



Independent Consumer & Competition Commission
Flour Pricing Review



Issues Paper

JUNE 2004

Contents

1. Forward	3
2. Introduction	5
2.1 Background to the Review	5
2.2 Legislative requirements	5
2.3 Format of the review process	7
3. Structure of the Industry in Papua New Guinea (PNG)	8
3.1 Import, manufacture and supply of flour	8
3.2 Distribution of flour products	8
3.3 Retailing of flour products	8
4. Retention of Price Control	9
4.1 Current pricing arrangement	9
4.2 Continuation of price regulation	9
4.3 Form of price control	10
5. Price Control Methodology	12
5.1 Industry proposal	12
5.2 Legislative requirements	12
5.3 Components of building block approach	14
5.4 Price path determinations	16
5.5 Price path period	17
5.6 Price for individual products	18
5.7 Costal freights	19
5.8 Timing of pricing adjustments	19
6. Wholesale Margin on Flour Products	21
6.1 Activities covered	21
6.2 Form of regulation	21
7. Retail Margin on Flour Products	24
7.1 Activities covered	24
7.2 Form of regulation	24
8. Appendix 1 Section 21 (2A) of the Prices Regulation Act	26

1. Forward

The Independent Consumer & Competition Commission (Commission) is a statutory body, established under the provisions of the *Independent Consumer and Competition Commission Act 2002*, which has been given responsibility for the promotion of competition & fair trading, the regulation of prices for certain goods and services, and the protection of consumers' interests and other related purposes.

In its role of regulating prices of certain goods and services, the Commission has the responsibility to regulate prices of Flour products. In PNG, Flour is manufactured and distributed by two companies namely; Associated Mills Limited (AML), a subsidiary of Goodman Fielder International Limited (GFI) that produces the **Flame** and **Mothers Choice** brands and Mainland Holdings under the **3-Roses** brand. Between the two, AML has about 60 to 65% of the flour market in Papua New Guinea (PNG); Mainland Holdings has 25 to 30%, and the sale of imported flour and flour products by large commercial food manufacturers and bakeries in the form of flour premix constitutes less than 10% of the domestic market.

Briefly, the current regulatory arrangements under the Prices Regulation Act (Chapter 320) cover the following areas:

- ✎ Review of Flour prices, undertaken on a bi-monthly basis and directed at consideration of exchange rate and imported price changes;
- ✎ Annual reviews of the Annualised Non-commodity Costs such as Mill run, labour, overhead manufacturing costs and International freight and handling charges; and
- ✎ The setting of a fixed retail and wholesale margin to be applied to the sale of flour products.

Under the provisions of Section 25A (6) of the Prices Regulation Act, the Commission has decided to undertake a major review of the pricing regulatory arrangements applying to flour and flour in its various variant forms and packages. This review will *inter-alia* consider whether the present price control arrangements for flour should continue to operate in their present form or be varied, or whether the price control arrangements should be terminated.

To assist the Commission in making informed decisions, the Commission is calling for submissions from all interested parties including the local flour companies, biscuit companies, bake shops, consumers and other interested parties. The Issues Paper is intended to provide a brief overview of the issues that will be considered as part of the review and the processes that the Commission will use in undertaking the review.

The timetable for the current review is as follows:

Release of Issues Paper	-	7 th June 2004
Receipt of Public Submissions	-	28 th June 2004
Release of Draft Report	-	30 th July 2004
Receipt of submissions on Draft Report	-	3 rd September 2004
Release of Final Report	-	22 nd October 2004

Submissions to the Commission will be available for public inspection unless the Commission agrees that all or part of the submission should remain confidential. However, in accordance with the provisions of the ICCA Act, it is intended to make the review process as transparent as possible and to this end, submissions would normally be available for public inspection unless there are exceptional commercial-in-confidence reasons why submissions be held in confidence.

Submissions to this inquiry should be received by 28th of June 2004 and should be directed to:

Mr. Thomas Abe
Acting Commissioner
Independent Consumer & Competition Commission
P.O. Box 6394
BOROKO,
National Capital District
Papua New Guinea

All telephone inquiries should be directed to Mr. Matagu Kidu on 325 2144.

2. Introduction

2.1 Background to the Review

The methodology that is currently used to set prices for **flour** was originally devised in 1991, and has basically remained unchanged since that time. The current methodology is time consuming and expensive to administer both from the perspective of the industry and the Commission often causing delays in reviewing of submissions, and passing through changes in prices.

Much of the work under the former price control regime was administered through the Price Controller's Office and was less transparent than is envisaged under the ICCC Act. Notwithstanding agreed procedures for price evaluations, reviews were more focused on current costs and not other factors such as new investment requirements, service standards, and a balancing of the interests of the regulated business and consumers as is now required under Section 21(2A) of the Prices Regulation Act Chapter 320.

Again, circumstances have changed prompting the need for a review to decide whether to continue, amend or terminate the current regulatory arrangements. Upon concluding the review process, the ICCC as the regulator should have developed a transparent, accountable and consistent pricing system beneficial to consumers and the Flour Industry.

