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Reforming the European Union's sugar policy

Summary of impact assessment work

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Introduction

In 2001, when the Council renewed the Regulation on the common market organisation (CMO) for the sugar sector for five years, it mandated the Commission to present a report in 2003 on the operation of the regime with, if necessary, proposals for its revision¹.

Alongside an evaluation of the CMO² carried out in 2000, the Commission decided that to prepare the report it would commission three studies from outside bodies to evaluate the impact of different reform scenarios³ and to compare the conditions of competition and concentration⁴ and the price transmission mechanisms⁵ in four agri-food sectors, including sugar.

In accordance with its communication of June 2002⁶, the Commission also decided to carry out an extended impact assessment on the preparation of the report. In view of the effect that the sugar CMO has and its relationships with other Community policies, it entrusted this analysis to an interservice steering group (ISG) representing fourteen Directorates-General and other departments. Assessment of the economic, social and environmental aspects of the sugar regime and the impact which the different reform scenarios could have on the parties concerned in the Union and in third countries was thus able to benefit from a diversity of expertise.

From January to July the ISG's approach followed the steps set out for conducting impact assessments. The different sections of this report each correspond to one of these steps. They are preceded by an introductory section which details the main features of the sugar economy and the sugar CMO (part 1).

The second part of the report details the changes and tensions confronting the CMO and the criticisms expressed by various interested parties and organisations (part 2).

The CMO's objectives are then reconsidered in the light of the Union's new commitments, the European sustainable development strategy and the general direction of the reformed CAP (part 3).

Four 'families' or sets of options are identified which reflect the different thinking on the reform of the sugar regime. The "status quo" set (no change) and the "fixed quotas" set are characterised by high prices and regulation of the market via variable or fixed quotas. The "price reduction" and "liberalisation" sets of options regulate the market by maintaining a balance between prices and costs with or without tariff protection (part 4). Their impact on production levels and location, prices, farmers' income, the sugar industry, employment, the environment, competition and concentration, import flows from third country sugar producers and the budget are first discussed in qualitative terms (section 4.1). They are quantified using

NEI(2000), Evaluation of the Common Organisation of the Markets in the Sugar Sector, http://www.europa.eu.int.

COM(2002) 276 of 5 June 2002 on the impact assessment.

From the agri-food industries using sugar or NGOs involved in development cooperation to the European Court of Auditors, via international bodies such as the OECD, and Brazil and Australia, which have submitted a complaint to the WTO.

Article 50(2) of Regulation (EC) No 1260/2001.

³ Study to Assess the Impact of Options for the Future Reform of the Sugar Common Market Organisation, http://www.europa.eu.int.

Study on the Structure of Competition and the Degree of Concentration in the Agri-Food Sector, http://www.europa.eu.int.

⁵ Study on Price Transmission in the Agri-Food Sector, http://www.europa.eu.int.

various modelled simulations and discussed in broader terms in the following section where they are regrouped under the three facets of sustainable development: economic, social and environmental (section 4.2).

An overview of the advantages and drawbacks of the different scenarios is given in the final part of the report. The options are ranked according to how well they respond to the challenges identified, the degree to which they meet the objectives and their effect on the stakeholders, on the budget and on global welfare (part 5).

In March the scenarios formalised by the ISG and an outline of their impact were submitted to the standing group on sugar of the Advisory Committee on the CAP. They were also forwarded to the secretariat of the Group of African, Caribbean and Pacific countries (ACP), and to other interest groups. On that basis the different parties represented were asked to present their positions and comments.

From April to June the ISG organised five working meetings with organisations representing beet growers, sugar manufacturers and refiners, user industries, consumer organisations, NGOs involved in development cooperation and environmental protection and ACP country representatives. The organisations consulted and a list of contributions received are given in Annex I. The substance of the positions expressed in their contributions on various aspects of the CMO and on reform options is considered in the corresponding parts of the report. The thematic contributions drawn up under the aegis of the members of the ISG are listed in Annex II. Further annexes set out the mandate and composition of the ISG and a bibliography of the documentation used in the course of its work (Annexes III to V).

The ISG also took note of an impact assessment carried out by LMC International for the European Committee of Sugar Manufacturers (CEFS), whose terms of reference were the same as those for the options study requested by the Commission, but which used a different methodology. The CEFS made the report of that study available to the ISG.

1. SUGAR AND SUGAR POLICY

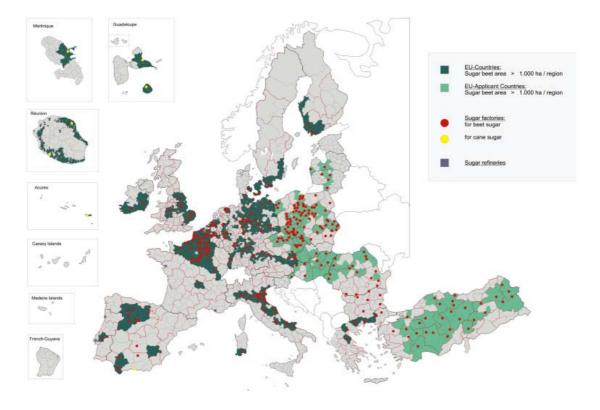
Sugarbeet growing was introduced only at the end of the 19th century in northern France in order to break dependence on sugar cane from the colonies, the sole source of sugar at the time, which made it a rare and precious commodity; the crop gradually spread throughout Europe. From the 1920s on, with the development of maritime transport, sugarbeet production faced competition from cane sugar and has only survived as the result of ever greater tariff protection.

1.1. The salient features of the sugar economy

Sugarbeet growing today covers 1.8 million hectares in the Community of 15, which is 1.2% of utilised agricultural area (UAA) and amounts to 1.6-1.8% of its agricultural production. Sugarbeet is grown on some 230 000 holdings alongside other crops such as cereals. As a general rule, holdings growing sugarbeet are larger than the average, being some 70 ha in size, with 8 ha for sugarbeet, in contrast to an average of 20 ha for holdings as a whole. They also have a higher income. Data from the Farm Accountancy Data Network (FADN) indicate that income per annual agricultural work unit is 1.7 times higher on sugarbeet holdings than on holdings as a whole.

Sugar production in the Community of 15 varies between 15 and 18 million tonnes. It is in the hands of 30 firms owning 135 sugar-mills and 6 refineries scattered throughout sugarbeet growing regions (sugar mills) or near port areas (refineries). Sugar-mills are located close to growing regions because of the cumbersome nature of the beet, making transport costs particularly high above a distance of 100 km.

Sugarbeet growing regions, sugar-mills and refineries in the Community of 25 \pm



Because sugarbeet is perishable the mills only operate during the season, some three months. They therefore need to have an adequate daily processing capacity, this representing particularly heavy investment. The replacement value of a plant of optimum capacity (>10 000 t/day) is currently estimated at EUR 200 million.

All Member States except Luxembourg grow sugarbeet. France and Germany account for more than half the Community of 15's production. They are followed by the United Kingdom and Italy, each accounting for 8%. With the ten new candidate countries, area under sugarbeet will increase by 30% and sugar production by 15%. Of these new Member States six produce sugar, Poland being the main one with an average production of 2 million of the 3 million tonnes produced by all six.

Both importer and exporter, the Union is ultimately a net exporter of sugar. Sugar represents 2-3.5% of the Union's agri-food exports. During the nineties the Union averaged 5.3 million tonnes of exports against 1.8 million tonnes of imports. The net export balance is therefore between 15% and 20% of production. Of the new Member States, Poland is also a major exporter, so after enlargement the Union will still be a net exporter.

The Union is a key figure on the world sugar market. It represents 13% of the production, 12% of the consumption, 15% of the exports and 5% of the imports of the world. However, those percentages are in decline while the southern hemisphere countries show regular growth. Since 1996 Brazil and India have taken over the leading sugar producers, a position held by the Union for decades. Together they account for 30% of world supply. India has also overtaken the Community of 15 in terms of consumption.

Although the major producer countries are also major consumers, sugar is a widely traded product. International trade, with a volume of 40 million tonnes, accounts for an average of 30% of world production, which is about 135 million tonnes of refined sugar equivalent. Brazil now dominates the market with a share corresponding to one quarter of world exports. World market prices are therefore very important.

World market prices for sugar are highly volatile. They move erratically and can reach exceptionally high or low levels. After historically high levels in 1974 and 1981, they fluctuated during the nineties between €115 and €260/t. Since 1995 they have been in decline, mainly because sugar production is exceeding consumption, this being reflected by an increase in stocks by comparison with utilisation.

Among the factors explaining price movements, consumption is increasing steadily and is a driving force on the market. However, there are differences from one group of countries to another and the increase in consumption is much greater in the developing countries. Sugar imports depend on macro-economic and political factors. Production is not very price-sensitive. This reflects the perennial nature of sugar-cane growing, with a planting cycle of an average of 6 years and representing 75% of sugar-growing land, but also the particularly long lead-time of investment in the sugar industry. By contrast, supply is highly dependent on climate and revisions of production estimates provoke significant adjustments in international prices. In addition, sugar exports are dependent on a small number of countries which are also the major world producers – Brazil, the EU, Australia, Thailand and Cuba account for 70% of global exports. Lastly, in all those countries both supply and demand are affected by public intervention, which reduces or delays the need for structural adjustments.

1.2. The sugar CMO

When it was created in 1968 the main purpose of the common market organisation (CMO) in the Community sugar sector⁸ was to guarantee its producers a fair income and to supply the market from its own production. Import levies guaranteed solid protection from third-country competition; aid to the sector was via profit-bearing prices paid for by consumers. The scheme scarcely required any budget expenditure. Community production was fenced around by guaranteed quantities (commonly known as quotas) corresponding to Community demand. Contributions levied on producers and paid into the Community budget were intended to cover the cost of exporting the surplus of production over consumption (export refunds).

The first change was in 1975 following the United Kingdom's accession. At that time the CMO took over some of its commitments, particularly to the ACP countries. The 'Sugar Protocol' opened the Community market to a cane-sugar quota from 19 ACP countries which benefited from that preferential access at Community prices. Addition of those extra quantities made it necessary to export an equivalent quantity of sugar, the refunds being charged to the Community budget. That opening of the market for Community refinery needs was reinforced – albeit to a limited quantity – when Portugal and then Finland joined.

