				DIRA S 5 (Definition of "commodity")		Qualifying Material per Milk Price Manual			
						Std Product Offering?			
							Generic Product Specifications?		
							Cascadable (without reference to customer)?		Sold in multiple regions to multiple customers through Fonterra "standard" sales channel?
Reference Commodity Product	Standard Specification Product	Standard Product Offering	Qualifies?	Significant quantities sold in globally contested markets (2)?	Uniform technical specifications (2)?	Sold on GDT?	To the Std Spec Product?	To Other Std Product Offering?	
WMP	Regular WMP	Regular WMP	Yes	Yes	N/a	Yes	N/a	N/a	Yes
		Regular UHT WMP	Yes	Unlikeley	Qualified yes (3)	Yes	Yes	Yes (RWMP)	Likely
		Instant WMP Vitamised (A and D)	**Yes (1)**	Likely	**No (4)**	Yes	**No (4)**	**No (4)**	Unknown (8)
SMP	Medium Heat SMP	Regular MH SMP	Yes	Yes	N/a	Yes	N/a	N/a	Yes
		Regular LH SMP	**Yes (1)**	Likeley	**No (5)**	Yes	**No (5)**	**No (5)**	Unknown (8)
		Regular HH SMP	**No**	Unlikely	**No (5)**	No	**No (5)**	**No (5)**	Unknown (8)
		Regular UHT SMP	Yes	Likeley	Qualified yes (3)	Yes	Yes	Yes (RWMP)	Unknown (8)
		Regular HH HS SMP	**No**	Unlikely	**No (5)**	No (listed, but not sold on GDT since November 2019)	**No (5)**	Yes (HH SMP only)	Unknown (8)
		Instant SMP (non-vitamised)	**No**	Unlikely	**No (5)**	No	**No (5)**	**No (5)**	Unknown (8)
Butter	Unsalted Butter	Unsalted Butter	Yes	Yes	N/a	Yes	N/a	N/a	Yes
		Salted Butter	Yes	Yes	Qualified yes (3)	Yes	**No (4)**	**No (4)**	Likely
		Lactic Butter	**No**	Unlikely	**No (4)**	No	**No (4)**	**No (4)**	Unknown (8)
AMF	AMF Premium 210 kg drum	Premium AMF	Yes	Yes	N/a	Yes	N/a	N/a	Yes
		Regular AMF	Yes	Yes	Qualified yes (3)	Yes	**No (6)**	**No (6)**	Likely
		Packing variations:					*Cascadable to other packaging formates?*		
		Drum	Yes	Yes		Yes	N/a	N/a	Yes
		1,250 kg Goodpack	**No**	No		No	**No (7)**	**No (7)**	Unknown (8)
		1,000 kg SpaceKraft tote	**Yes (1)**	No		Yes	**No (7)**	**No (7)**	Unknown (8)
BMP	BMP UHT	Regular BMP		Yes	N/a	Yes	N/a	N/a	Likely

(1) Only because of the "free pass" where product is sold on GDT
(2) Judgement based on a comparison with the standard specification product.
(3) For purposes of the milk price calculation, the product is likely to be sufficiently uniform (by comparison to the standard specification product)
(4) Different composition and or non-dairy additives
(5) Product designed to meet specific and narrow range of customer applications (and limiting cascadability to other products). In the case of ISMP, this is less marked but reference would still need to be made to customer before substituting to another product.
(6) Lower quality raw materials (including disposal option for butter materials not otherwise "fit for purpose")
(7) Customer needs investment in technical handling systems unique to the packaging type
(8) Insufficient sales transparency (for both GDT and off-GDT sales) to draw a conclusion
(9) 25 kg pack weight but larger bags (lower bulk density); also increases domestic and export logistics costs
(10) To be meaningful (and to prevent manipulation) there can be only one "standard packaging" for each reference commodity product. In the case of AMF however, Fonterra in effect circumvents the "standard packing" requirement by simply classifying most or all packing variants for the standard product offering as "standard packaging". Fonterra here returns to its habit of using circular definitions: if a product is a "standard product offering", the packaging is "standard packaging". Standard packaging should be set in line with the standard specification product
(11) These specialised plant are not required to manufacture the standard specification product. It would however be usual for modern commodity factories to include this plant. Provided this otherwise specialised plant has been included in the cost of the standard plant, and the full fixed cost of the plant is provided for in the Notional Producer costs, this will not be an issue. On the other hand, costs of specialised plant cannot simply be included in the Incremental Cost Adjustment as this would be unlikely to recover the full fixed cost of the plant.
(12) The multi-product manufacturing environment required by the list of standard product offerings means that all products (including the standard specification product) would be produced less efficiently than is currently assumed in the milk price calculations (based on manufacturing just 5 unique products). Incremental cost adjustments for all Standard Product Offerings (including the Standard Specification Product) are therefore required to achieve consistency between revenue and cost/yield elements in the milk cost calculations. This column captures major additional factors that would need to be reflected in the incremental cost adjustments for those products.
(13) Any variation in throughput will impact the capacity required (by comparison to the Standard Specification Product) to process the milk allocated to the product. It is not therefore correct or consistent to assess practical feasibility (sufficiency) of the NP processing capacity based on the continuous production of the 5 standard specification products.