2.2 Legislative requirements

The Independent Consumer & Competition Commission is undertaking this review in accordance with the amended provisions of the Prices Regulation Act (Ch. 320). In undertaking this review, the Commission is to have regard to the following:

- Sections 10, 20 (A & B), 21, 25 and 32A of the amended Prices Regulation Act;
- Confidentiality and public disclosure provisions of the Act on information received from submissions; and
- The current and prospective outlook for the Flour Industry in PNG.

Under Section 10 of the Prices Regulation Act (Chapter 320), the Government through the Minister for Treasury has declared the following Flour related products for price control purposes:

- Bakers Flour
- Cracker Flour
- Biscuit Flour
- Soft Flour
- Wheat Flour
- Whole meal Flour
- Self Raising Flour

The *Independent Consumer & Competition Act 2002* made a number of changes to the Prices Regulation Act under which the prices for flour products are controlled. In particular, the Prices Regulation Act was amended in the following ways:

- A new section, Section 20A was included which requires the ICCC to publicly notify its intention to determine a Pricing Order under Section 21 of the Prices Regulation Act.
- Section 21 (2A) (see Appendix) was added which introduces specific requirements on the ICCC in terms of the matters that it must consider when making a Pricing Order including encouraging greater efficiency, ensuring an appropriate rate of return and appropriate safeguards for quality, reliability and safety for the supplying industry, and protecting consumers from the misuse of market power by suppliers of declared goods and services.
- Sections 25A, 25B and 25C were introduced which specify the process by which a review of a Pricing Order can be undertaken including the deadlines that must be met, the requirement for the Commission to publish details of its decisions, and the form of a decision that can be taken by the Commission as a consequence of such a review.
- Section 25A (6) allows the Commission of its own accord to initiate a review.
- Section 25C (3) specifies that in response to a review, the Commission may determine to:
 - ⇒ Continue to operate the existing price control arrangements in their present form,
 - ⇒ Vary the existing price control arrangements, or
 - ⇒ Terminate the present price control arrangements.
- Section 32(A) provides for the declaration of goods or services for price monitoring purposes as an alternative to price control. This is a less stringent form of regulation, which effectively allows the Commission to oversee the prices being charged for the declared goods or services, without requiring the industry to incur the cost of more heavy-handed direct price control.

Under a prices monitoring arrangement, if it is evident that price movements are not reflective of appropriate competitive market benchmarks, the Commission can recommend to the Minister for Treasury that the relevant goods or services be declared under Section 10 of the Prices Regulation Act (Chap.320) for full price control purposes.

These amendments to the Prices Regulation Act increase the flexibility of the Commission in terms of its overall price control activities, and allow for appropriate mechanisms to be developed and implemented that meet the objectives of the Government in terms of price control while minimising the cost of

undertaking the price control tasks, thereby ensuring that price control does not of itself create other unintended adverse economic consequences.

2.3 Format of the review process

This review is initiated under the provisions of Section 25A (6) of the *Prices Regulation Act*. The process of review will be public and transparent and in addition to the flour industry, other interested parties and the public are invited to make submissions to the review.

The process will involve the following broad stages:

- ◆ Public announcement of inquiry & invitation for submissions to be made to the Commission;
- ◆ Release of an Issues Paper discussing aspects of the inquiry and the major issues that the Commission believes need to be considered;
- ◆ Release of a Draft Report and the inviting of submissions on that Draft Report;
- ◆ The possible holding of Public Hearings on the Draft Report and
- ◆ Release of the Final Report and Determination.

A timetable for the review has been provided in the Forward to this Issues Paper. Copies of submissions received by the Commission (unless treated as being confidential) will be available for public viewing at the Commission's office on a 'Public File' or copies can be obtained from the Commission at a nominal cost for photocopying. The Draft Report and Final Report of the Commission are also public documents and can be obtained from the Commission's office once they are released.

3. Structure of the Flour Industry in PNG

3.1 Import, manufacture and supply of flour products

Under the existing arrangements, the importation, manufacture and distribution of flour products in PNG is undertaken by AML for “Flame and Mothers Choice” products and Mainland Holdings Limited for “3-Roses” branded products. Other companies import other flour brands but hold a relatively minor part of the total flour industry in PNG.

3.2 Distribution of flour products

Grain is imported from Australia into PNG by the two flour milling companies and processed in the plants in Port Moresby & Lae. AML operates two factories in Port Moresby and Lae, supplying flour to the whole country while Mainland Holdings Limited has its factory in Lae servicing the whole country. The grain is processed and packed into various flour products for distribution to major customers such as bakeries, wholesales and retail supermarkets. The packs come in various sizes ranging from 1kg to 50kg flour products to suit companies and individual consumers. The main inputs into flour milling, principally wheat, are fully imported and the domestic manufacturing activities primarily involve the milling of the wheat to meet specific flour grade requirements in PNG and the packaging of products for domestic sale.

Imports of flour into PNG are required to meet a 20% tariff which acts as a form of protection for the local industry. Thus imported flour represents less than 10% of the domestic market.