There was a more recent amendment to the arrangements in 1995 following the Uruguay Round, with a restriction on export refunds. The CMO had to adapt by making provision to reduce quotas in the event that the limit on refunds meant that the available surplus on the Community market could no longer be exported with refund. Since then, in practice, if imports increased the market equilibrium was re-established by reducing Community quotas (reduction mechanism). That provision has not been used for some years. Nevertheless, the restriction imposed by the WTO's Agreement on Agriculture and the opening up of the Community market, particularly to the Balkans in 2001, have brought about an increased supply of sugar and reductions in quotas.

The CMO is regulated by Regulation (EC) No 1260/2001, which expires on 30 June 2006.

2. TENSIONS AND CHANGES

In essence, the sugar CMO was left out of the CAP reform process which started in 1992 and has continued since then, and was only slightly affected by the Uruguay round of trade negotiations. Its relative longevity bears witness to a certain degree of success, although at a high cost with regard to the achievement of the initial objectives assigned to it. Today it is experiencing pressure which is profoundly changing the prospects for the sector and is also being subjected to criticism, sometimes years-old, from numerous and varied sources.

2.1. A CMO that escaped CAP reform

Since the early 1990s the reform of the CAP has consisted in moving away from price support towards direct support to farmers. Internationally, this has been accompanied by a process of harmonising the internal support conditions for agriculture and arrangements governing trade in agricultural products.

The sugar CMO is not involved in that change.

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Council Regulation No 1009/67/EEC, OJ B 308, 18.12.1967, p. 1 (English Special Edition Series I-67, p. 304).

In nearly all countries sugar production benefits from special support arrangements while the ACP countries also benefit from the Community system thanks to the Protocol. The international pressure for change has therefore for a long time been less in the sugar sector than in others. Today, that is no longer the case.

While keeping the main principles of its organisation intact, the CMO has also managed to adapt to external changes, including five enlargements and the Uruguay Round Agreement on Agriculture.

However, this exclusion from reform encouraged support in the sector to develop in a way that created competitive distortions among farmers. The general spread of single decoupled aid in most agricultural sectors and the introduction of degressivity threaten to make those distortions worse. Without reform the sugar sector would remain sidelined from the movement towards sustainable agriculture guided by the market.

2.2. A supply balance under great pressure

With stabilised consumption, imports under quotas and sugar production varying slightly from one year to the next, exports have long been the safety valve for a Union supply balance which is particularly stable.

The commitments in the Uruguay Round Agreement on Agriculture scarcely affected that situation. The overall reduction in internal support did not affect sugar because that commitment was met thanks to major price reductions in other sectors such as cereals. The minimum access obligation was more or less covered by preferential imports. Customs duties remained particularly high thanks to the choice of favourable historical reference points. In addition, the special safeguard clause remained in application because the trigger price was twice as high as world market prices for non-preferential trade. The protection thus obtained in fact prohibited any non-preferential importing. Only the ceiling on exports using refunds had a restricting effect, necessitating the introduction of a quota reduction mechanism applied from 2000 on.

Now, as the Union is on the point of a new enlargement, the stability of the supply balance is seriously threatened. Under the cumulative effect of the commitments negotiated multilaterally within the WTO, the unilateral concessions to the least-developed countries (LDCs) and the Balkan countries, and the possible threat to the export scheme following the complaint made to the WTO by Brazil, Australia and Thailand, the sugar trade balance could rapidly invert and weigh heavily on production opportunities. The latter would then become the new safety valve for the Union's supply balance.

2.2.1. Reduced export opportunities

In the WTO the Union is proposing a substantial reduction in the volume of exports using refunds and a reduction of 45% in their budget envelope. At the current average refund cost (€480/t) those proposals translate into a reduction in exportable volume to less than 0.6 million tonnes. The Harbinson proposals, more ambitious still, provide for the total elimination of refunds over 5 and 9 years. They would remove the possibility of exporting a volume of the order of 1 million tonnes.

The refund reduction obligations do not include the re-export of sugar from India and the ACP countries, the Community not having entered into a reduction obligation for this. However, a complaint made to the WTO by Brazil, Australia and Thailand asks for that exemption to be abolished. This could mean an additional reduction in exportable volume of 1.6 million tonnes.

An unfavourable ruling from that panel could also mean the abolition of exports of C sugar exported without refund. The plaintiffs claim that it is being exported at lower than production cost thanks to the high level of support for A and B quota sugar. The export potential in dispute would be some 3 million tonnes.

All other things being equal - in particular, assuming that the difference between the internal price and the world price, which makes the European market very attractive, is maintained - if all these adverse prospects for exports come to pass the Union would no longer be able to export.

2.2.2. A potentially substantial flow of imports

Where imports are concerned, the concessions granted to the western Balkan countries already authorise free access, under certain conditions, to the European market for their entire production. That freedom was granted to the least-developed countries under the Everything but Arms (EBA) initiative. It was introduced gradually from 2001 by increasing preferential quotas and will have a significant impact from 2009, when free access becomes effective. Under those terms, while European prices continue to remain attractive we can anticipate three types of reaction:

- diversion to the Union of exports up to then intended for the world market.
- arbitrage operations diverting local production towards the Union while sugar bought on the world market is substituted for domestic consumption. The Balkan countries have already been placed in that situation.
- increases in production capacity to supply the European market from countries where production is more competitive (Mozambique, Sudan).

On the basis of current trade flows, capacities and known investment plans, LDC export potential is gauged at between 0.9 and 2.7 million tonnes and Balkan export potential at between 0.5 and 0.9 million. Leaving aside the possibility of re-export after processing, thus justifying acquisition by the product of LDC or Balkan origin, experts place total potential at between 1.5 and 3.5 million tonnes towards 2010 to 2015.

At the moment only a few ACP countries are benefiting from zero-duty and guaranteed-price quotas under the Sugar Protocol. That protocol will have to be reviewed in the light of the new Economic Partnership Agreements (EPA) currently being negotiated. In that context, free access to the European market could be extended. The diversion of ACP sugar exports to the Union could reach 3.5 million tonnes and diversion of their entire production could reach 6 million. In addition, current negotiations with Mercosur could represent another source of increase in potential imports.

Without anticipating the analysis of the pressure which sweeteners, competitors for sugar, would exert if they were produced in Europe assuming the current policy of limitation were reviewed, we should also mention the concessions granted to Turkey and Israel under the Euro-Mediterranean agreements for the import of fructose. The production capacity which sprang up as a result of those agreements could displace some 0.3 million tonnes more sugar from the internal market.

2.2.3. Internal market protection will have to be reduced

During that period Community proposals for tariff reductions (-36% on average) could mean a reduction in tariff protection from its current level of €419/t to €268/t, or even €168/t in the case of the Harbinson proposals (-60% on average). Negotiators also believe that it is very unlikely that the special safeguard clause can continue to be applied on a permanent basis.

So, although difficult to estimate with any precision, the way the main elements of the Union supply balance is developing and the magnitude of that development are relatively clear. By 2010-2015 the next CMO will be confronted with:

- the inevitable reduction of internal prices linked to a reduction in external protection,
- reduced opportunities to export, especially with refund,
- a major increase in preferential imports,
- increased pressure on the European market from competing products.

The result will be limited scope for European sugar production, which will of necessity diminish.

2.3. A controversial CMO

While being subject to great external pressure, the CMO is also under pressure from within. Since 1975 the Court of Justice has been pronouncing strong reservations on the CMO and its impact on competition⁹. In 2000 independent experts carried out an overall evaluation of its operation¹⁰. In the same year the European Court of Auditors made it the subject of a special report¹¹. Other national and international bodies have also analysed it¹². The authors analysed the CMO's performance vis-à-vis the objectives assigned to it by the legislators. They also attempted to take account of the impact of its operation on other sectors and public objectives in Europe and in other countries. The positions expressed in the contributions and consultations organised by the IGS broadly confirm the issues and judgements made in those works.

Security, stability and quality of **supply** on the European market are unanimously praised. The user industries, which are among the most critical of the CMO and which are well placed to assess it, acknowledge the exceptional quality of the supply guaranteed by European sugarmills, in terms of both products and services, even though they criticise the in their view excessive and unjustified cost.

The CMO's contribution to **price stability** is also acknowledged even though protection from the volatility of world market prices is bought at a **very much higher internal price** and an uncompetitive commercial environment.

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⁹ Court ruling, Suiker Unie et al. versus the Commission.

¹⁰ NEI (2000).

Court of Auditors (2000)

Swedish Competition Authority (2002); OECD (2002).

Its contribution to **maintaining farmers' income** is attested by the income levels of sugarbeet growers, which remain higher than for most other categories of farmers. However, that aspect has been criticised both because it causes distortion of competition among farmers and for reasons of fairness. The benefit of CMO support is enjoyed by the sugar industry and a minority of farmers, often better-off than the average taxpayer, to the detriment of other social categories.

On the other hand, the sugar CMO is severely criticised because it organises a vastly surplus sugar production which is disposed of on the world market to the detriment of more competitive producers with the aid of refunds the cost of which is ultimately born by taxpayers and consumers. With the exception of the sector's actors, all consulted parties and studies agree in condemning the export refund system. Several of them - leaving aside Brazil, Australia and Thailand - also criticise C sugar exports.

Linked to those criticisms, the interested parties and studies consistently mention **preferential imports** at guaranteed prices in favour of the ACP countries and, gradually, other developing countries. Although these are part of development policy rather than the CAP, their future is linked to that of the CMO.

Most of the ACP countries profiting from the Sugar Protocol praise the current CMO and want to maintain it, although they are dubious about the impact of extending the preferences to other countries. They justify their position by the multifunctional nature of their sugar production and by its direct and indirect social benefits which could not be taken on by public budgets. Some argue the irreplaceable role that cane-growing plays in preserving their environment. Some also point to the absence of realistic diversification options, their economies being dependent on the sugar sector. However, other ACP countries are advocating amendments to the CMO.

