

# GDT – Next steps for growth

Stakeholder Consultation, June 2015

## Executive Summary

GDT is the world's leading online dairy auction, connecting buyers and sellers to trade efficiently between each other. Established in 2008, GDT was a world-first for dairy trading and has gone on to become the established benchmark for dairy commodities pricing.

The platform has passed significant milestones, including over 140 successful events and more than US\$16 billion in sales over the seven years since trading began.

With the platform's credentials well-established, it is now time to further strengthen its independence, transparency and liquidity.

This paper outlines four proposals, supported by the GDT Advisory Board, that are being made public for stakeholder consultation. The changes incorporate discussions and feedback on GDT that has been received to date.

The four proposals are:

1. Establish Oversight Board
  - With independent chair, addition of three financial members, voting for rule changes and a compliance function;
2. Seller Forecast Statements
  - Whereby a seller may commit to provide additional explanatory information whenever their offer quantities or forecasts fall outside of published guidance ranges;
3. Additional GDT Data
  - Enable interested parties to subscribe for round-by-round data viewed by GDT participants and access to new information on sold quantities and bidder participation;
4. Larger Pools of Demand and Supply
  - Extend the current pooling process by enabling a seller to assign their product groups into aggregated product pools;
  - For example, AMF and butter, both of which comprise only fat and water, could be aggregated into a cream pool.

The four proposed initiatives would result in:

- (a) The GDT Advisory Board transitioning into an Oversight Board where future changes to the GDT Market Rules will be subject to agreement of the Oversight Board as well as Fonterra as owner of the GDT;
- (b) GDT bidders and other stakeholders potentially having access to more information about changes in sellers' supply forecasts;
- (c) Equal opportunity for all interested parties to access key GDT information relevant for assessing market conditions; and
- (d) Larger product pools with deeper liquidity, less price volatility, and greater consistency of underlying component values (for example in a cream pool, greater consistency of AMF and butter prices with a common underlying price of fat).

Once feedback has been received and considered by GDT and the Advisory Board, GDT will announce any potential changes to the GDT Market Rules.

## Proposal 1: Establish Oversight Board

### Objectives

1. GDT's objectives in establishing the oversight board are:
  - a. To comply with best practice international standards for governance and third-party oversight to ensure GDT operates with independence, neutrality and transparency;
  - b. To do this in a way that ensures Fonterra - its owner, operational manager, and major seller who relies more heavily on the platform than any other party - is assured that GDT operates an efficient market for dairy products.

### Background

2. In 2011 when GDT became a multi-seller platform, Fonterra implemented an internal separation of its roles as operational manager of the platform and as seller:
  - a. Fonterra's role as operational manager is undertaken through a wholly-owned subsidiary, Global Dairy Trade Holdings Limited, which reports through the CFO Group Function and is subject to strict confidentiality protocols;
  - b. Fonterra's role as seller is managed by its global ingredients sales business unit in accordance with internally agreed policies and standards.
3. Measures were also implemented at this time to ensure compliance with the anti-trust considerations applicable to the operation of the multi-seller platform. These included:
  - a. Outsourcing the conduct of auctions to an independent trading manager (CRA International, based in Boston, USA );
  - b. Physically separating the GDT office, IT services and security infrastructure from the rest of Fonterra;
  - c. Establishing an Advisory Board of bidders and sellers, publishing market rules and committing to consult on rule changes; and
  - d. Comprehensive restrictions on the way information is managed internally and the nature of data that can be published externally, particularly with respect to seller forecasts, offer quantities and starting prices.
4. Since the above measures were implemented, international best practice for the governance of organisations that publish market based benchmark prices has evolved and in some cases has become codified into key principles.
5. A leading example is the International Organisation of Securities Commissions *Principles for Financial Benchmarks*, July 2013, which recommends that an independent oversight body be established comprising a balanced representation of stakeholders.