Currently, each flour company is responsible for distributing its own flour products to other locations in the country from their respective plants in Port Moresby and Lae. Typically, each flour company is a wholesaler with the distribution of products undertaken either by themselves or by contractual arrangements with established wholesalers and retailers. The two manufacturers also undertake direct wholesale sales of flour to major bakeries and local food producers in PNG. The current price regulated wholesale margin is 11% on the ex-factory price.

3.3 Retailing of flour products

The provision and sale of flour products at the retail level is undertaken by the retailing sector. Retailing activity is independent from the operations of the manufacturers’ activities although retailers may directly import certain flour products.

Under existing price control arrangements, the retailers are entitled to a retail margin of 11% on the wholesale price for declared products. The review will also assess these margins.

4. Retention of Price Control

4.1 Current pricing arrangement

The price control of flour products in Papua New Guinea must be seen in the context of the Government's policy in providing import protection to the domestic flour milling industry. In conjunction with a decision to protect the industry, the government introduced price control for flour. Initially the price control mechanism introduced made use of an "import parity" approach to price determination. That is, prices in PNG were determined on the basis of the cost of importing the same or similar products from Australia after allowing for freight and handling to deliver the flour to PNG and associated government levy (2% import levy plus the tariff) and taxes, and freight to main ports within PNG. Thus in effect, prices in PNG for flour products were capped at a level that reflected the competitive import prices.

Prices are currently set on the basis of a 'cost plus' approach. That is the regulated businesses advise the Commission of movements in their costs of production including the imported grain and subject to a materiality test of the overall price change being greater than 5% since the last price change, prices are adjusted accordingly. The costs that are included in the 'cost plus' approach are:

- The Australian Wheat Board (AWB) published card prices for grain (including the import levy)
- International freight rate (ex-Brisbane)
- Allowance for net waste on production
- Labour and overhead costs in manufacturing
- Coastal freight
- A 10.53% mark up on the sum of all the above

A main port price per tonne is determined using this formula, and prices for individual pack and product type are determined from the movement in main port prices from one period to another.

4.2 Continuation of price regulation

Under the provision of Section 25C(3) of the Prices Regulation Act, the Commission must determine whether to:

- Continue to operate price control in its present form, or
- Vary the form of price control, or
- Terminate price control.

Any decision to terminate price control needs to be based upon the current projected state of the industry. Price control was originally introduced in recognition that the government's decision to impose a significant tariff barrier on

imported flour, effectively created a monopoly for the then newly established flour mill in PNG. Since that time, a second commercial flour mill has established in PNG and these two mills meet most of PNG's flour needs.

Some import competition has emerged despite the high tariff rate on flour. Industry advice is that this in part reflects efficiency improvement in overseas milling practices that has allowed some cost savings in production costs of imported flour. With the anticipated reduction in the import duty from 25% to 20%, industry sources suggest that import competition is increasing. Furthermore as there is no tariff on premixed flour products, competition in this section of the market is much stronger.

Submissions from the industry are claiming 'significant domestic flour competition and increasing import competition as is evidenced in recent flour imports by companies in PNG'¹. The Commission is seeking further information and evidence of this claimed growth in import competition.

Aside from competition amongst suppliers, the Commission also will need to consider the existence of countervailing power amongst consumers of flour products. The main consumers of the flour in PNG are local manufacturers including bakeries and processed food manufacturers who use flour based products. Potentially these consumers could hold significant countervailing power which could counter any market power that might be held by the flour mills or flour suppliers. Thus prices for flour products could be kept in check by the respective powers of the suppliers and consumers.

However, the Commission is also aware of a large group of consumers, mainly domestic households who hold very little countervailing power in terms of the prices charged for flour products. These consumers may be more inclined to purchase premixed flour products where there is a greater degree of import competition. However, there may still be a need to provide some form of price regulation for these products used by households where competition in PNG is limited because of the import protection barriers and limited number of suppliers.

The Commission is seeking information and submissions on the current and projected state of competition and contestability in the flour market in PNG and the need to continue some form of price regulation

4.3 Form of price control

On the assumption that some form of price control or price regulation should be continued for flour and flour products in PNG, the Commission is required to

¹ Correspondence from Goodman Fielder, 22nd January 2004

consider whether the existing form of regulation should apply and if not, what alternative form of regulation should be used.

The options that are available to the Commissions are identified in the Prices Regulation Act, namely;

- ✚ Price control as Declared Goods under section 10 of the Prices Regulation Act; or
- ✚ Price monitoring as Declared Monitored Goods under section 32A of the Prices Regulation Act.

Price control as a Declared Good would require the Commission to have regard to the provisions of Sections 20A, 20B and 21 of the Prices Regulation Act. Specifically that would require the Commission to:

- ✚ Undertake a lengthy public review process each time it was proposed to alter the maximum prices approved under the Price Declaration;
- ✚ Prepare and publish draft reports and other material relating to the proposed price change; and
- ✚ Have regard to the requirements of Section 21 (2A) of the Prices Regulation Act that *inter alia* require the Commission to ensure that an appropriate balance is kept between the interest of consumers and the suppliers/manufactures of flour products.

