates of the key participants for the production/importation/wholesale functional dimension of the turf seed market. While the Parties have some idea of what brands the other wholesale/retail participants sell (because they observe them in the market), they do not have a good sense of the quantities. For its part, DLF supplied in total **[ ]** of turf seeds in 2017, **[ ]** in 2016 and **[ ]** in 2015. PGW Seeds supplied in total **[ ]** of turf seeds in 2017, **[ ]** in 2016 and **[ ]** in 2015. What is evident from this is that **[ ]**.

Constraint from Existings Competition

243. Post acquisition the merged entity will continue to be constrained at the wholesale/retail level by other market participants such as Turf Grass Specialists, Prebble Seeds, and Evans Turf. Various mid-Canterbury seed production companies also sell turf (or off-spec seed into the turf market). Further information on these companies is provided in the industry background section above.

244. These other market participants obtain turf seeds from DLF and PGW Seeds, but still supply them in competition to DLF and PGW Seeds at the wholesale/retail level including setting their own prices. They also source material from third party suppliers. As an example, DLF recently learned that **[ ]**. These companies are able to buy turf seeds from wherever they like and that is what they do in practice. **[ ]**, whereas it appears they probably sell another four ryegrass varieties (according to their website).[62] For its part, PGW Seeds understands that **[ ]**.

60 **[ ]**.
61 **[ ]**.
62 http://www.villagegreenseed.com/spec-sheets/

245. Imports also impose a constraint and are readily available. PGW Seeds estimates around **[ ]** of turf seed is already imported into New Zealand, while DLF estimates that at least for professional sports fields this figure could be up to **[ ]**. DLF imports the tall fescue and fine fescue seeds that form its turf seed product offerings. Evans Turf, Turf Grass Specialists and Prebble Seeds import seed mainly from the USA and some from Australia.

246. Grass seed production provides a high-value land use in most areas where suitable climatic and soil conditions exist. Most seed production areas of the world have significant spare capacity. Areas such as Eastern Europe and South America are emerging as highly competitive regions for seed multiplication. As a result, there is the ability for imports to be expanded substantially.

Constraints on the Merged Entity Post-Acquisition from Potential Competition

247. As is the case for the forage seed markets, there are low barriers to entry into the turf seed market and no regulatory impediments. Evidence of this can be seen in the fact that Turf Grass Specialists (supplied by Barenbrug, an overseas supplier with a large breeding programme) only recently entered the turf seed market.

248. Regarding potential entrants:

248.1 It is possible that Nuturf Australia could enter NZ. Nuturf is a subsidiary of CK Life Sciences which is listed on the Hong Kong Stock Exchange. Nuturf is the main sales channel for Heritage Seeds Australia which is wholly owned by Barenbrug NL (same parent company as Agriseeds). Alternatively, Agriseeds itself could enter the NZ turf market as it would have access to Heritage's well-proven turf cultivars;

248.1 PGW understands DSV has previously considered entry into New Zealand, but has so far decided against it. **[ ]**. PGW would expect that, if prices began to increase for turf customers, DSV may well enter;

248.2 Some major international turf breeders/producers are seldom seen or are unrepresented in NZ. These include Jacklin USA (occasionally imported by Evans and Prebble), Pennington (occasionally imported by PGW Seeds), Deutsche Saatveredelung (DE) and Limagrain (FR). Valley Seeds (Australia) also breeds and produces turf seed but this material has not been seen in NZ. The United States in particular has a very large pro turf market: its suppliers are accustomed to dealing with pro turf quality requirements, and could expand through their respective New Zealand distributors;

248.3 A number of NZ seed growers do multiplications of turf types for overseas buyers, notably Cates Grain & Seed, Rosevear and Canterbury Seeds (formerly Seed Production Ltd). These overseas buyers could make some of this available for sale in NZ.

249. NZ price increases would result in USA-sourced ryegrass becoming much more competitive. Currently certified "blue tag' USA ryegrass can be landed for around **[ ]**.

250. The turf seed market also faces constraint from the ability to substitute turf cultivars with those originally grown for forage applications. Suppliers of forage seeds are able to expand into turf. Good examples of this are roadside mixes, 'economy' packs for home lawns, hydroseeding, racecourses and council sports fields. This

behaviour is widely prevalent and potentially represents two thirds of the total NZ turf market. There is no hard data, but anecdotally DLF considers probably all forage seed suppliers move product into this market.

251. There are other disruptive products already making a mark in New Zealand which act as a constraint on the Parties. These include:

251.1 Synthetic grass – many councils will already have some of these installations for high-use sports activities, notably football fields, rugby practice fields and hockey fields. Although these require high capital investment, they have low maintenance costs and are therefore potentially attractive to some councils;

251.2 DLF is also seeing increased usage of summer grasses by councils, especially in the upper half of the North Island. Grasses such as kikuyu, couch, zoysia and paspalum already dominate much of the Australian market and are increasingly used in New Zealand as a response to higher temperatures and restrictions on water usage for irrigation. Neither of the Parties are active in this area.