### Proposed approach

6. This paper proposes to adopt best practice by converting the GDT Advisory Board into an independent Oversight Board.
7. It is proposed that:
  - a. An independent person be appointed to chair the Oversight Board;
  - b. Membership of the Oversight Board would include a 'financial member' class in addition to bidder and seller member classes:
    - i. The financial member class to have three members;
    - ii. Financial members to be selected from the operators, broker members and clearing members of financial derivative markets that settle against GDT prices;

- c. Approval of a proposed change to the GDT Market Rules would require:
    - i. A two-thirds majority of the Oversight Board (one member, one vote); and
    - ii. A supporting vote from at least one member of each class, i.e. at least one bidder, at least one seller, and at least one financial member would need to vote in favour; and
    - iii. Support of Fonterra in its capacity as owner of GDT;
  - d. To ensure transparency to stakeholders, voting results by member class (but not the names of who voted which way) and the approval or rejection by the owner of GDT to be published on the GDT website;
  - e. The Oversight Board to oversee a compliance function.
8. Key elements of the compliance function include:
- a. Complaints can only be made for alleged breach of the GDT Market Rules by a participant - complaints cannot be made for disputes over the seller's supply terms or other side agreements between parties;
  - b. To deter frivolous complaints, a complaint must be signed by the complainant's chief executive or legal counsel and must be accompanied by payment of an administrative charge;
  - c. Advisory Board to appoint a Rulings Panel comprising the Advisory Board chair and two other independent parties with relevant expertise who are not members of the Advisory Board;
  - d. The Rulings Panel will appoint an independent investigator to investigate complaints and conduct hearings as appropriate;
  - e. Sanctions will be limited to publication of the investigator's report (edited to protect confidential and commercially sensitive information);
  - f. The sanctioned party to have a written right of reply included in the published report;
  - g. No financial penalty can be levied.

## Proposal 2: Seller Forecast Statements

### Objectives

9. GDT's objectives for rules relating to seller supply forecasts are:
  - a. To provide an opportunity for each seller to keep bidders well informed about their future sales intentions, thereby raising the confidence of bidders to consider bidding on the seller's products;
  - b. To provide assurance that sellers do not set their supply quantities in a manner intended to influence GDT outcomes;
  - c. To accommodate the needs of participants in financial derivative markets to access aggregated price-relevant information;
  - d. To comply with anti-trust requirements that GDT must not in any way constrain, restrict or influence the forecasts provided by sellers.

### Background

10. The rules specify that a seller may provide forecasts to GDT for publication to bidders (Rule C2.5).
11. However, the rules do not require a seller to provide forecasts. The rules also impose no constraints or specific requirements on any seller who chooses to provide forecasts other than the general obligation of not causing a false or misleading appearance of demand, supply or participation in a trading event (Rule A3.1).
12. The rules specify that forecasts can be provided to financial market participants where GDT prices are used to settle the financial derivative contracts (for example, futures and options contracts) traded in a recognised financial market (Rule B4.4).
13. These rules reflect the practice established prior to GDT becoming a multi-seller platform whereby Fonterra forecasts were published on GDT and made available to the NZX dairy futures market. It was important for the credibility of GDT to ensure the ongoing provision of such information to bidders and participants in relevant financial derivative markets such as the NZX dairy futures market.
14. GDT believes there is scope to improve the way the forecasts are managed while continuing to meet its obligations to comply with applicable anti-trust laws.

### Proposed approach

15. This proposal will extend the rules so that a seller who provides forecasts to GDT may also provide additional information such as guidance on the normal range of variability of their forecasts and explanations for larger-than-normal changes in their forecasts.
16. The purpose of the proposed rules is to clarify the circumstances in which the participating seller is committed to provide additional explanatory information to the market.
17. The new rules would have the following components:
  - a. A seller may specify forecast guidance ranges within which changes to actual and forecast offer quantities are expected to occur under normal circumstances;
  - b. Any guidance ranges received by GDT will be:
    - i. Made available to bidders on the GDT information website; and
    - ii. In cases where derivative financial contracts operate, provided to financial market participants through the relevant financial market operators;
  - c. A seller who provides guidance ranges will be committing to issue an explanatory statement to GDT whenever one or more of their supply changes exceeds their guidance range;
  - d. The explanatory statement must be provided to GDT as close as reasonably possible to the publication to bidders of sellers' pre-event data (currently 4pm NZ time on the Thursday in the week prior to the auction);