Some NGOs involved with the environment and development cooperation question the effectiveness of the current **system of preferences** and the selection criteria of those profiting from it. They accuse it of making no distinction between the situation of the countries or between categories of producers. Like the multilateral development agencies, they feel that it is helping to bias the allocation of resources, persuading some countries towards monocropping and activities that end up aggravating their dependence on unsustainable trade patterns without succeeding in putting them on the path to development.

The **high price** of sugar in the Community is severely criticised by the user industries and the consumer bodies on which it is imposed. Consumers criticise the high price they have to pay because of the CMO, which only benefits sugar growers. As a means of supporting farmers it is also criticised by economists for its lack of effectiveness and the distortions it has introduced on the market. In terms of purchasing power parity, the cost of sugar on the European market is about average for industrialised countries and lower than the price paid by the developing countries. However, when compared directly with the world market price, it is two to three times higher. The user industries feel that that difference is affecting their competitiveness. In any event they feel that this price differential should continue to be absorbed by refunds for the production and export of sugar products. If not, they feel that they would implicitly be forced to finance part of the sugar CMO.

The impact of a high price on intensification of farming methods and on the production of surpluses is also criticised by defenders of the **environment** and by the Court of Auditors. The sector defends itself against that charge by pointing to the significant progress made in recent years in improving farming practices, which has enabled the use of inputs to be rationalised, and to the increasing energy efficiency of sugar-mills¹³.

The agri-food industry complains of the restrictions imposed by the CMO on caloric **sweeteners** competing with sugar, the production of which is kept well below their potential use at current prices.

More fundamentally, competition monitoring authorities such as the Commission itself, national authorities, the Court of Justice, the Court of Auditors, the OECD, sugar-user industries and consumer bodies complain of the **lack of competition** on the European market and the guaranteed high margins that the system grants to sugar producers.

The lack of competition is generally attributed to the fundamental terms of the CMO, which produce the following direct effects:

- Production quotas limit the ability of the most efficient producers to develop, impose limits on the production of competing products, create barriers to the entry of new producers and are a concentration factor, the most competitive producers being sustained in their will to expand;
- The bureaucratic distribution of production via national quotas favours the partitioning of national markets;
- The intervention price, kept high, is a barrier to a competitive prices policy; the
 arrangements applying to relations with third countries to a large degree protect the
 Community market from external competition.

Indirectly, the CMO creates such conditions that the sugar industry finds itself, on the European market, placed in a situation of 'tacit collusion', encouraging market prices to be set at a level much higher than the guaranteed price without the need to form cartels¹⁴.

It is clear that the fundamental factor on which many of these criticisms are based is the regulation of supply by the imposition of quotas defined per Member State. The imposition of national quotas originates in a political choice to maintain sugar production in all the Union's Member States, thus favouring distribution rather than specialisation to exploit the comparative advantages of the single market. This original choice by the legislators, confirmed regularly at each enlargement, has had as a corollary the need to maintain the price of sugar at a level which covers the costs of producers located in regions less suited to sugarbeet growing and therefore less competitive. At the same time it guarantees the most efficient producers comfortable margins. The system also involves financing the export refunds of the most productive producers by means of a levy shared between all the actors in the sector but ultimately offset against the consumption price. More competition would without doubt bring the market price closer to the intervention price, which it has long had a tendency to move away from. The benefit would be appreciable. It is still a fact that the high intervention price is intrinsically linked to the priority given to maintaining sugar production throughout the territory of the Union.

Joint CIBE-CEFS report on the environment.

Cf., for example, the above report by the Swedish Competition Authority.

The Court of Auditors and the user industries also criticise the sugar industries' margin, which is said to be guaranteed by the difference between the sugar intervention price and the minimum beet price, regardless of the variation in costs and productivity gains. Also, they denounce the advantage given to the sugar industry through the allocation of quotas to sugarmills rather than to farmers¹⁵.

3. GUIDELINES FOR REFORM

The guidelines for reforming the sugar CMO are based on the above premises (part 2). They are linked to the European sustainable development strategy priorities as translated into the objectives of the reformed CAP. They also result from the need to pre-empt the changes which the Union's commitments will cause to the market organisations. Lastly, they take account of the need to respond to the problems or expectations brought up by the parties concerned or in the reports and studies.

The CMO reform should help the European sugar sector to restructure itself and become more competitive. In the not too distant future it will have to be able to survive, at least to a large extent, without export refunds and the high level of internal support that it enjoys. It will have to be able to cope with increased competition following on from the reduction in customs protection.

Given the prospect of increased imports under existing or foreseeable initiatives and agreements (ACP-EPA, India, MFN, EBA, Balkans), the reform should also attempt to create the conditions for long-term market equilibrium guaranteeing regular and secure supplies.

The new CMO should also encourage the sugar sector to contribute to the European sustainable development strategy. To do so, it must try to align the specific objectives of the sector to the objectives and intervention rules of the reformed CAP.

3.1. Objectives of the future CMO

The following seven objectives are directly inspired by the objectives in the most recent reforms of the CAP, but amplified and reworked:

- to guarantee regular supplies of sugar while protecting the European market from extreme price fluctuations,
- to make the sector more **competitive** and able to stand up to international competition,
- to provide farmers with a fair **standard of living** and maintain rural communities while moving from price support to a system of aid to producers linked to compliance with standards.
- to increase competition, offer users a fair price and diversify the range of sweetening products on offer,
- to limit the pressure on the environment caused by sugar production,
- to simplify the market organisation and make it more transparent,

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The latter criticism is weakened as major parts of the sugar industries become the property of agricultural cooperatives. More than a third of sugar firms are now owned by agricultural cooperatives.

 to limit its cost to the budget and contribute to secondary objectives under appropriate common policies.

3.2. Essential questions and issues

These objectives set a framework for the future CMO but are not enough to structure all its elements. More specifically, they cannot provide answers to a number of basic questions and dilemmas. For example, they do not indicate what balance is to be struck between the demands of trade liberalisation and Community preference. They do not remove the tension between the logic of the single market, which favours concentration in the most productive regions, and the political decision to maintain sugar production, even if at lower quantities, across the Union's currently productive zones and the new Member States.

The objectives also leave open questions such as the speed of the transition and whether and to what extent the restructuring will need accompanying measures, depending on the impact on the EU's regions. A slow, cautious transition would affect the stakeholders differently than would a rapid transition with clear moves towards the end-goal, thus influencing the progress and result of the restructuring. As far as accompanying measures are concerned, the objectives provide pointers on support for sugarbeet producers but not for the restructuring of the industry, let alone the consequences for third countries who derive benefit from the current price of sugar on the European market.

To meet its mandate while acknowledging its limitations, the ISG chose to explore four sets of options. They all satisfy the reform guidelines, giving different weightings to the priorities among the different objectives and taking different positions on the basic issues. This difference in positioning is used for the evaluation in the last section of this report (part 5).

4. THE FOUR SETS OF OPTIONS AND THEIR IMPACT

To comply with the objectives and constraints of the reform, four sets of options have been identified. These reflect the views of the different parties concerned and differ according to which instruments are used for regulating the market (prices or quotas), what kind of balance is sought (price level and supply sources) and their impact on the different categories of stakeholders and objectives. The selected sets include the various options analysed in the independent studies carried out for the reform and other studies conducted in recent years This work fed into the quantitative impact estimates.

Taken together, the four sets of options outline the possible future scenarios and contribute to a systematic exploration of their impact. Each looks at the main components of a future sugar market organisation in a different way and each also includes variants which set different parameters for the instruments which they may share, such as the arrangements for direct support to farmers or production quotas for alternative sweeteners.

The choice of instruments and parameters which specify the variants will influence the quantitative level of balances and the impact of the reform. Such choices are sometimes inevitable as between the different options presented, but the present summary mainly restricts itself to discussing the broad sets of options. Reference to choices among the different variants is by way of illustration or for quantification purposes required by the modelling exercise. These choices do not prejudge which variant will emerge at the end of the

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EuroCARE (2003) and LMC International (2003).

⁷ See list of works consulted, Annex V.

preparatory work as best reflecting the balance of interests and challenges at issue. The final variant therefore remains to be elaborated from the indications which are certain to emerge from the discussion which the Commission is seeking.

In the sets of options which choose market regulation by production quotas, the 'status quo' set of options adjusts these quotas annually to changes in the volume of imports. The 'fixed quotas' set of options presumes that production quotas will be reduced to a level to be agreed and that free import concessions will be converted into preferential quotas. However, this would require the Community to go back on its international commitments such as the Everything but Arms initiative.

In the sets of options which choose to regulate the market mainly through prices, the 'fall in prices' set of options presupposes a consolidated and more competitive sugar sector. In consequence, it also supposes a less attractive European market still retaining the conditions required for a system of preferential imports. The 'liberalisation' options presume that all administrative regulation of production, prices and trade will end.

Faced with the complexity of analysing the different impacts of each set of options, the steering group has chosen to supplement its investigation by analysing six horizontal issues¹⁸. This report adopts the same two-pronged approach, by option and by issue, in setting out the findings. The four sets of options and their impact are first presented and discussed in qualitative terms (section 4.1). Thereafter, the main quantitative results for 2010-15 are presented and their impact is explored as part of the thematic studies, grouped under the three facets of sustainable development: economic, social and environmental (section 4.2).

4.1. Approach by sets of options

For each set of options, this report examines the regulatory instruments, the market balance expected in 2010-15 and the main impacts, advantages and drawbacks anticipated.

4.1.1. Status quo

The status quo option involves extending the current regime beyond 30 June 2006, but there will nevertheless be substantial changes in the market situation.

Prices on the Community market, while lower as a result of the reductions negotiated in the WTO, would continue to be guaranteed at a level almost three times higher than on the world market. With that degree of difference, the concession of free access to LDCs from 2009 onwards stands every chance of acting as a suction pump which will bring about the reorientation and development of production in the third countries concerned in order to supply the European market. Experience over the past two years with the western Balkans also shows that, with that degree of difference, there are always operators who consider it worth trying to abuse the origin rules. Monitoring is already difficult and is being complicated further by the establishment of free-trade relations between some LDCs and major sugar-producing third countries.

Annex II contains the list of contributions produced for the six thematic explorations.