Countervailing Power from Customers

252. The turf seed market is constrained by consumer purchasing power (which is also very discretionary). In particular, "council" type customers are heavily constrained by budgetary pressure. Seed sowing rates are much higher in turf than in farming applications (typically 350-500kg/ha, compared to 25-30kg/ha in agriculture) and an easy market response is simply to use less, or to defer re-sowing or to delay maintenance until after the sports season.

253. On the pro turf side, suppliers will often be dealing with a contractor to the end-user. They are generally willing to pay for quality, but there is a limit. The presence of alternative suppliers is the most effective constraint open to customers. Prestige – i.e. the ability to claim you supplied seeds to a famous sports field or golf course – also accords higher-end customers bargaining power, and means suppliers may compromise on price.

254. PGW Seeds' major customers for professional turf sales include local authorities, golf courses, lawn bowling clubs, rugby clubs, soccer clubs and polo clubs. For professional turf, sales are direct to the end-user or to contractors to the end-user.

255. For domestic turf, PGW Seeds has **[**

]. PGW Seeds' major turf customers for 2017 were **[**

].

256. DLF mainly supplies **[**

].

257. **[**

].

258. Professional turf sales tend to be made through short term contracts and so have an opportunity to switch frequently. Customers tend to value a supplier's product portfolio, product performance and customer service quality.

259. Similarly for sales of domestic turf seeds, customers are able to switch suppliers easily.

Part J – Confidentiality

260. Both public and confidential versions of this clearance application have been provided to the Commission.

261. Confidentiality is sought in respect of the information in the confidential version of this application that is highlighted in coloured shading. Confidentiality is sought for the purposes of section 9(2)(b) of the Official Information Act 1982 on the grounds that:

261.1 the information is commercially sensitive and contains valuable information which is confidential to either or both of the merger parties; and

261.2 disclosure of it is likely to prejudice unreasonably the commercial position of the merger parties.

262. DLF requests that it be notified of any request made to the Commission under the Official Information Act for release of the confidential information, and that the Commission seeks its views (and those of PGW where applicable) as to whether the information remains confidential and commercially sensitive at the time responses to those requests are being considered.

263. The above applies equally in respect of any additional information provided to the Commission that is expressed to be confidential.

Part K – Declaration

I, Lars Johansen, have prepared, or supervised the preparation, of this notice seeking clearance.

To the best of my knowledge, I confirm that:

- all information specified by the Commission has been supplied;
- if information has not been supplied, reasons have been included as to why the information has not been supplied;
- all information known to me that is relevant to the consideration of this notice has been supplied; and
- all information supplied is correct as at the date of this notice.

I undertake to advise the Commission immediately of any material change in circumstances relating to the notice.

I understand that it is an offence under the Commerce Act to attempt to deceive or knowingly mislead the Commission in respect of any matter before the Commission, including in these documents.

I am an officer of the company and am duly authorised to submit this notice.

Name and title of person authorised to sign:

Lars Johansen

Director Strategy & Business Development

DLF Seeds A/S

Sign: _____ **Date:** _____

Appendix 1 – Transaction Documents

- **[ ]**

Appendix 2 – Corporate Structure Charts

Current ownership of DLF

The current ownership of DLF is set out in the **attached** corporate structure chart.

Current ownership of PGW Seeds

The current ownership of PGW Seeds is set out in the **attached** corporate structure chart.

Appendix 3 – Audited Financial Statements and Annual Report

DLF

- The audited financial statements for DLF for the period 1 July 2016 to 30 June 2017 are **attached**.
- The annual report for DLF for the year ended 30 June 2017 is **attached**.

PGW Seeds

- PGW's group financial statements and annual report is separately **attached** as "PGW Annual Report 2017". They do not split out seeds from the remainder of the business.

Appendix 4 – Total Sales Revenues

DLF

DLF's revenue in New Zealand for 2016/2017 was **[ ]**.

This was comprised of **[ ]** for forage seeds and **[ ]** for turf seeds.

PGW Seeds

PGW Seeds' 2017 audited revenue in New Zealand was **[ ]**.

This was comprised of **[**

].