- e. GDT will publish the explanatory statement to bidders and financial market participants (as appropriate) as close as reasonably possible after the sellers' pre-event data has been published;
  - f. A seller who provides forecast guidance ranges may from time to time:
    - i. Update their guidance ranges;
    - ii. Provide additional information relevant to interpreting the guidance ranges;
  - g. A seller who has been providing forecast guidance ranges may cease this practice by giving three months' notice to GDT.
18. It is important to note that the above rules are not intended to limit the extent to which a seller may change their forecast, or to require the seller to set its actual offer quantity within its then applicable forecast guidance range. The seller will also have sole discretion over the content of any explanatory note it issues.
19. Given the untested nature of these proposals, we intend to review the effectiveness of the new rules 6 – 12 months after implementation.
- Application to Fonterra**
20. Fonterra has indicated that it is willing to provide guidance ranges under the rules proposed above.
21. For each product group offered on GDT, Fonterra proposes to provide guidance ranges that:
- a. Apply to changes for the next and following trading event, i.e. cover a one-month forecast horizon;
  - b. Apply to Contract 2 (since used for settling NZX dairy futures) and in aggregate across all contract periods.
22. In addition, to best reflect the extreme seasonal variation in its milk supply and hence in its offer profile, Fonterra proposes that its guidance ranges will incorporate both a percentage change threshold and a quantity (MT) threshold, as illustrated in Table 1 below.
23. Both thresholds must be exceeded to trigger an explanatory statement.
24. For example, for WMP Contract 2 the supply change for the next trading event would need to be both greater than 500 MT and greater than 5%.

**Table 1: Example of Published Guidance Range (Note: example data only)**

Fonterra WMP Guidance Ranges				
Forecasts:	WMP Contract 2		Total WMP (C1-C6)	
	One Event Ahead	Two Events Ahead	One Event Ahead	Two Events Ahead
Percentage Threshold (%)	±5%	±15%	±5%	±15%
Quantity Threshold (MT)	±500	±1,000	±1,000	±2,000

## Proposal 3: Additional GDT Data

### Objectives

25. GDT's objectives for the provision of trading event information are:
- To enable interested parties to assess the significance of prices reported by GDT;
  - To accommodate the needs of participants in financial derivative markets for timely access to aggregated price-relevant information;
  - To comply with anti-trust restrictions on the flow of information between competing sellers;
  - To earn a commercial return on the cost of providing information to the market.

### Background

26. A range of stakeholders have expressed interest in accessing the detailed information available to GDT buyers and sellers during and after trading events.
27. Currently, bidders who participate in a trading event are able to view two types of information round-by-round as the event progresses:
- The demand/supply ratio of each product group for the prior bidding round (refer Table 2 below); and
  - The announced price for each product for the next bidding round (refer Table 3 below).
28. Also, each seller has an observer account for viewing the demand/supply ratios and announced prices of their own products. (Note that an observer account does not enable a seller to input any data or communicate with the trading manager or any other party).
29. After the end of a trading event, each seller also receives data on the bidders who bought their products. Sellers therefore have information on their sold quantity and a partial view of bidder activity by region.