To meet these requirements, the Commission can establish a price direction/price path which could provide for some degree of automatic adjustment of prices albeit against an approved price adjustment methodology (see Section 5 of this paper).

Price Monitoring under section 32A provides a less intrusive method for price regulation. Under the price monitoring approach manufacturers/suppliers can adjust their prices without the need for Commission approval. Prices of products ex-factory in Port Moresby and Lae would be monitored by the Commission against a benchmark that has been set by the Commission. This would allow the Commission to monitor the prices being charged by the local manufacturers against accepted international benchmarks for flour products.

The Commission invites submissions on the forms of regulation (i.e., price control or price monitoring) that should be applied to flour products in PNG.

5. Price Control Methodology

5.1 Industry proposal

In a preliminary submission from Goodman Fielder International (GFI), it has been proposed that the Commission move from an 'ex factory price control' process to a process under which price notification would be made against a pre agreed formula. The objective is to provide a more automatic process whereby changes in cost are passed through into prices.

As part of the GFI proposal it is proposed that the existing formula for calculation of the ex-factory price of flour be retained (see section 4.1), but that there be annual updates of the overhead, labour and energy recovery rates, GFI has also proposed that a more regular review of packaging price adjustments be undertaken. It is argued that infrequent changes to the non-commodity components of the formula results in either the company or consumers being disadvantaged as cost rise and fall. Goodman Fielder proposes that non-commodity costs within the formula be adjusted on a six monthly basis.

5.2 Legislative requirements

Under the provisions of Section 21 (2A) of the Prices Regulation Act, if some form of price control is retained, the Commission is required to have regard '*inter alia*' to the following:

- ✚ The need to protect consumers of declared goods from the misuse of market power
- ✚ The cost of producing the declared good
- ✚ The desirability of encouraging greater efficiency in the production and supply of declared goods
- ✚ The need to ensure an appropriate rate of return on any investment in the production or supply of the declared goods
- ✚ Quality standards
- ✚ The impact on inflation of a price control order
- ✚ The economic and social impact of a price control order.

The need to achieve a balance between the interest of the suppliers/manufacturers and consumers is embodied in these legislative requirements.

The Commission must therefore consider what is the best mechanism to achieve these particular objectives.

The Commission has in part sought to achieve these objectives by linking the determination of regulated prices with the efficient costs of producing or supplying the regulated goods or services. This allows the Commission to differentiate between the actual costs that a manufacturer/supplier may incur, and the 'efficient/best practice' costs that apply to the provision of that good or service. The prices that consumers are required to pay therefore do not include

inefficiencies or inappropriate cost pass through that might otherwise occur in a market where there is no regulation and the supplier has a degree of market power.

The Commission understands that there are efficiencies in milling practices that are being introduced in other countries but which may not have been adopted in PNG at this time. The Commission will be interested in exploring the extent to which production efficiencies are available and ways in which these efficiency savings can appropriately be shared between the manufacturers/suppliers and consumers.

The introduction of some forms of efficiency improvements may require new investments by manufacturers/suppliers. Before investing in any new equipment or technology, the manufacturer/supplier would normally want some assurance that the price of goods sold would allow for the cost of the investment to be recovered together with a return on the investment. A 'cost plus' approach to pricing regulation of the type currently used for flour in PNG (and of the type that appears to be favoured by at least one of the millers) does not allow for a recovery of this investment over time. An alternative form of price regulation that both allow a recovery of these costs while at the same time sharing the benefits with consumers needs consideration.

The Commission, in favoring a 'building block' approach, has included in the building block costs over time, an allowance for the recovery of new prudent investment expenditure and a rate of return on that investment. This is achieved by using forward projections of operating and capital costs rather than a static cost plus approach which relies upon actual costs incurred over the most recent period.

A 'building block' approach is therefore linked to the forward projection of costs over a period of time (often five years). These cost projections are based on efficient costs of production (taking into account the particular operating environment in which the business operates) and prudent capital expenditure projections. These projections are also developed in the context of forward projections of demand.

The main components of the 'building block' approach are:

- Operating costs
- Return of capital (depreciation)
- Return on capital

Under this methodology, prices would be based upon a recovery of all these costs over time.

The Commission is inviting comment on the use of a ‘cost plus’ versus a ‘building block’ methodology in the setting of prices, or the use of some other methodology for setting prices

5.3 Components of building block approach

In order to use a building block approach (or even a ‘cost plus’ approach), the Commission will need to obtain information from the industry on the various costs components that are involved in manufacturing and supplying flour and flour products. The Commission needs to ‘test’ or benchmark these cost estimates in order to come to a view as to whether they reasonably reflect ‘efficient’ costs.

Operating costs need to be examined in as much detail as possible. The industry has already raised concern about certain costs not having been reviewed at regular intervals in the current pricing methodology. The Commission would anticipate that as part of the current review process, these costs would be reviewed prior to their inclusion in any form of pricing model.