Under these circumstances, production supported by Community intervention (price and tariff protection) becomes a consequence of the actual volume of preferential imports and the reduction in support for exports which will have to be agreed within the WTO. If the WTO panel requested by Brazil, Australia and Thailand has a negative outcome, the status quo will amount to a drastic reduction in the production of sugar in Europe. The resulting reduction in the number of sugar-mills could be more than proportional, given that mills are viable only beyond a certain threshold of production capacity. The status quo option would involve a fall in the number of sugar-mills similar to what happened when the industry was rationalised and 25% of mills were closed between 1992 and 2000. A small proportion of production capacity could be converted to refine imported raw sugar. The benefit of Community support, ultimately financed by European consumers, would gradually be transferred to third countries and intermediaries.

Apportioned in accordance with the coefficients laid down in Regulation (EC) No 1260/2001, the reduction in production subject to quotas would affect all Member States regardless of their comparative advantages. This would leave them scope to optimise the pattern of the production capacity cuts in their territory. Beyond a certain level, however, the reduction of quotas would weigh disproportionately heavily on the competitiveness of the most efficient producers and would seriously hamper restructuring¹⁹. A negative panel outcome could therefore hasten the point at which a breakdown in solidarity would lead players in the sector to challenge the common market organisation.

By its very nature, extending the present Regulation would not have a corrective effect on the most controversial aspects of the market organisation and would not therefore allay the many criticisms formulated (see above at II.3), particularly regarding the lack of competition.

There would continue to be distortions among farmers related to the highly lucrative prices for growing beet compared to other crops.

As Community production surpluses vis-à-vis consumption diminished, so would the levies which finance refunds. This would lead to an increase in the net price of beet. The final impact on farmers' income would thus be rather small and would depend on the extent of the fall in beet production and alternative activities.

In a weak competitive environment the sugar industry's margins would continue to be guaranteed by set prices, regardless of the actual development of production costs. Market prices could even rise as producers sought to maximise their profits on smaller quotas.

The cost to consumers would remain high.

The disappearance of production surpluses will mean the disappearance of subsidised Community exports of quota sugar and the abolition of levies. Subsidised exports caused by preferential imports would continue to be borne by the Community budget. If the WTO were to impose a reduction in Community exports without refunds, there would be a greater reduction in Community production, which would benefit the market shares of producer third countries, mainly Brazil.

Extending the present arrangements would entail adapting quotas for alternative sweeteners in the same way as those for sugar. The scope for user and consumer choice would therefore not be improved.

Particularly because of the differing proportions of A and B quotas among Member States.

All else being equal, the cut in production would probably alleviate the pressures which Community oversupply exerts on the environment and the world market.

4.1.2. Fixed quotas

The prospect of returning to a more predictable situation which would permit investment again - although at the cost of a severely reduced level of activity - appeals to many in the sector. This is because the latter have started to experience the effects of automatically adjusting production quotas to changes in the level of preferential imports, some of which are already entirely quota-free (western Balkans). Possible arguments in support of this proposal, which runs counter to the EU's commitment towards LDCs, are the still isolated character of the European initiative (EBA) until the recent announcements by Australia, New Zealand and Canada, and the practical difficulties of preventing fraud in relation to the rules of origin.

The option of returning to fixed quotas would require the Community to go back on its international commitments like the Everything But Arms initiative, which opens up the Community market to all products from the least developed countries (LDCs). The EBA initiative is one of the pillars of the agricultural proposal on market access in the WTO and other international fora. Reintroducing tariff quotas would exact a high political price and harm the Community's credibility. However, the LDCs are themselves calling for negotiations to guard against prices falling to a level which would prevent several of them from enjoying free access and make substantial inroads into its benefits. Similarly, the ACP countries which are signatories of the Sugar Protocol have come out in favour of returning to fixed quotas.

In the case of the western Balkan countries, which are, or are likely to become, candidates for accession to the Union, it would be incongruous to encourage an increase in production and imports for local consumption only to have to absorb the quantities concerned - and compensate the supplier non-member countries - once they become members.

Returning to fixed quotas would entail considerably lower production quotas than at present. Preferential imports would be subject to quotas again, but the quotas to be negotiated would without doubt have to consolidate the highest export levels attained while taking into account the investment undertaken by a number of partners with a view to accessing the European market from 2009 onwards.

From the viewpoint of renegotiating the regime, the option of returning to fixed quotas could provide a Community framework for regulating the transfer of production quotas between cultivation areas, thereby seeking to introduce a decentralised mechanism for arbitration between the principle of cohesion and an allocation of quotas according to comparative advantage. Subject to certain conditions, the resources freed up by the sale of quotas could contribute towards financing rural development and alleviating the consequences of the cut in production. Such a system could, however, also weigh heavily on the restructuring efforts of competitive industries. It would affect producers differently depending on their funding capacity, thus leading to a more marked process of concentration.

Supported by a degree of tariff protection, internal market prices would remain relatively high and lucrative - including for the portion of preferential imports subject to quota. But the option would not preclude also providing for guaranteed prices to fall on terms similar to some of those contemplated for the set of options described at (4.1.3) below.

Besides the budgetary consequences referred to in connection with the status quo option, those of the fixed-quota option will depend on whether or not it is decided to initiate a price drop linked to the introduction of direct aid or the resources which might be needed to offset the renegotiation of the trade agreements and assist restructuring in the developing countries.

Increasing the quota for alternative sweeteners would fit in with the renegotiation of the set of options concerned, since the conditions underlying the original quota decision have changed.

The environmental consequences of this option would depend on the choice of alternative land uses and their location, but the reduction of production quotas is *a priori* quite favourable.

4.1.3. Fall in prices

This option presupposes that prices on the domestic market are supported by setting an adequate level of tariff protection. Quantitative market balance would thus be achieved by adjusting supply (Community and preferential) to prices free, at least in the long term, from production quotas.

The intervention mechanism, which in the case of sugar has remained unused over the last fifteen years, would, if necessary, be reduced to the role of a genuine safety net in the event of a sharp fall in domestic prices within a given threshold. It could even be abolished, the role of reference value then being played by a target price and the role of the safety net by an appropriate mechanism. In a context of an increase in non-quota preferential imports, market prices would then tend to adjust themselves to the entry price of non-preferential imports to which the tariff protection resulting from the negotiations in the WTO would apply, reduced if necessary to balance the market.

Reducing the internal price would make it possible to satisfy the external constraints while exerting less pressure on the production level. The Community market would become less attractive for quite a large proportion of exporters with high production costs - including a significant proportion of ACP countries.

To compensate where necessary for the effects of the reduction in the beet price, direct support to growers' incomes would be introduced in line with the reformed CAP. The rules for setting it could seek to reduce the differences in levels of support for different categories of grower. In the interests of fairness and to reduce its budgetary cost, direct aid could be granted for a limited number of hectares.

Production quotas would be abolished once the levels of imports and production had stabilised. They could even be abolished immediately if part of the direct payments remained linked to area with the introduction of a maximum area. Such abolition would bolster competition and intra-Community trade to the benefit of the most competitive producers. Depending on the price level decided, it would afford opportunities for developing the production of alternative sweeteners (isoglucose).

The effects of the fall in prices should be felt most in regions without comparative advantages, particularly after the abolition of quotas. Compensation to growers and any compensation for ACP countries by means of instruments outside the CAP could have a significant impact on the budget.

Here, too, the environmental consequences would depend on the land use alternatives. However, the introduction of direct payments would make it possible to apply cross-compliance requirements and should promote less intensive cultivation methods.

At this stage it is difficult to predict accurately the effect on retail prices for sugar and products containing sugar. More than 30% of the sugar consumed in Europe is direct consumption, for which a price reduction is likely, particularly in view of competition in retail sales. The remaining sugar consumed in Europe is incorporated in processed products. The effect of the fall in the price of sugar will depend on the cost of the raw material in the final product and competition conditions on the downstream market.

EXAMPLE OF A TRANSITION SCENARIO

The presentation of each set of options describes the market balance sought and the approach to regulation and discusses their chief impacts in qualitative terms. However, what was described is the situation at the end-point.

To facilitate reflection in the particularly complex and varied case of the "price fall" set of options, the route towards a new market balance (with neither surpluses nor deficits in production or preferential imports) is illustrated by a transitional scenario leading by 2013 to a common organisation of the market in which there are no longer either quotas or intervention prices, and the price of white sugar is around 40% lower than today.

It goes without saying that other scenarios for arriving at such a balance, in particular more quickly, are also possible but the scale of restructuring necessary should not be underestimated.

Stage 1:

Starting from the current regime, prices would be cut by between 15% and 20%, thus reaching an average Community market price for white sugar of about €600 a tonne. The intervention price would be abolished.

Customs duties, including additional duties linked to an indispensable safeguard clause, would be cut with a view to maintaining the entry price of non-preferential sugar at parity with the Community market price while still meeting the requirements of the prospective WTO agreement (probably by anticipation).

The current system of variable quotas based on market balance would be maintained, while export refunds would be phased out in line with the future WTO agreement. However, if quotas are reduced, the amount of the quotas for sweeteners could remain stable.

To ease the restructuring of sugar production, production quotas could be transferred (sold or leased) between regions and Member States. If such transfers were not possible, a reduction in production of 2.5 to 3.5 million tonnes in the least competitive regions would trigger demands for compensation which could weigh rather heavily on the Community budget as well as harming the regional economies.

In order for the reallocation of quotas to work optimally from an economic standpoint, sales would have to be conducted both within and among the 25 Member States, based on clearly stated prospects for Community prices. The sales must be organised in such a way that, although the buyer is completely free, the seller can act only under an inter-branch agreement committing a complete production unit, the owner of the unit and at least a majority of the sugar beet growers with delivery rights to it.

Similarly, in order to avoid any excessive postponement of the impact of the price fall on the regulation of supply by provoking an increase in the production of C sugar by growers acquiring new quotas, the exchange could be accompanied by obligations to restrict the production of C sugar.

That said, quota selling would only be an efficient restructuring device if a quota system offering relatively high prices were to continue for a number of years. In order to introduce this market organisation (its legal aspects in particular) and the commercial decisions and agreements involving inter-branch organisations, a transitional period of between five and seven years with relatively high and stable prices would appear to be necessary, on the understanding that the parties concerned would still have the remaining period of validity of Regulation (EC) No 1260/2001 during which to adapt.