**Table 2: Demand/supply ratios from a completed bidding trading event**

Demand/Supply Ratios At End of Trading Event

Round	1	2	3	4	5	6	7	8	9	10	11
AMF	1.5	1.5	1.5	1.5	<1.25	<1.25	<1.25	<1.25	<1.25	-	-
BMP	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-	-
Butter	1.5	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	-	-
Ched	1.5	1.5	1.5	<1.25	<1.25	<1.25	<1.25	<1.25	-	-	-
RenCas	2.0	2.0	1.5	1.5	1.5	<1.25	<1.25	<1.25	<1.25	-	-
SMP	2.0	1.5	1.5	<1.25	<1.25	<1.25	<1.25	<1.25	<1.25	-	-
SWP	3.5	N/A	N/A	N/A	-	-	-	-	-	-	-
WMP	1.5	1.5	1.5	1.5	<1.25	<1.25	<1.25	<1.25	-	-	-
Total	1.5	1.5	1.5	1.5	<1.25	<1.25	<1.25	<1.25	<1.25	-	-

**Notes:**

The Demand/Supply Ratio is the ratio of total accepted MT bid divided by the total maximum supply offered by sellers, rounded to the nearest 0.5. For example, a ratio of 2.0 means that for every 1 MT of supply offered, there was between 1.75 to 2.25 MT of bidding demand. A ratio below 1.25 is displayed as "<1.25". The calculation for each product group includes the demand and supply for all sales groups in the product group regardless of whether the sales group received any bids. "N/A" means the ratio is unavailable due to the product group having fewer than 10 bidders. "-" means the announced prices on all products in the product group are unchanged from the preceding bidding round.

Table 3: Announced prices for next bidding round

Trading Status Information - After Round 1

	Oct14 (Contract 1)			Nov14 (Contract 2)			Dec14 (Contract 3)			Jan15 (Contract 4)			Feb15 (Contract 5)			Mar15 (Contract 6)		
	Announced Price	\$ΔP	%ΔP	Announced Price	\$ΔP	%ΔP	Announced Price	\$ΔP	%ΔP	Announced Price	\$ΔP	%ΔP	Announced Price	\$ΔP	%ΔP	Announced Price	\$ΔP	%ΔP
	\$/MT FAS			\$/MT FAS			\$/MT FAS			\$/MT FAS			\$/MT FAS			\$/MT FAS		
<b>SMP High Heat</b> Amul - IN				\$3,885	\$0	0.0%	\$3,885	\$0	0.0%									
<b>SMP HH Heat Stable</b> Fonterra - NZ				\$2,245	\$110	5.2%	\$2,370	\$125	5.6%	\$2,465	\$125	5.3%	\$2,515	\$100	4.1%	\$2,870	\$140	5.1%
<b>SMP UHT</b> Fonterra - NZ				\$2,245	\$110	5.2%	\$2,370	\$125	5.6%	\$2,465	\$125	5.3%	\$2,515	\$100	4.1%	\$2,870	\$140	5.1%
<b>SWP Regular 25kg</b> Ammerland - DE				\$1,250	\$35	2.9%												
<b>SWP Regular 1000kg</b> Ammerland - DE				\$1,235	\$35	2.9%												
<b>WMP Regular</b> Fonterra - NZ				\$2,300	\$85	3.8%	\$2,355	\$100	4.4%	\$2,395	\$100	4.4%	\$2,565	\$170	7.1%	\$2,595	\$155	6.4%
<b>WMP Instant</b> Fonterra - NZ				\$2,350	\$85	3.8%	\$2,405	\$100	4.3%	\$2,445	\$100	4.3%	\$2,615	\$170	7.0%	\$2,645	\$155	6.2%
<b>WMP UHT</b> Fonterra - NZ				\$2,375	\$85	3.7%	\$2,430	\$100	4.3%	\$2,470	\$100	4.2%	\$2,640	\$170	6.9%	\$2,670	\$155	6.2%

### Proposed approach

30. GDT proposes to establish a subscription service to make similar information available to all interested parties.
31. The following information would be available round-by-round as a trading event progresses:
  - a. Demand/supply ratios as viewed by GDT bidders and sellers (refer Table 2);
  - b. Average announced price for each product group and contract period, i.e. aggregated across product specifications, sellers and source region, as illustrated in Table 4 below;
  - c. For those with a particular interest in New Zealand, an option to access Total-NZ and WMP-NZ versions of demand/supply ratios and announced prices.