A building block approach would normally need to project costs over a period of up to five years. As discussed below, this provides an environment where not only efficiency gains can be passed through to consumers, but the businesses themselves have an incentive to outperform the efficiency costs included in the pricing model. Use of forward projections also allows a more automatic price adjustment process, thereby reducing the overall costs of regulation over time.

The Commission is seeking input into what are the efficient operating costs for flour milling in PNG

A rate of return appropriate for the industry needs to be determined for inclusion in the building block model. The rate of return should reflect an appropriate return on the investment by the business in the manufacture/supply of regulated goods. The Commission would normally use a Weighted Average Cost of Capital (WACC) as the basis for the appropriate rate of return. The WACC will take into account issues such as the appropriate return that the business should generate on both the equity and the debt capital in the business.

A Capital Asset Pricing Model (CAPM) is the type of financial model normally used by the Commission to determine the WACC. To populate the CAPM model, the Commission will need to have regard to the risk free rate of return that presently applies in PNG, the additional costs that should be included to reflect appropriate commercial debt margins on the risk free rate, the level of the additional risk that flour milling might attract above and beyond the standard risk allowances that would apply to other businesses in PNG, the treatment of tax (a pre tax or a post

tax rate of return) and the normal debt equity ratio that should be applied to this industry.

The Commission is seeking submissions on the appropriate rate of return to use for a flour milling business in PNG and the components of a CAPM calculation of WACC

The rate of return must be applied to some valuation of the business to provide a value of the return on investment generated on an annual basis.

There are various methods used to derive a value of the investment. Ultimately the Commission is seeking to determine the financial value of the business. Thus, while some estimation of value may be built around the asset values of the business (the Regulated Asset Values Base or RAB), effectively the Commission is attempting to derive an 'economic value' of the business reflecting not simply the investment that has been made in the business over a period of time, but the value of the business to its owners (and therefore the value on which they would expect to generate a financial return).

There are various options available to the Commission in terms of the valuation that should be used. These include:

- ✚ Historical Value: this represents the written down book value of the business. The advantage of this approach is that the value can be readily obtained from the financial account of the business. However, this value will be in Kina of different years (and therefore of different underlying value) and the assets may no longer be fully utilized (that is, sub-optimal) and therefore do not generate a return to the business

Optimised depreciated replacement costs (ODRC): this form of valuation reflects the current costs of the assets that are in use after allowance for assets that are not fully used (optimised out of the valuation) and deduction for the value of assets that have already been 'consumed' in an economic and financial sense (depreciation). The advantage of this approach is that it effectively represents the value of the business if a new entrant was to buy the assets at their replacement costs today. The disadvantage is that it represents an upper end of the valuation scale and its determination is open to a high level of subjectivity in terms of the equipment and technology that might be used to undertake flour milling in PNG

- ✚ Optimised deprival value (ODV): essentially this valuation reflects a compromise in terms of the two extremes of historical value and ODRC in that it is measured as the lesser of ODRC and the value that the asset owner would have to be paid to compensate them fully if they were deprived of the asset. The value that the owner would be paid if they were deprived of the asset is the greater of the scrap value of the asset and the economic value.

The economic value is usually determined by the use of some form of Return on Asset Test (RAT) or may be determined based on a market value of the business if it is sold as a going concern. The advantage of the ODV valuation is that it reflects the market value of the business and as the Commission is seeking to determine a financial value upon which to apply the WACC to generate the return on investment, it more closely reflects this objective than say the historical or ODRC valuation methodology.

The Commission seeks comments on the methodology used to derive a Regulated Asset Base for purposes of applying the WACC to generate the return on investment

Using a building block methodology that seeks to establish a price path over a number of years, it is normal practice to roll into the RAB new investment that occurs over the regulatory period. New investment would only be rolled into the RAB on which a return on investment is calculated if the investment is considered to be prudent.

The Commission will require information on the projected prudent capital expenditure likely to be incurred by the flour businesses over the period of the regulatory price path.

Adjustment to the RAB is also required for the consumption of capital (that is depreciation) and asset sales and disposal that occur over the period of the price path. The Commission will need to obtain information on the rates of depreciation applied to various asset categories by the industry and to projected asset disposals or sales over the period.

The Commission is seeking information on:

- *The prudent capital expenditure over the regulatory period**
- *The rates of depreciation used on the remaining asset lives of existing assets**
- *Anticipated scrapping or disposal of assets over the period of the price path**

5.4 Price path determination

The building Blocks model is designed to provide an efficient cost based estimate of the revenue requirements of the flour milling businesses over the price path period. This estimated revenue requirement will be expressed in current or real

terms, depending on the form of modeling undertaken. The projections of anticipated costs are based on the best available advice at the time the price path is set. However, the revenue projection will need to take into account actual changes in underlying costs over time. The rate of actual costs changes across the economy (the level of inflation) may in practice be different to the estimates included in the building block cost modeling.