The maximum refining needs that have been fixed for five Member States, including Slovenia, would be reduced, like the production quotas. Thus, new refining plants needing more imports would be free to turn towards regions where sugar production is low and which are also often those that would have to surrender their beet production quotas first.

The guaranteed price for preferential ACP-India sugar would be reduced, in line with the internal market price, to €435 per tonne of raw sugar. Refining aid would similarly be cut.

The Member States' sugar-beet growers would not need to be financially compensated by the EAGGF because that compensation would be provided in the form of abolished levies, sales and leasing of quotas, the cut in C sugar production, etc. It might, however, be necessary to provide for and phase in financial and/or trade support measures to accompany the adjustments imposed in the ACP countries covered by the Sugar Protocol.

By the end of this first transitional phase, Community production would have been completely restructured and would amount to around 17.5 million tonnes, of which 15.5 or 16 million tonnes would be quota sugar. Preferential imports would be at between 2 and 2.5 million tonnes and exports 3.5 million tonnes.

Phase 2:

Community market prices will have to be cut further to €450/t, or just less than 40% compared to the initial level. This would be achieved through a phased reduction in the entry price of non-preferential sugar and thus in customs duties (including the indispensable safeguard clause) and the corresponding adjustments to the institutional prices. This stage should take place after two or three years.

At the new market price for white sugar, competitive sugar-mills could be viable at an average beet price of about €25. Compensation would have to be paid to beet growers. This could take the form of decoupled aids or, for a while, at least part of the support could preferably be area aid for a fixed maximum area, to ensure that the industrial plant continues to be used and to maintain even a minimum of control over the organisation of production.

The production quotas would be cut, as they are under the current system, on the basis of market balance, to be achieved through export refunds that would be run down and market prices that would gradually fall. The quotas would be finally abolished when, in the final phrase, the market price (reduced by about 40%) produced the target market balance.

The guaranteed price for preferential sugar, applicable only to sugar covered by the ACP Protocol and the Agreement with India, would again be cut, as would the refining aid, in the same proportions as the margins for sugar beet growers. Under these conditions, it would be about €290.

Based on compensation for half the loss of revenue of the beet growers arising from the price cuts in the second transitional phase, the budget required would ultimately be close to $\in 1$ billion. The restructuring of production in the ACP countries will also require support measures.

In the final phase, i.e. towards 2013, the Community of 25 Member States would produce about 14 million tonnes of sugar and would import close to another 2.5 million tonnes through its preferential agreements. It would export practically no more sugar. Isoglucose production would be determined solely by its competitiveness.

4.1.4. Liberalisation

The liberalisation option would mean abolishing domestic price support for sugar and beet, as well as ending production quotas and quantitative and tariff restrictions on trade. As such, it is advocated by the most competitive cane sugar exporters, parts of the agri-food industries which use sugar, some development NGOs, consumer representatives and those who, like the OECD, criticise the current market organisation for lack of competition and inefficient allocation of resources.

In the absence of any protection, domestic sugar prices would fall into line with world market prices. At that price level the European market would remain attractive to the most competitive exporters, such as Brazil. Their exports would come to replace the majority of preferential exports from ACP countries, India and the LDCs, whose production costs are considerably higher. A characteristic feature of the liberalisation option in the sugar sector is that it would most probably lead to a reduction in sources of supply, which would expose the European and world markets more directly to the consequences of a single large exporter country's weather and economic and political risks.

Despite the efficiency of their industrial plant, European manufacturers would find their profitability severely jeopardised and could have difficulty in remaining competitive. The short beet season (three months at the most) compared with the cane sugar season (more than nine months) indeed imposes a structural handicap to deriving maximum benefit from the European sugar industry's investment.

In the absence of regulatory instruments, the reduction in production capacity would primarily affect the facilities of the least profitable manufacturers. For want of alternative markets the closure of isolated production units could therefore lead to the complete cessation of beet cultivation in certain areas, with in some cases major consequences for the profitability of farms.

As with the other options which would lead to a drastic reduction in production, measures would probably be called for to facilitate restructuring the sector and to provide social and regional support when sugar-mills are closed.

If combined with compensation for farmers' loss of income in the spirit of the CAP reforms, the liberalisation option would unquestionably lose in simplicity but gain in political acceptability. In that case, given the scale of the fall in prices, the cost to the budget of direct aid would turn out to be very high (see section 4.2.1 below).

By the same token, it would be necessary to examine the need for measures to alleviate the effects of the drastic fall in income derived by ACP countries and LDCs from their preferential imports at guaranteed prices.

However, if liberalisation were implemented gradually, with a sufficiently long transitional period, the accompanying measures could be more limited; in particular, they could include less financial compensation.

The beneficial effect on the diversity offered to users and consumers from the abolition of restrictions on the production of alternative sweeteners would be partially lost through the new competitive pressure exerted by low-price sugar.

The effect on retail prices would be similar and would depend on the same conditions as in the case of a more limited price fall, examined in the "price fall" option.

In terms of its implications for Europe's environment, the liberalisation option could be similar to keeping the 'Status Quo'. The environmental impact on agricultural holdings would depend on the use made of the land released from beet cultivation. By contrast, if production conditions remain the same, the boost to the Brazilian sugar sector could bring more pressure on the environment.

4.2. Approach via the different facets of sustainable development

This section quantifies the impact of the different sets of options and reports on the findings of the investigations conducted by the interdepartmental steering group in the context of the thematic explorations into the economic, social and environmental aspects of sustainable development²⁰. The state of knowledge and the modelling tools available mean that it has not always been possible to obtain sufficiently robust or conclusive results to distinguish between the different sets of options.

4.2.1. Economic impact

The discussion of economic impact starts with a presentation of the components of the supply balance for 2010-15. Next, various situations of balance between supply and demand according to price levels without market intervention are examined, showing the level (around €475) which would minimise the surplus without creating a need for non-preferential imports. The last part presents the impact of the different sets of options on the different components of the budget.

4.2.1.1. The situation at 2010-15

Based on the results yielded by the impact studies and simulations modelled, Table I gives an approximate overview of the Union's supply balance, the prices for sugar and beet and the effects on the budget of the four sets of options in 2010-15. The results of the models have been drawn up on a proportional basis for a Community of 25 Member States and an estimated average market price of white sugar ex works of €725/tonne.

In the event of total liberalisation, it should be noted that Community production would continue, which testifies to some competitiveness. However, at constant costs, it would be reduced by almost two thirds and would be concentrated in a very few regions in the United Kingdom, France, Germany and Austria, and, among the new Member States, in Poland.

The fluctuations in the price of beet depending on world prices for sugar and prices for alternative crops would adversely affect the stability needed for the sugar industry to survive, given its quite heavy investment requirements.

Internationally, the Community would depend to almost 80% on a single country for nearly two thirds of its sugar needs; this would raise issues of long-term supply and seriously affect relations with the LDCs and the Community's historic sugar partners, the ACP countries.

The options maintaining a long-term quota scheme make it possible to continue Community production at a higher level than it would be under the options without quotas. In particular, beet prices would be higher. A reform along these lines would slightly reduce the Community's budget spending on the operation of the market organisation. By contrast, the cost to consumers and users would remain very high.

The eight themes were: prices and market equilibrium; compensation; prospects for sweeteners; competition; environment and transport; bioenergy; restructuring and employment; third countries.

However, such arrangements would be unstable in the long term because they would hardly reduce the current opposition and the pressure of competition. The situation would continue to be contentious and totally dependent on international negotiations.

The regime chosen would depend on imports of sugar under the EBA agreement, imports of crystallised fructose, etc. and the negotiations at the WTO, including those involving the dispute between the Community and Brazil, Australia and Thailand.

In the longer term account must be taken of the new international negotiations that will have to be concluded with Mercosur, or in the context of the economic partnership with the ACP countries, or perhaps even with other large sugar producers. The prospects are for increasingly smaller Community production.

The options designed to achieve market balance through price cuts rather than quotas are more radical and so justify the need for transitional arrangements. By definition, the balance achieved must be quite stable vis-à-vis the level of Community production.

That said, the effort needed to move from the current situation to one of balance will be quite considerable and will involve income losses for sugar-beet growers, difficulties for the remoter regions and income losses for those benefiting from ACP-India preferential imports. This can give rise to demands for compensation and therefore in some cases to costs for the Community budget.

4.2.1.2. Prices and market balance

The price of sugar in the Community governs beet production capacity, preferential import opportunities and competition with alternative sweeteners. Market equilibrium and its consequences are, naturally, greatly affected by the choice of market regulation system, even though they also depend on many other factors and unknowns. But the basic equilibrium, to be adjusted when necessary, should be the one governed by prices and costs.

Table II illustrates various market situations where white-sugar market prices in the Union of 25 are the governing factor. All the situations showing surpluses or deficits imply adjustments. These simulations are based on average regional or national production costs. It is therefore not impossible that some of the more competitive producers might survive on a given market which is not in the main very competitive, in which case it becomes impossible to forecast production levels with any certainty.

Given a white-sugar price of around €525/tonne and average production costs, ten of the 21 Member States currently producing sugar would discontinue beet production²¹. Nearly 25% of production would thus be lost. Above €400/t, Community production would be very low.

If every drop in the Community white-sugar price is accompanied by a proportional fall in the cost price of imported preferential raw sugar²², total "importable" production would drop from nearly five million tonnes at \in 500/t of raw sugar to three million tonnes for a price of some \notin 400/t.

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Obviously, firms with below average production costs would be better placed to withstand the drop in prices. However, this would depend on whether they are able to obtain beet supplies, which implies margins per hectare for beet production equivalent to the margins for the most lucrative competing

In the case of sugar covered by the ACP Protocol and the India Agreement, the intervention price for raw sugar minus the refining aid.

At around €400 per tonne of raw sugar, which is €575 per tonne of white sugar, there is an important threshold where only the low-cost producers among the EBA beneficiaries would survive. Production on Mauritius, accounting for about a third of preferential ACP sugar, has profitability problems vis-à-vis the Community market. Regional markets for low-cost producer countries may become more attractive than the Community.

Production of isoglucose plays a vital role in a market governed by Community prices and production costs. If the white-sugar price exceeds €500/t in a system without quotas, isoglucose would occupy 3.5 to 4 million tonnes of the market, about a third. Below €450 per tonne, that production would collapse and the industry's starch production activities are likely to be affected.