Table 4: Example of round by round price indicators by product group and contract period (Note: example data only)

Average price relative to previous trading event	Round 1	Round 2	Round 3	...
AMF – C1	n.a.	n.a.	n.a.	...
– C2	-15.0%	-7.0%	-2.5%	...
– C3	-15.0%	-10.4%	-6.1%	...
...	...	...	...	...
[other products in alphabetical order]	...	...	...	...
WMP – C1	n.a.	n.a.	n.a.	...
– C2	-15.0%	-7.0%	-2.5%	...
– C3	-15.0%	10.4%	-6.1%	...
...	...	...	...	...
<b>Weighted Average price (USD/MT)</b>	<b>Round 1</b>	<b>Round 2</b>	<b>Round 3</b>	<b>...</b>
AMF – C1	n.a.	n.a.	n.a.	...
– C2	1850	2150	2230	...
– C3	1850	2150	2230	...
...	...	...	...	...
[other products in alphabetical order]	...	...	...	...
WMP – C1	1800	2190	2230	...
– C2	1850	2150	2230	...
– C3	1850	2150	2230	...
...	...	...	...	...



32. Data on sold quantities would be available by product group, contract period and seller as illustrated in Table 5 below.

**Table 5: Example of sold quantity by sales group (Note: example data only)**

Product Group	Seller	Sold Quantity (MT)					
		Contract 1	Contract 2	Contract 3	Contract 4	Contract 5	Contract 6
AMF	Seller1	-	100	100	100	100	100
...	...	...	...	...	...	...	...
SMP	Seller1	100	100	100	100	100	100
	Seller2	100	100	100	100	100	100
	Seller3	100	100	100	100	100	100
	...						
WMP	Seller1	100	100	100	100	100	100

33. Key regional data would also be made available as illustrated in Table 6:

- The number and distribution of participating bidders by bidder region;
- The distribution of sold quantity by bidder region and product category.

**Table 6: Example of participating bidders and sold quantity by bidder region (Note: example data only)**

	Africa	Middle East	North Asia	South East Asia & Oceania	North America	South & Central America	Europe	Total
Participating Bidders	10	10	10	10	10	10	10	70
- Number	14.3	14.3	14.3	14.3	14.3	14.3	14.3	100
- Share (%)								
Powders*								
- Sold Quantity (MT)								
- Share (%)								
Cream**								
- Sold Quantity (MT)								
- Share (%)								
Other***								
- Sold Quantity (MT)								
- Share (%)								
Total								
- Sold Quantity (MT)								
- Share (%)								

\* BMP, SMP, WMP, SWP \*\* AMF, Butter \*\*\* Cheese, rennet casein, lactose



34. The Historical Data spreadsheet currently available as a free download from the Information Website will be updated to include the above data and will become part of the subscription service.

## Proposal 4: Larger Pools of Demand and Supply

### Objective

35. GDT's objective is to deepen liquidity to enable buyers and sellers to execute a wide range of individual trading quantities.

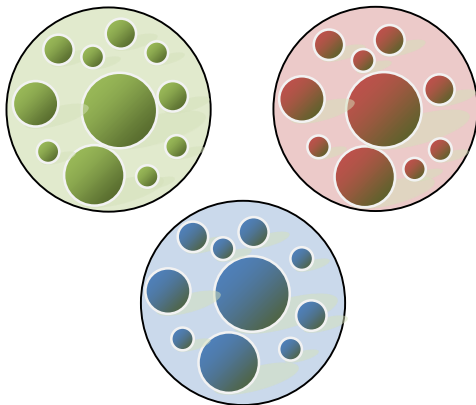
### Background

36. The depth of trading required to achieve liquidity for a buyer or seller depends on the size of transactions the party normally undertakes. Larger participants typically require bigger and more active trading pools than smaller participants.
37. The GDT auction process was designed to promote liquidity in two ways:
- By enabling bidders to shift their bids between products, contract periods and sellers as their relative prices vary round by round;
  - By enabling a seller to specify certain product specifications to belong in the same sales group. This enables supply to adjust dynamically to the products in greatest demand during the trading event.
38. The pooling feature described in (b) of the above paragraph has been utilised in nearly all product groups and by nearly all sellers.
39. For example, in the case of SMP each seller has specified between two and five product specifications (such as low heat, medium heat etc.) as belonging to their respective SMP sales groups.
40. In each case, the effect is to create a larger pool of both demand and supply that improves the efficiency and robustness of the auction process in discovering market clearing prices.