Thus, it is normal to link the revenue requirement to some form of inflation based formula, such as of the CPI +/- X type. In effect, this formula, which is based on the revenue requirement derived from the cost building block modeling, allows for changes in the general level of inflation (the Consumer Price index or CPI component) and makes an adjustment through the X factor for changes in efficiency levels, demand projections, capital investment requirements, and other factors that have been built into the modeled required revenue projections.

While it is normal to use CPI in this type of price/revenue adjustment formula², it is also possible to use other indicators of underlying cost changes (such as movements in relative exchange rates). The Commission would favour the use of CPI rather than exchange rate adjustments.

For an industry such as flour milling where a high proportion of the final value is a reflection of the value of the imported grain, there may be merit in deriving a pricing formula which separates the cost of imported grain from the domestic incurred milling/production and packaging costs. In these circumstances the Commission would need to satisfy itself that the cost of the grain being included in the final revenue requirement and price path formula reflected an arms length, commercial price at world parity rates. This is an option that the Commission will need to consider.

The Commission invites submissions on the appropriate form of the required revenue/price path formula that should be used for flour milling. The Commission also seeks comments on the possible treatment of the costs of grain in the pricing formula

5.5 Price path period

Incentive regulation of the type the Commission favours requires that the price path be set over several years (rather than a year on year process as inherent in a 'cost plus' approach). The Commission would normally favour a five year price path. This allows sufficient time for the pricing formula to maximize its desirable attributes of encouraging greater efficiency while providing price certainty for both consumers and suppliers. It also reduces the dead weight cost of repeated intensive price reviews.

² The Commission uses an 'adjusted' CPI prepared by the National Statistician which excludes betel nut and alcoholic beverages

Under a CPI +/-X price path, the regulated business effectively faces a price or revenue cap on its sale of regulated goods and services. Provide the regulated business can retain its cost within the cost projection used in the building block model used to derive the CPI +/-X price path; the regulated business will earn a commercially acceptable rate of return and recover all efficient costs. If the business can reduce costs below those included in the building block model, the business can retain the financial benefit of these cost savings for the period of the price path. There is no claw back or requirement to force these additional cost savings to be passed through to consumers during the period of the price path. To achieve cost savings, the regulated business will in all probability want more than one or two years to put into place various cost savings technologies. The CPI +/- X form of regulation provides the incentive for the business to make these types of cost saving investments. A five year price path allows sufficient time for the industry to implement cost saving technologies.

The Commission invites comments on the length of the regulatory period

5.6 Price for individual products

The price path if expressed in total revenue requirement terms, needs to be converted into prices for individual flour products. The industry produces a range of products and different product sizes. A price control mechanism needs to define how prices for individual products should be changed consistent with the overall total revenue requirements.

A number of options are available to the Commission. These include:

- ✚ Setting prices for individual products based upon some form of direct cost allocation methodology for each product and adjusting these prices in accordance with movement in the price path formula
- ✚ Setting an average price for a basket of similar products, allowing individual prices within this basket to be set by the manufacturer/supplier and adjusting the average price using the price path formula
- ✚ Setting a total revenue cap and allowing prices to be set that, together with demand projections, result in total revenue outcomes consistent with the required revenue cap

The Commission is seeking comments on the way in which prices for individual types and sizes of products should be set consistent with the overall objective of recovery of the efficient building block costs

5.7 Coastal freight

Coastal freight costs under the current regulatory formula are included in the cost recovery for flour products ex-factory. These costs reflect the average cost of delivering products to outlying areas in the country, depending upon the contractual arrangement between the flour milling company and the local shipping operator.

The Commission must determine whether prices should be set ex-factory at the place of manufacturer or ex warehouse in Lae and Port Moresby, or delivered to the customer/retailer. The Commission must also determine what is an appropriate efficient cost for that freight service. The Commission also needs to consider how and whether to regulate this cost.

The Commission notes that for some other products, coastal freight charges are regulated (e.g. petroleum products), but for others non-coastal freight charges are not regulated. The Commission must consider whether this differential treatment of coastal freight from other freight should continue.

The Commission is seeking submissions on the inclusion of coastal freight as part of the cost build up for ex-factory/warehouse prices. The Commission is also seeking input as to what value should be applied to such freight services and how this cost should be adjusted over the period of the price path

5.8 Timing of price adjustments

If the results of the review allude to some form of continued price regulation, the Commission will seek to put into place a price determination which will provide a degree of automatic adjustment to prices within an overall incentive based price path model. In effect this approach envisages that price adjustments would be made annually, and that during each year the business would manage its overall costs such that it keeps its total costs within the modeled revenue requirement derived from the forward projection of the efficient cost building block model.

The industry has indicated that it is seeking more regular price adjustments, reflecting movements in the cost of production including the cost of the main ingredient, imported grain.

More regular price adjustment effectively reduces the incentive pricing methodology to a cost plus form of regulation with all its associated disadvantages to the industry as well as the whole community.

One alternative may be to allow regular (for example, monthly) flow through adjustments in price for changes in the cost of imported grain. The Commission would need to be satisfied that these costs were determined on an arms length basis and reflect movements in an import parity price for grain.