Appendix 5 – New Zealand Competitors and Industry Associations

NZ Competitors – Forage Seeds

Competitors	Contact Details
Agriseeds Limited	Michael Hales, CEO 2547 Old West Coast Road RD 1 Christchurch 7671 Ph 03 318 8514
Cropmark Seeds Limited	Glen Jarvis, CEO 49 Manion Road Rolleston 7677 Canterbury New Zealand Phone: +64 3 347 7950
Seed Force Limited	Bruce Garrett, General Manager PO Box 16 625 Christchurch New Zealand 8441 Office: 03 344 1690
Germinal Holdings New Zealand Limited	Sarah Gard, General Managerc/o Brophy Knight Ltd 144 Tancred Street, Ashburton 7700, New Zealand T 0800 171 825
Specialty Seeds	Stephen Finch PO Box 79 -118 Avonhead Christchurch 8446 T 0800 727 8873
Wholesale Seeds	Patrick Davis, CEO 5 Bryant Street Ashburton Phone 03 307 9260
Carrfields Grain & Seed	Craig Carr, Managing Director PO Box 19 Ashburton 7740 Phone: +64 3 307 6014

NZ Competitors – Turf Seeds

Competitors	Contact Details
Turf Grass Specialists	Peter Garvey, General Manager 38 Hannigan Drive St Johns Mt Wellington PH: 09 572 8001
Prebble Seeds	Andrew Cox, General Manager P.O. Box 11186 Christchurch 8443 PH: 03 349 7295
Evans Turf	Tony Evans, General Manager PO Box 392 Kumeu Auckland PH: 09 412 7265

Other Relevant Industry Participants & NZ Industry Association

Association	Contact Details
AgResearch Limited	Dr Tony Conner, Science Group Leader Forage Science1365 Springs Road Lincoln 7674 Private Bag 4749 Christchurch 8140 Phone:+64 3 321 8800
Plant & Food Research	David Hughes, CEO Private Bag 92169 Auckland Mail Centre Auckland 1142 Tel: +64 9 925 7000
New Zealand Grain and Seed Trade Association Incorporated	Thomas Chin, General Manager 185 Kirk Road PO Box 23 143, Templeton Christchurch 8445 Phone:+64 3 349-8430
New Zealand Plant Breeding and Research Association	Thomas Chin, General Manager PO Box 23 143, Templeton, Christchurch Ph: +64 3 349 8430 Fax: +64 3 349 8436 Email: thomas.chin@seedindustrynz.co.nz

Appendix 6 – Key Customers

DLF's Key Customers

Forage Seeds

Customer	Contact	2017 Revenue
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

Turf Seeds

Customer	Contact	2017 Revenue
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

	]	

PGW Seeds' Key Customers

Forage Seeds

Customer	Contact	2017 Revenue
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

Turf Seeds

Customer	Contact	2017 Revenue
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]
[ ]	[ ]	[ ]

Appendix 7 – NZPBRA Survey Data

The NZPBRA survey data for the total volumes of proprietary cultivars sold within New Zealand for the 2009-2017 calendar years is as follows:

NZ domestic proprietary pasture seed sales						
	2009	**2010**	**2011**	**2012**	**2013**	**2014**
Perennial Ryegrass	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Hybrid Ryegrass	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Italian Ryegrass	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Annual Ryegrass	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
White Clover	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Cocksfoot	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Tall fescue	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Lucerne	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
Total tonnes	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

	2015	**2016**	**2017**	**8 yr average**
Perennial Ryegrass	[ ]	[ ]	[ ]	[ ]
Hybrid Ryegrass	[ ]	[ ]	[ ]	[ ]
Italian Ryegrass	[ ]	[ ]	[ ]	[ ]
Annual Ryegrass	[ ]	[ ]	[ ]	[ ]
White Clover	[ ]	[ ]	[ ]	[ ]
Cocksfoot	[ ]	[ ]	[ ]	[ ]
Tall fescue	[ ]	[ ]	[ ]	[ ]
Lucerne	[ ]	[ ]	[ ]	[ ]
Total tonnes	[ ]	[ ]	[ ]	[ ]

Appendix 8 – Glossary

Term	Definition
Brassica/Fodder Beet Seed Market	National market for the production or importation and wholesale supply of brassica/fodder beet seeds
Clover Seed Market	National market for the production or importation and wholesale supply of clover seeds (both red and white)
Cocksfoot Seed Market	National market for the production or importation and wholesale supply of cocksfoot seeds
DLF	DLF Seeds A/S
DSV	Deutsche Saatveredelung AG
Forage Seed Markets	Together the Ryegrass/Tall Fescue Market, the Clover Seed Market, the Brassica/Fodder Beet Seed Market and the Cocksfoot Seed Market
KWS	KWS SAAT AG
Parties	DLF Seeds A/S and PGG Wrightson Seeds Holdings Limited
PGW	PGG Wrightson Limited
PGW Seeds	PGG Wrightson Seeds Holdings Limited
Proposed Transaction	The acquisition by DLF Seeds A/S of 100% of the shares in PGG Wrightson Seeds Holdings Limited and its subsidiaries
PVR Act	Plant Variety Rights Act 1987
R&D	Plant research and development
Ryegrass/Tall Fescue Seed Market	National market for the production or importation and wholesale supply of ryegrass/tall fescue seeds
SISD	South Island Seed Dressing Limited
SPA	Agreement for Sale and Purchase of Shares in PGG Wrightson Seeds Holdings Limited
Turf Seed Market	National market for the production or importation and wholesale or retail supply of turf seeds