**Figure 1: Illustration of three products aggregated to one sales group**

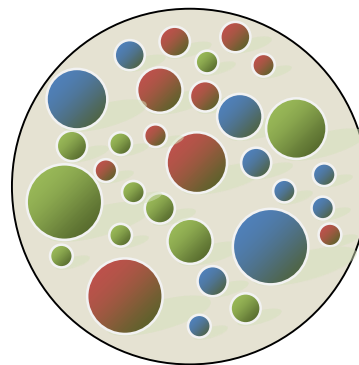
**(a) Three separate product pools**

Small number of bidders in each pool  
A few large bidders may dominate



**(b) One sales group covering three products**

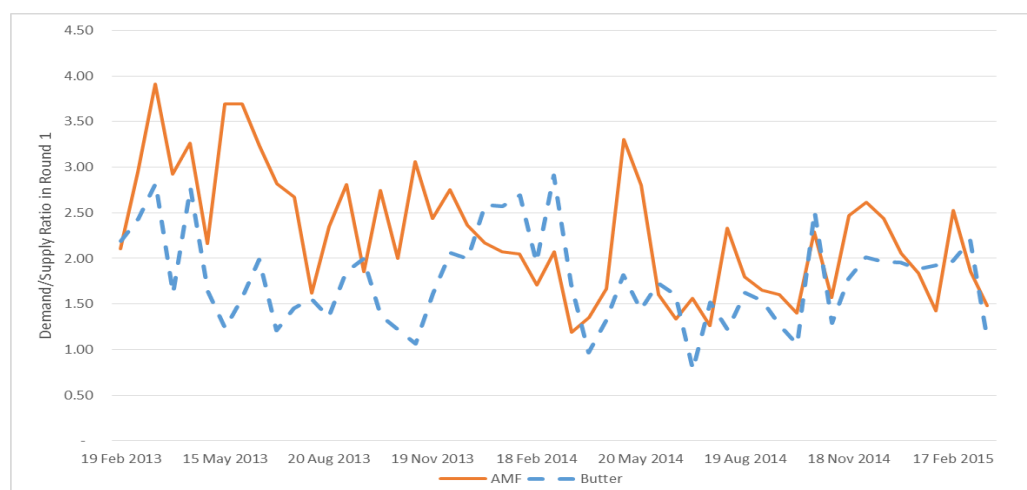
Individual bidder has less impact  
Demand shocks averaged out



## Proposed extension

41. GDT proposes to extend the above approach by enabling product groups (i.e. groups of several product specifications) to be aggregated into larger pools.
42. For example, AMF and butter, both of which comprise only fat and water, could be aggregated into a cream pool.
43. Expected outcomes from creating a cream pool include:
  - a. Improved liquidity as there is less impact on price from any individual bidder's trading actions
  - b. Reduced price volatility through demand shocks to the individual AMF and butter product groups being averaged across the pool;
  - c. Efficient matching of supply to demand through flexible allocation of available fat supply across both AMF and butter to the bidders with strongest demand;
  - d. Price outcomes would be influenced by the total supply of fat available to the pool rather than by a seller decision on how much to allocate to AMF versus how much to allocate to butter; and
  - e. Enhanced robustness of the auction process.
44. In addition to improving the auction process for GDT participants, these outcomes may be beneficial for other stakeholders such as the financial derivative markets that use GDT prices as reference prices.
45. In particular, reducing the role of sellers in deciding how to allocate available supply across the product groups may enhance the confidence of parties interested to trade in the dairy futures and options markets.
46. For AMF and butter, Figure 2 shows the first round demand/supply ratios are highly variable and imperfectly correlated (with correlation statistic of only 25%). This indicates good potential to smooth across the individual AMF and butter demand shocks within a combined cream pool.