Under this arrangement the Commission would effectively set the revenue requirements for the production and packaging functions undertaken by the flour mills. To preserve the advantage offered by an incentive regulation methodology, the production/packaging margin could be set on an annual basis, thereby encouraging the flour mills to manage their operating costs (other than the grain cost) within the cost based revenue requirements of the production and packaging activities of the mills. The cost of the grain landed in PNG would be allowed to flow through to the final price for flour, and then using an appropriate formula, converted to a price for particular flour products and package sizes.

The Commission is seeking views and submissions on the timing for price adjustments under the regulatory price path, and what options might be available to retain the benefit of an incentive form of regulation while at the same time allowing for a pass through of certain significant costs

6. Wholesale Margin on Flour Products.

6.1 Activities covered

At present, the wholesale activity is undertaken by various wholesalers and to some extent by the two flour companies (AML & Mainland Holdings Ltd) in cases where a major retail operator purchases direct from the flour factory. The current wholesale margin on flour products is set at 11%. This margin does not cover the cost of freight from the wholesaler's premises to the retailer. These costs are separate and are not subject to price control under the current arrangements. For some of the larger wholesalers/retailers; the distribution task is undertaken as an integral part of their total trading function.

The current allowable retail margin for flour is 10%. However, where a retailer purchases direct from the flour mill at ex-factory price, he is allowed a margin of 18%. In addition, to discourage direct purchasing, AML applies an 8% charge above its ex-factory price for purchases below 10 tonnes.

The wholesaling function is undertaken by a limited number of businesses in PNG. While some degree of competition exists between wholesalers/retailers in the larger centers where consumers can access more than one retail outlet, the opportunity for competition is not as high in other centres and remoter locations. In these circumstances there is the potential for market power to be exercised in a manner that could disadvantage consumers.

The Commission must consider whether some form of regulation of wholesalers' margins should continue and if so what form of regulation (i.e. price control or price monitoring) should be used. Submissions are invited on this issue

6.2 Form of regulation

Assuming price regulation continues in some form, the Commission must decide the most appropriate way of applying that regulation. If price monitoring is adopted whereby the wholesaler could set their own wholesale margins, the Commission would compare movements in this margin with an appropriate benchmark with the threat of full price control should margins be increased above an appropriate benchmark. This is a less intrusive form of regulation, although it requires access to some form of benchmark that can be readily obtained and used for price monitoring purposes.

If a price control mechanism is used, the Commission would need to determine the appropriate level of the wholesale margin and the process whereby an approved change in the margin could be made. The process of reviewing changes in the margin in response to an industry request would necessitate a lengthy and detailed process whereby the Commission would effectively need to model the efficient costs of wholesaling flour.

Rather than undertake a detailed review of these margins each time a change is requested, the Commission could adopt a 'price path' approach similar to that discussed above whereby the Commission would evaluate an appropriate formula linked to some appropriate indicator of cost changes (and incorporating some form of efficiency adjustment) and this formula could be applied over a number of years without the need for a full price review.

This form of regulation is often referred to as 'incentive regulation', and the price adjustments formula used is often of the $CPI \pm X$ type. It is this type of price adjustment mechanism that has been used to regulate the declared industries of *inter alia* electricity, telecommunications and harbours services. The advantage of this approach is that it provides a greater degree of certainty to the regulated business while at the same time ensuring that consumers are not required to pay any more than the efficient cost of delivering the service. It also has other advantages in that while the initial price path process is data intensive, the price adjustment mechanism over the price path period is relatively simple, cost effective and non intrusive.

The Commission has found that the present annual system of setting the wholesale margin is expensive and time consuming, and may not be reflecting adequately the efficient cost of the wholesaling activity.

At the same time, the Commission acknowledges that, in terms of the wholesaling function the ability to separate the costs of wholesaling flour from the wholesaling of other regulated and unregulated goods and services handled by a wholesaler raises considerable practical difficulties. In these circumstances the Commission may have to consider an alternative approach of reviewing more broadly the wholesale margin applied to a range of food products. The Commission currently applies a standard 11% wholesale margin on a range of regulated food products such as tinned fish, tinned meat and rice. In these circumstances a broader examination of the wholesale margin on regulated foodstuff as a group may be a more appropriate approach at this time.

The current regulated wholesale margin is based on a percentage markup of the product price. This percentage markup has remained fixed for many years. Any increase in the kina value of the markup has been dictated by changes in the ex-factory price of flour. The continual use of a percentage markup may have some practical advantages from a regulatory perspective provided it represents a reasonable reflection of cost recovery. The Commission will consider the relative merits of an absolute kina value versus a percentage markup approach to set the wholesale margin.