Reference Commodity Product	Standard Specification Product	Standard Product Offering	Qualifies?	Std Packaging?	Manufactured on standard plant?	Production efficiency and cost relative to the NP "5 products" production plan (12)
WMP	Regular WMP	Regular WMP	Yes	Yes	Yes	
		Regular UHT WMP	Yes	Yes	Yes	
		Instant WMP Vitamised (A and D)	**Yes (1)**	Yes	**No: Requires agglomeration system, and ingredient handling/dosing equipment (11)**	Reduced throughput due to the different product composition (13); increased frequency of evaporator cleaning and therefore reduced evaporator throughput (increased downtime).
SMP	Medium Heat SMP	Regular MH SMP	Yes	Yes	Yes	
		Regular LH SMP	**Yes (1)**	Yes	Yes	
		Regular HH SMP	**No**	Yes	Yes	Higher energy costs; increased frequency of evaporator cleaning and therefore reduced evaporator throughput (increased downtime) (13); dryer configuration/settings need to be changed increasing change-over time and reducing throughput (13); production affected by seasonal milk quality changes, making production scheduling more complex (impacting both HH SMP and adjacent scheduled product).
		Regular UHT SMP	Yes	Yes	Yes	Increased plant cleaning leading to shorter (less efficienct) production runs (13)
		Regular HH HS SMP	**No**	Yes	Yes	Higher energy costs; increased frequency of evaporator cleaning and therefore reduced evaporator throughput (increased downtime) (13); dryer configuration/settings need to be changed increasing change-over time and reducing throughput (13); production affected by seasonal milk quality changes, making production scheduling more complex (impacting both HH HS SMP and adjacent scheduled product).
		Instant SMP (non-vitamised)	**No**	**No: (9)**	**No: Agglomeration system required (11)** **No: requires higher spec'd and higher capacity transport system (for conveying more fragile powder from the dryer to the packing bin)**	Difficult to meet specification targets, and higher portion of product will fail to meet specification (increasing cost); increased losses at production start-up and close-down. Lower bulk density increases domestic and and external logistics costs (lower pallet and container loading factors (weight))
Butter	Unsalted Butter	Unsalted Butter	Yes	Yes	Yes	
		Salted Butter	Yes	Yes	**Ingredient handling and dosing equipment for both salted and lactic butter (11)**	
		Lactic Butter	**No**	Presumably		Unable to recover product losses through AMF (out of spec product at start-up, run out at the end of the production run, and general product fallout cannot be recovered to AMF (contaminated by lactic fermentation).
AMF	AMF Premium 210 kg drum	Premium AMF	Yes		Yes	
		Regular AMF	Yes		Yes	
		Packing variations:				
		Drum	Yes	**No (10)**	n/a	
		1,250 kg Goodpack	**No**	**No (10)**	n/a	Different product filling and handling configuration (added cost)
		1,000 kg SpaceKraft tote	**Yes (1)**	**No (10)**	n/a	Different product filling and handling configuration (added cost)
BMP	BMP UHT	Regular BMP		Yes	Yes	

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