**Figure 2: AMF and Butter Demand/Supply Ratios in Round 1**

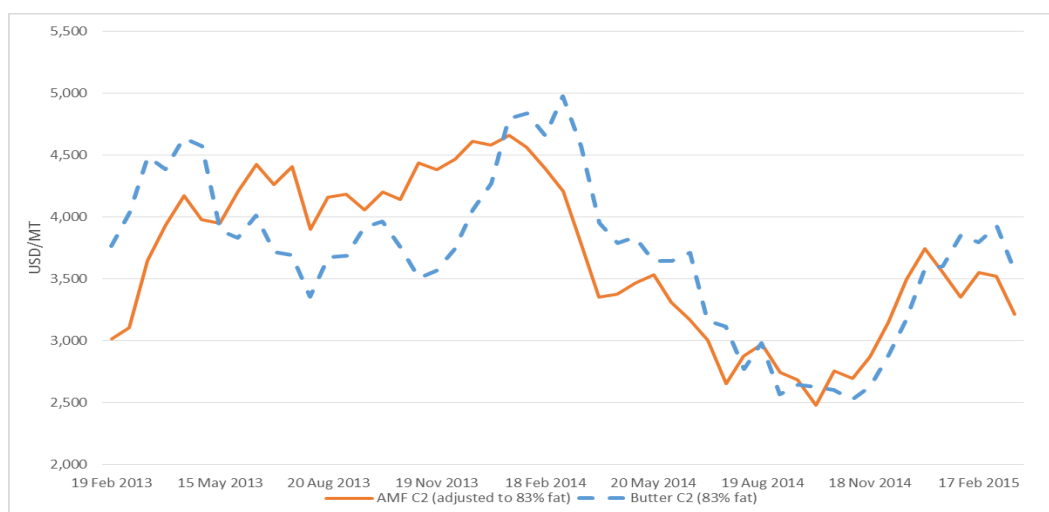


47. The creation of larger sales groups would not increase complexity to bidders as they would continue to observe and bid on their individual products of interest as they do currently.
48. The main visible impacts would be two-fold:
  - a. The quantity sold of each product group (e.g. AMF) would be determined by the relative strength of demand between the products in the pool, rather than being predetermined by the seller;
  - b. The winning prices for products in the same pool will tend to be related by the same underlying component prices – this means, for example, that winning prices for AMF and butter products will

tend to embody a common fat price (in contrast, under the current system the AMF and butter prices often diverge from each other on a fat-equivalent basis).

49. The extent to which these impacts occur will depend on the degree of supply flexibility set by the seller. The greater the production flexibility, the more the sold quantities can reflect the relative strength of bidding demand and the more likely that prices will be determined by common underlying values.
50. In the case of AMF and butter, there is no reason to expect the price of either product to be systematically higher or lower under a cream pool than under current arrangements.
51. This is indicated in Figure 3 where the fat-equivalent price of AMF has sometimes been higher and sometimes lower than the equivalent butter price. The average fat-equivalent prices over the past two years since the launch of butter on GDT are virtually identical (\$3,674 for AMF versus \$3,706 for butter).

**Figure 3: AMF and Butter Prices in fat-equivalent terms**



## Feedback

52. The GDT Advisory Board supports these proposals and GDT is committed to consulting with key industry stakeholders. Please give considerable thought to these proposals as they will impact the development of GDT as it moves into its next growth phase.
53. TNS, a global market research company, has been commissioned to collect your feedback which will be anonymous and confidential.
54. All surveys must be completed by the **end of June 2015**.

Please click [here](#) to provide your feedback