The Commission is seeking views on the way in which price regulation of the wholesale sector of the flour industry should be undertaken. In particular the Commission notes the requirements of Section 21 (2A) of the Price Regulation Act and the need for the Commission to have regard to the desirability of encouraging greater efficiency in the industry, the cost of supplying the wholesale service, and the need to ensure that an appropriate rates of return on any investment be provided while also protecting consumers from the misuse of market power. The Commission is seeking views on how best to balance these various requirements. The Commission is also seeking information on the level at which the wholesale margin should be set

7. Retail Margin on Flour Products

7.1 Activities covered

The retail sector of the flour industry is operated by businesses such as trade stores and supermarkets. The larger supermarkets usually have their own wholesaling division and supply many of the small retail outlets and trade stores. There appears to be a high concentration of market power in the hands of a relatively few retail/wholesale businesses in PNG. While there is some evidence of competition between these businesses in the larger centers such as Port Moresby and Lae, in the smaller centers and remote rural locations there is little if any competition between retail outlets for the sale of flour products.

Currently the retail margin of 10% is declared under the Prices Regulation Act (amended) and is factored into the final flour product price. The 11% margin on the into store price for the retailer has been fixed at this level for a number of years.

The retailing activities of retail stores cover both regulated flour products plus a wide range of other regulated and non-regulated products. Thus, in any consideration of the appropriate costs to be recovered from the regulated products, allowance must be made for costs that more appropriately relate to unregulated activity.

The Commission must consider whether some form of regulation of retailers' margins should continue and if so what form of regulation (i.e. prices control or prices monitoring) should be used. Submissions are invited on this issue

7.2 Form of regulation

Assuming price regulation continues in some form, the Commission must decide the most appropriate way of applying that regulation. If price monitoring is adopted whereby the retail outlets could set their own margins, the Commission would simply compare this with an appropriate benchmark with the threat of full price control should the industry lift their margins above that indicated by the benchmark. This is a less intrusive form of regulation, although it requires access to some form of benchmark that can be readily obtained and used for price monitoring purposes. Also, with a large number of small retail outlets and limited competition between these retail outlets in most instances, there may be little incentive for an individual retailer to keep the retail margin within the bounds set by the benchmark. This would also create monitoring and compliance checking problems for the Commission.

If a price control mechanism is used, the Commission would need to determine the appropriate level of that margin and the approved change in the margin before any change can be made. The process of reviewing the margin in response to an industry request would necessitate a lengthy and detailed process whereby the Commission would effectively need to model the efficient costs of supplying the retail service. This could be costly and intrusive approach for individual small retailers.

As referenced in discussion on the wholesale sector, the Commission could adopt a 'price path' approach whereby the Commission would evaluate an appropriate formula linked to some appropriate indicator of cost changes (and incorporating some form of efficiency adjustment) and this formula could be applied over a number of years without the need for a full price review.

This form of regulation would give incentive and stability for future planning purposes for small business retail operators while at the same time ensuring that consumers are not required to pay any more than the efficient cost of delivering the service. It also has the other advantage that while the initial price path process is data intensive, the price adjustment mechanism over the price path period is relatively simple, cost effective and non intrusive.

The use of some form of a price path linked to an indicator of cost inflation such as the CPI assumes that the price control mechanism would be based on a kina value. However, the present margin is based on a percentage mark up on the 'into store' price for the retailer. This margin increases or decreases along with movements in the 'into store' price. In one sense it already incorporates an inflation adjustment in that as the cost of producing flour increases so the kina value of the retail margin increases. However, this may not be appropriate particularly when a large proportion of the into-store value of flour is the cost of the grain, a cost that is largely determined by the international grain market and by movement in the Kina's value against foreign currencies. The Commission must therefore decide whether an absolute kina value should be used as the determinant of the retail margin or whether a percentage margin as applied at present should be retained.

The Commission is seeking views on the way in price regulation of the retail sale of flour should be undertaken. In particular the Commission notes the requirements of Section 21 (2A) of the Price Regulation Act and the need for the Commission to have regard to the desirability of encouraging greater efficiency in the industry, the cost of supplying the retail service, and the need to ensure that an appropriate rates of return on any investment be provided while also protecting consumers from the misuse of market power. The Commission is seeking views on how best to balance these various requirements. The Commission is also seeking information on the level at which the retail margin should be set

8. Appendix 1

Section 21 (2A) of the Prices Regulation Act Chapter 320

When making an order under Subsection (1), the Commission shall have regard to:

- A. the need to protect consumers and users of the declared goods or services from misuse of market power in terms of prices, pricing policies (including policies relating to the level or structure of prices) and the standard of the declared goods or services;
- B. the cost of making, producing or supplying the declared goods or services;
- C. the desirability of encouraging greater efficiency in relation to making, producing or supplying the declared goods or services;
- D. the need to ensure an appropriate rate of return on any investment in relation to the declared goods or services;
- E. the borrowing, capital and cash flow requirements of persons making, producing or supplying the declared goods or services;
- F. considerations of demand management and least-cost planning;
- G. existing standards of quality, reliability and safety of the declared goods or services, and the desirability of encouraging improvements in those standards;
- H. the effect any proposed order on **general price inflation** over the medium term; the economic and social impact of ant proposed order; and
- I. any other matters the Commission considers relevant.