In overall terms, an equilibrium between beet sugar produced in the Community and preferential imports, virtually without isoglucose production, is obtained at around \in 475 per tonne of white sugar, or \in 325 per tonne of raw sugar. The grant of direct aid to boost the income of beet growers might need to be nearer \in 450/tonne to bring about market equilibrium. The unknown factors affecting those results prevent fine-tuned modelling and provide only general features among situations with indistinct borders.

Achieving equilibrium at €475/tonne is chancy because this is the tipping point for the viability of:

- beet sugar production in ten Member States: Austria, Belgium, the Czech Republic, Germany, Denmark, Hungary, the Netherlands, Poland, Sweden and the United Kingdom;
- isoglucose production;
- the supply of preferential sugar from major beneficiaries of the ACP protocol, the threshold for Mauritius being at a higher price.

Table I - Main results of the options for EU-25, in 2010–15

	PRODU	PRODUCTION		ORT EXPORT		PRICE OF WHITE	DROP IN CUSTOMS	BEET PRICES		DIRECT AID	FALL IN ACP	NET EXPEND-	MEMBER STATES CEASING/				
OPTION	QUOTA TO	QUOTA	QUOTA	QUOTA	QUOTA	TOTAL		REFUND	TOTAL	SUGAR EU	DUTIES	QUOTA	C SUGAR	PRODUCERS	REVENUE	ITURE ON SUGAR ²³	SUBSTANTIALLY REDUCING THEIR PRODUCTION
	Millions of tonnes	Millions of tonnes	Millions	Millions of tonnes		€/t	%	€/t	€/t		€ million	€ million					
Today	17.5	20.0	1.9	2.8	5.3	725	0 %	48	17	No		1000 - 1200					
Status quo 2010-15	13.5	16.0	4.0	1.5	4.0	600	<-36 %	40	20	No	150	600 - 800	EL-IR-IT (ES-FI- LV-LT-P-SK-SV)				
Fixed quotas 2010-15	14.0	16.0	3.5	1.5	3.5	600	< -36 %	40	20	No	150	600 - 800	EL-IR-IT (ES-FI- LV-LT-P-SK-SV)				
Fall in prices 2012 -15	0.0	14.0	2.5	0.0	0.5	450	<-60 %	-	25	Yes	300	800 - 1000	EL-IR-IT (ES-FI- LV-LT-P-SK-SV)				
Midway situation 2006-11	15.5	17.5	2.0	1.5	3.5	600	< -36 %	40	20	No	150	600 - 800	EL-IR-IT				
Liberalisation 2010 -15	0.0	6.0	10.0	0.0	0.0	350	-	-	21	Yes	350	1150 - 1350	All except perhaps AT-DE-FR-UK				

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The amounts in this column do not necessarily represent the expenditure to be entered in the budget. After deducting contributions from receipts. 23

Table II - Market trends according to reductions in the price of sugar in the Union of 25

The results presented here are based on orders of magnitude of total production costs and transport costs, implementation of the current preferential import agreements in 2010-15 and no compensation to producers.

Where there is a surplus or a negative balance, market equilibrium can be re-established without changing the price, for example, by reducing the surplus by means of exports with a refund and/or by reducing the production quotas for EU-25, or by making up the deficit with new imports and/or by stimulating production by granting aid.

EU market price WTO tariff red		et price W		EU market price		WTO tariff reductions		f reductions Member States likely cease production		EU production	LDCs likely to cease exports	EBA imports	Other partners ceasing exports	Other imports	EU prod.	Imports	Isogluc.	Total	Surplus																
Selling price	Cost		with qu exp	ota and orts	without quota or exports																								3	, , ,					
€/t white sugar		% redu ction	Safe provi with		provi	guard sions without		Millions of tonnes		Millions of tonnes		Millions of tonnes	Millions of tonnes		Millions of tonnes	of	Millions of tonnes																		
725	498	0			-15 %				+ Bangladesh				20,0	4,7	4,0	28,7	12,7																		
700	481	-3%	-15%					20	Congo (D.R.)	2,5		2,2	20,0	4,7	4,0	28,7	12,7																		
675	464	-7%				-15%	+ EL IR IT		Jamaica Madagascar			2,2	20,0	4,7	4,0	28,7	12,7																		
650	446	-10%			-36%			18,5	Madagascai				18,5	4,2	4,0	26,7	10,7																		
625	429	-14%		-15%				10,0		2,0	ı	2	18,5	4,0	4,0	26,5	10,5																		
600	412	-17%	-36%		-45%	-36%		18	+ Burkina Faso		+ Cote d'Ivoire		18,0	4,0	3,5	25,5	9,5																		
575	395	<mark>-21%</mark>	-45%				+ ES FI LA LT	10	Tanzania	1,2	Mauritius	1,7	18,0	2,9	3,5	24,4	8,4																		
550	378	-24%			-60%	-45%	PT SK SL	17		1,2		1,7	17,0	2,9	3,5	23,4	7,4																		
525	361	-28%		-36%				17			+ Cuba		17,0	1,9	3,0	21,9	5,9																		
500	343	-31%	-60%	-45%		-60%	DE 07 DV	16		0,7	Congo Br	1,2	16,0	2,6	3,0	21,6	5,6																		
475	326	-34%					+ BE CZ DK HU NL	14			Guyana		14,0	2,6	1,0	17,6	1,6																		
450	309	-38%		-60%				11,5	+ Malawi		+ Balkans		11,5	0,9	0,5	12,9	-3,1																		
425	292	-41%					+ AT DE PL SV UK	8	Senegal	0,4	Belize . India	0,5	8,0	0,9	0,5	9,4	-6,6																		
400	275	-45%					FR	8	Swaziland		Fiji		8,0	0,9	0,5	9,4	-6,6																		
375	258	-48%						6					6.0	0.3	0,0	6,3	-9.7																		
350	240	-52%						6	Ethiopia				6,0	0,3	0,0	6,3	-9,7																		
325	223	-55%						6	Mozambique				6,0	0.3	0,0	6,3	-9,7																		
300	206	-59%						0	Sudan Zambia	0,2	Brazil	0,1	0.0	0,3	0,0	0,3	-15.7																		
275	189	-62%							Zimbabwe				0,0	0.3	0,0	0,3	-15.7																		
250		-66%											0.0	0.3	0.0	0,3	-15,7																		

Source : DG AGRI

4.2.1.3. Impact on expenditure connected with the market organisation and on the export earnings of the ACP countries

Table I gives an estimate of net budget expenditure in 2010-15 for the different sets of options. The estimate is based on a world price for white sugar in 2010-15 of \$300/tonne with a ϵ /US\$ parity of ϵ 1=\$1.03.

The final situation of the "price fall" set of options in 2012-15 is based on a domestic sugar price of $\[mathcal{\in}$ 450/tonne, i.e. 38% less than the price at the outset. The price taken for beet is $\[mathcal{\in}$ 25/tonne.

For a cut in the beet price of up to $\[\in \]$ 40, the estimate of expenditure does not include compensation to farmers for loss of income, given the increase in the net beet price (reduction in levies and in the production of C beet) and possible income from quota transfers. Below this level, the estimate is based on compensation for the price reduction at 50% of the drop in income (except for C beet). For a beet price of $\[\le \]$ 25/tonne, compensation would amount to around $\[\le \]$ 900 million. Net expenditure on the operation of the market organisation would then be slightly lower than it is now. The estimate of expenditure for the liberalisation set of options also includes compensation of this order.

The budget estimates for both sets of options entailing a price fall do not include expenditure on restructuring or compensation to any other categories of stakeholder.

Any internal price reduction will entail a drop in the export earnings of the ACP countries, also shown in the table. This drop in earnings will be more marked as the degree of liberalisation increases and will have a greater impact on the countries which earn a significant part of their foreign currency from sugar exports.

4.2.2. Social impact

4.2.2.1. Impact on the sugar industry and employment

The impact of the different options on employment is illustrated in the table below, which shows the estimated job losses resulting from the cuts in sugar production. Jobs are broken down into agricultural jobs, industrial jobs and indirect jobs in ancillary activities.

Compared to the impact on industrial jobs, few jobs will be lost in agriculture. Reductions mainly come from replacing beet production with less labour-intensive alternative crops.

Estimate of jobs and the number of sugar mills under the different options

	agricultural	industrial	indirect	refineries
Status quo	- 4 500	- 24 500	- 49 000	57
Fixed quotas	- 4 500	- 24 500	- 49 000	57
Price fall	- 6 500	- 25 500	- 51 000	54
Liberalisation	- 7 500	- 29 000	- 58 000	37

More jobs are likely to be lost in sugar mills and activities connected with sugar production than in agriculture. However, the number of jobs lost will remain at around the same level as it has been in recent years while the sector has rationalised, with the closure of a number of smaller units and the concentration of production in units with greater capacity (more than 8 000 tonnes/day).

Rationalisation in the sugar industry EU-15, 1992 - 2000

Capacity in tonnes/day	1992	2000
< 5 000	51	9
5 000 - 8 000	59	28
8 000 – 12 000	46	51
12 000 – 15 000	27	26
> 15 000	0	21
Total number of mills	183	135

Continuing the rationalisation already started would lead by 2012 to the loss of a further 60 units and some 15 000 jobs. The net impact of the other sets of options on employment as indicated in the estimates appears rather low and should not be a determining factor in the choice.

Between 1992 and 2000, the loss of 17 000 jobs through rationalisation did not pose any major conversion problems. However, in the regions concerned and in certain isolated areas, the impact of a closure can sometimes affect up to a third of families and entail more serious consequences. When justified, the corresponding needs for conversion could be met from a special allocation provided for in the next financial package and/or by setting up a conversion fund. This could be financed from levies on growers and/or from part of the income earned from transferring quotas (by sale or lease) in the context of the restructuring exercise.

Converting sugar mills into refineries for imported sugar could reduce job losses to a limited extent. For identical production volume, a refinery requires fewer jobs. It operates for all 12 months of the year, while a sugar mill operates only during the season, i.e. approximately three months. All else being equal, a refinery taking over the activity of a sugar mill of identical capacity would provide activity for three months. In other words, a refinery can account for the production volume of four sugar mills.

4.2.2.2. Impact on growers' incomes and compensation

The drop in production and prices will have an impact on growers' incomes. This impact will definitely be greater where market equilibrium is achieved by a fall in prices rather than by a reduction in quotas.

A reduction in the average net price of beet received by growers will lead to a shift towards competing crops once the margin on the variable costs of beet production falls below that for alternative crops (generally cereals).

Simulations based on the data from the farm accountancy data network (FADN) show that the drop in income per beet holding resulting from a 50% reduction in the average net beet price after any substitution with competing crops should not exceed -15%.

Compensation amounting, for example, to 50% of the price fall, as in the case of cereals, would bring the maximum average reduction to -4%. However, compensation at this level might be excessive in some cases.

The actual loss of income will depend on the degree of specialisation of farms and their ability to diversify. The more specialised a farm, the more dependent it is. 55% of all beet farms are smallholdings with an average area under beet of less than five hectares.

More than half the areas sown to beet belong to 13% of holdings, with an average area of more than 120 ha and on which an average of 15 hectares are devoted to beet cultivation. These large farms clearly have a much greater scope for diversification than the much smaller, specialised farms, and will therefore be able to convert more easily to competing crops already grown on the farm. The loss of income resulting from the fall in the price of beet will thus be more easily absorbed.

To take account of these differences, compensation for loss of income could be modulated. For example, it could amount to 50% of the drop in the price of beet for the first five hectares, or be aligned on the level of aid for cereals for up to 10 hectares.

4.2.2.3. The special case of the outermost regions

The impact of rationalisation and reductions in activity will be just as great in some of the outermost regions, where the cultivation and processing of cane accounts for a substantial proportion of local economic activity while production costs are high owing to remoteness from the centre, production structures and limited local outlets.

The Azores produce beet and refine sugar primarily for local consumption (from 6 000 to 10 000 tonnes). Beet cultivation is limited by competition from more profitable products and the Azores import raw sugar for refining under the special supply arrangements.

The French overseas departments produce cane sugar for processing locally, in particular into rum, but above all for refining in mainland France, which provides most of the outlets for their production of 200 000 to 250 000 tonnes. The chief producer region is the island of Réunion, where sugar cane production is so extensive that it plays a major role in both the island's agriculture and its socio-economic development. Production costs are high despite efforts to improve structures and productivity. Any fall in prices which might reduce sugar production would deeply affect not only the island's economy but also its environment.

Production conditions in the outermost regions are so different to those of mainland Europe that the former regions should receive different treatment in the context of the reform of the instruments for supporting the regional economy. Any restructuring and, if necessary, conversion needs could be met through a special allocation earmarked in the next financial package.

4.2.2.4. Impact on the ACP countries

All the options involving a price fall will affect the countries benefiting from the Sugar Protocol by reducing the income accruing from exports to the Community. Table I gives an estimate of the reduction in export earnings under the different options. At different price levels, Table II shows which ACP countries and LDCs would be hardest hit on the basis of their estimated average production costs.

In social terms, the most negative consequences will be felt where dependence on the sugar sector is strongest. In the hearing they were given, certain ACP countries strongly stressed the multifunctional nature of their sugar sector and its indirect social benefits. However, the situation varies widely from one country to another, and to evaluate this would have required specific, more detailed studies of production structures and the prospects of the sector in each country.

The measures to help the beneficiaries of the Sugar Protocol make the transition to a new market organisation will in any case have to be based on such analyses, which will take account of the economic, social and environmental impact of a reduction in the European

sugar price and its consequences on growers' incomes, the prospects for their sugar sector and the possible alternatives.

Part of the annual cost of re-exporting preferential sugar could usefully be channelled into financing restructuring and accompanying measures in the ACP countries and the LDCs.

4.2.3. Environmental impact

The different sets of options will have an influence on the volume and location of beet production, replacement crops, the activity and replacement of sugar mills by refineries, and on the transport of sugar and beet. Each one of these elements has an impact on the environment

4.2.3.1. Soil, water, biodiversity

Based on numerous studies and monographs, a qualitative and sometimes even quantitative assessment comparing the impact of beet cultivation and competing crops on soil, water and biodiversity provides some useful insights for evaluating the different sets of options from the environmental point of view.

All other things being equal, a reduction in the areas sown to beet and a corresponding increase in the most likely replacement crops given the location and characteristics of beet holdings, i.e. cereals, oilseeds, and protein crops, will reduce negative effects on the environment, such as soil erosion and compaction, the unnecessary removal and transportation of soil, the contamination of water by pesticides and the quantity of water used for irrigation in certain regions. By contrast, a reduction in beet production would have a negligible impact on water pollution by nitrates. Beet cultivation also has positive effects for the environment, like keeping certain species of animal at production places and improving the agronomic quality of soil in the context of crop rotation. In short, the assessment depends on the replacement crop and agronomic conditions. Generally, a reduction in beet cultivation would contribute to protecting the environment.

The environmental impact of replacing the activity of sugar mills with industrial processing of the alternative crops and sugar refineries is difficult to evaluate and does not appear conclusive.

On the basis of these qualitative indications, quotas have a rather negative environmental impact on the location of beet cultivation, in particular by maintaining production in the least suited regions. Conversely, decoupling the direct aid which might be granted under the "price fall" set of options, the concomitant cross-compliance and a reduction in the per-hectare margins which encourage the inclusion of beet in agri-environment programmes should have a beneficial impact on the environment.

4.2.3.2. Renewable energy

Trends in production and prices will also influence the potential contribution of beet to the production of renewable energy²⁵. To achieve the Union's objectives for renewable energy production, an additional quantity of biomass should be devoted to energy production. Technically speaking, bioethanol production from beet is feasible and the energy balance is positive. As things now stand, the bioenergy outlet does not present a viable alternative which would in itself warrant maintaining beet production. The economic viability of the bioethanol

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The contributions on these topics are listed in Annex II.

sector depends above all on how fuels are taxed and on what conditions are imposed on their composition. A reduction in the price of beet intended for the manufacture of sugar can encourage its use for energy purposes.

4.2.3.3. Transport

The environmental impact of transporting beet and sugar is complex to evaluate. Transporting a heavy product like beet, which has a sugar content of less than 17%, accounts for a substantial share of production costs and energy consumption which does not seem optimal. Supplying from ports rather than from a fragmented production base might bring about a switch from road transport to rail or river transport. Similarly, the net effect of a price reduction on the volumes transported to and from the Community would also have a favourable impact despite the increase in imports (at least until production had decreased beyond 60%). However, despite leaning towards the "price fall" and "liberalisation" options, the connections with transport and the environment do not turn up any factors allowing a clear judgement between the different hypotheses.

5. SUMMARY OF ADVANTAGES AND DRAWBACKS

The way in which the different sets of options contribute to the objectives identified in part 2 is summarised briefly below (section 5.1), and again in the table at the end of this section. The advantages and drawbacks for the various categories of actors are also assessed by the actors themselves, on the basis of the information provided in their contributions (section 5.2), and by the ISG (section 5.3). Finally, a table gives an overview of the main advantages and drawbacks of each set of options (section 5.4).

5.1. The options measured against the objectives

Of the different sets of options, only "liberalisation" would alter the Union's sugar **supply** conditions profoundly and rapidly. It would lead to a reduction in Community production to one third of present levels, and even to its disappearance in the long run, while concentrating supply from a handful of big and extremely competitive exporters, Brazil having the greatest potential for expansion. In this case, the **regularity** of supply would be directly exposed to the weather-related, economic and political risks faced by this key exporter. However, even under these conditions, with world consumption evolving in a predictable and stable manner, regular surplus production and a wealth of exporting countries, the **security** of supply is not likely to be seriously challenged.

For all that, we should not underestimate the difficulties, or even drawbacks, of a shift towards a situation where the bulk of the sugar used in Europe is imported. Today, European producers guarantee a variety of **quality** standards which are hard to match when sugar is transported over long distances, and which are vital to certain types of use. They also assume a powerful logistical supply chain with integrated management from sugar mills right down to the user industries and large-scale distributors. These product- and service-quality conditions could undoubtedly be met in a different way in a supply system based largely on imported sugar. However, this would be at a cost which is often obscured in direct comparisons between the price (European port) with the price paid by users.

The European market would have more protection against **price fluctuations** on the world market in the options with quotas, but at a high cost to users. Such protection would vanish completely in the case of "liberalisation" and be reduced under the "price fall" set of options as tariff protection diminished and the gap between internal and world prices closed. The impact of a radical fall in prices on farmers' standard of living should be taken into account in the broader context of the crisis management analysis that the Commission is to produce by the end of 2004 in line with the conclusions of the June 2003 Agriculture Council.

By ensuring a high price for beet, the options with quotas would sustain a comfortable perhectare **income** for beet growers but would also maintain distortions of competition and **income disparities** among farmers, unless there were to be a parallel decrease in prices and mechanisms for redistributing quotas between regions. On the other hand, the "price fall" set of options would align the sugar sector on the other agricultural sectors and reduce these distortions by granting decoupled direct income payments, in the long run.

Under the "status quo", production would continue to be distributed among all the existing production regions, thus helping maintain **rural communities**. However, this advantage must be seen in context: the agricultural regions in question generally have the best land and are therefore already in a relatively good position to convert to other agricultural activities. The same advantage is to be found in the "fixed quotas" set, and even during the restructuring phase in the "price fall" or "liberalisation" sets of options, thanks to the resources released by selling or leasing the quotas which would be reassigned to maintaining income levels or creating alternative activities. Moreover, the fall in prices would be accompanied by the introduction of direct aid which would strengthen the buying power of rural communities.

The reduction of activity throughout the territory under the "status quo" would, however, be a serious handicap to restructuring the sugar sector and improving its **competitiveness**. The transfer or abolition of quotas under the other options would remove this handicap but would represent a cost to producers, who would be acquiring and using these quotas differently in accordance with their financial capacity.

In a trade liberalisation context, the options without quotas would encourage specialisation in line with comparative advantages and would open up the **internal market**. They would release the potential of the most competitive producers and enable them to envisage taking over shares released on this market. In this perspective, the intensity, rhythm and means of support envisaged during the transition towards the new market balance at a lower price will have a decisive impact on the restructuring and longer-term competitiveness prospects.

The **elimination of C sugar** and abolition of the safeguard clause could seriously disrupt the market balance, particularly within the context of the sets of options with quotas.

As regards **competition**, only the options without quotas allow an improvement while reducing the barriers to the entry of new producers and new products. Competitive pressure would improve if white sugar imports helped avoid the present hold of the refining industry.

Even assuming a decline in sources of supply to Brazil alone, which might happen under the "liberalisation" option, competition would not necessarily be weakened. The rules of competition would continue to apply independently of the location of companies. Within Brazil, sources would remain varied; moreover, several companies have passed into European producers' control in recent years.

From the point of view of users and consumers, the **best price** would be obtained through "liberalisation". It would, however, be at greater risk of fluctuation.

By retaining beet production in the regions which are least adapted to growing it, the options with quotas would have a somewhat negative impact on the **environment** overall, unless transfers were authorised. Conversely, the decoupling of direct aid under the "price fall" option would enable the grant of direct payments to be made subject to cross-compliance. Although it would not be sufficient on its own, the fall in beet prices under the sets of options without quotas would also make the fuel-bioethanol sector more economically viable.

The introduction of a single, decoupled income payment would make the system simpler and more **transparent**. The "liberalisation" option is more radical, however, and would amount to getting rid of the sugar regime altogether.

Under all the options under consideration, the reduction of production and of exports using refunds will have a beneficial impact on the **budget**. These would however be partly counterbalanced by the cost of direct support in the case of the "price fall" and "liberalisation" options. Measures to facilitate the restructuring of the sugar industry and conversion in the regions and rural communities most affected, where required, will be financed outside heading 1a.

Externally, the options with quotas would continue to guarantee high export earnings to the **partners with preferential access**. Some of them would therefore continue to be supported in a non-economically sustainable specialisation. By maintaining high prices, these options would also continue to create distortions on the world market by removing outlets from internationally competitive producers, including a number of developing countries. The "price fall" options would reduce over-production and distortions of the market. They would however create problems for some outermost regions and for some of the EU's traditional partners where the economy remains dependent on high-price European outlets.

Calculations of **overall economic welfare**, although sometimes rather theoretical, show that the "liberalisation" and "price fall" sets of options would provide the greatest boost because they reduce the expenditure of users and budget expenditure much more than the profits of the sugar sector. These calculations do not, however, take account of the welfare of people outside the European Union.

The options measured against the objectives

Objective of the study in the sugar sector	status quo	fixed quotas	price fall	Libera- lisation
To guarantee regular supplies of sugar while protecting the European market from extreme price fluctuations	②	00	0	⊗
To make the sector more competitive and able to stand up to international competition	88	⊗	©©	©©
To provide farmers with a fair standard of living and maintain rural communities while moving from price support to a system of aid to producers	⊗	8	©	8
To increase competition , offer users a fair price and diversify the range of sweetening products on offer	88	88	©©	©©
To limit the pressure on the environment caused by sugar production	(3)	8	©	•
To simplify the market organisation, make it more transparent and contribute to secondary objectives under appropriate common policies	8	⊗	☺	©©
To limit its cost to the budget	©©	©©	©	8

the option achieves the objective in full

5.2. The options assessed by the parties consulted

The advantages and drawbacks of the different sets of options are assessed here on the basis of the information provided by those organisations that submitted contributions within the context of the consultations organised by the ISG. The list of these contributions is attached (Annex I).

the option approaches the objective

the option has no impact on the objective

[😊] the option moves away from the objective

the option puts the objective at risk

Parties consulted	status quo	fixed quotas	price fall	Libera- lisation
Farmers	©	00	88	88
Sugar mills	(i)	@@	•	88
Refineries	00	©©	88	88
Starch manufacturers	•	(1)	90	88
Agri-food industry	88	88	00	©©
ACP countries	00	00	88	88
EBA agreement beneficiaries	00	00	88	88
Consumers	88	88	©©	00
Development NGOs	©⊕	©©	⊗	88
Environment NGOs	8	₿	©©	(1)

- ©© preferred
 - © satisfactory
 - e neutral
 - negative
- & very negative, even dangerous

5.3. Impact on the key stakeholders

On the basis of the different analyses, the following table evaluates the impact of the various sets of options on the parties concerned by the common organisation of the market in sugar. Whether the impact is likely to be positive or negative is evaluated in relation to the current situation of the various categories of actors involved.

	Advantaged	Disadvantaged
Status quo	EBA, Balkans Refineries Importers Budget Brazil	Farmers Sugar mills Environment AFI ACP Consumers Sweeteners Agricultural inputs Rural areas
Price fall	AFI Consumers Environment Budget	EBA Balkans ACP Farmers Sugar mills Refineries Importers Agricultural inputs Rural areas Sweeteners Brazil
Fixed quotas	Refineries Importers Sweeteners Budget	EBA, Balkans Farmers Sugar mills Environment AFI ACP Consumers Agricultural inputs Rural areas Brazil
Liberalisation	AFI Importers Consumers Brazil Environment	EBA, Balkans ACP Farmers Sugar mills Refineries Agricultural inputs Rural areas Sweeteners Budget

^{*} The impact on the stakeholders is evaluated in relation to the current situation.

5.4. Summary of advantages and drawbacks

	Advantages	Drawbacks
Status quo	 Maintains production and income in the majority of regions, though the level of both gradually decreases. Progressively decreases the budget cost of the regime. Maintains current benefits to ACP/EBA countries. 	 Delays restructuring and improved competitiveness of the sector. Attracts non-restricted quantities of imports, under preferential agreements, at non-competitive prices, to the EU market, which threaten continued EU production in the long run. Maintains distortions in competition. Maintains inequalities among farmers. Trade balance is very sensitive to the removal of the safeguard clause and the abolition of C sugar. Complicates EU WTO negotiating position. The common market organisation for sugar remains complex and non-transparent.
Price fall	 Facilitates restructuring and improved competitiveness of the sector. Reduces production surpluses and world market distortion. Reduces distortions in competition. Reduces inequalities among producers. Reduces cost to consumers and users. Promotes diversification in the market for sweeteners. Facilitates WTO negotiations. Promotes application of cross-compliance. Reduces budget cost of the regime slightly. 	 Producer incomes fall. Revenue of ACP countries falls. Cost of possible accompanying measures for restructuring.
Fixed quotas	 Ensures stable supply and protects from fluctuations in world market prices. Raises the sector's visibility, allowing it to resume investing. Maintains production in more of EU with beneficial effects on rural communities, unless quotas are transferred. Reduces budget cost of sugar regime. 	 Backtracking on EBA would affect credibility of EU. Delays restructuring and improved competitiveness of the sector, unless quotas are transferred. Maintains distortions in competition. Maintains inequalities among farmers. Complicates EU WTO negotiating position. The common market organisation for sugar remains complex and non-transparent.
Liberalisation	 Competitiveness of the sector is improved in the long-term. World market distortions are reduced. Facilitates WTO negotiations. Eliminates the budget cost of the regime, unless compensation is granted. Eliminates distortions in competition. Greatly simplifies the common market organisation for sugar. 	 Regularity of supply and price stability are no longer assured to the same degree. A large part of the EU sugar industry disappears. Agricultural incomes fall with a significant impact on some rural communities. Revenue falls for non-competitive traditional partners (ACP). Production of alternative sweeteners is no longer competitive and disappears. Profitability of sugar refineries is threatened. Cost of possible accompanying measures for restructuring. Budget cost if compensation granted to farmers.

ANNEX I Consultations and contributions received

Advisory Committee on the Common Agricultural Policy

On 17 March 2003, the sets of options and an outline of their impacts were presented to the CAP advisory committee's standing group on "sugar" which comprises representatives of the various parts of the sectors concerned. A consultation period was launched until 30 April 2003.

Hearings

Between 1 April and 26 June, the ISG organised five working meetings with representatives of the main parties concerned and stakeholders who had already expressed views on the sugar policy:

- 1 April 2003, International Confederation of European Beet Growers (CIBE);
- 9 April 2003, European Committee of Sugar Manufacturers (CEFS);
- 14 May 2003, Committee of industrial users of sugar (CIUS);
- 16 June 2003, consumer organisations (European Consumers' Organisation, BEUC), NGOs active in development cooperation and fair trade (Collectif de l'éthique dans le sucre, Collectif stratégies alimentaires, Oxfam-Solidarité, Solagral, etc.), environmental protection NGOs (WWF);
- 26 June 2003, ACP countries.

On 18 March 2003, the ISG held a working session with experts from EuroCARE, the consultancy which carried out the impact analysis on behalf of the Commission.

Written contributions

Between March and July the ISG received written contributions from the following organisations:

- International Confederation of European Beet Growers (CIBE) 29 April 2003;
- European Committee of Sugar Manufacturers (CEFS) 19 May 2003;
- Committee of industrial users of sugar (CIUS) 19 June 2003;
- National Farmers Union (NFU) 12 May 2003;
- Comité Européen des Raffineurs Permanents de Sucre de Canne (CERPSCA) –
 21 May 2003;
- African, Caribbean and Pacific Group of States (ACP Group) 15 May 2003;
- Association des amidonneries de céréales de l'Union européenne (AAC) 21 May 2003;

- Confédération des betteraviers belges (CCB) 16 May 2003;
- Collectif stratégies alimentaires (CSA) 25 June 2003;
- *Collectif de l'éthique dans le sucre* 24 June 2003;
- European Federation of Food, Agriculture and Tourism Unions (EFFAT) 24
 June 2003;
- Solagral 28 June 2003;
- Group of ACP-LDC States supplying the EU with sugar 16 July 2003;
- European Environmental Bureau (EEB) 16 July 2003.

ANNEX II

CONTRIBUTIONS FROM THE ISG

- 1. Analysis of the impact of the reform options on employment.
- 2. Analysis of the impact of the reform options on the environment.
- 3. Economic aspects of the reform of the common organisation of the market in sugar.
- 4. Description of the common organisation of the market in sugar.
- 5. Evaluation of the reform options in the light of the EU's international commitments and of the impacts on development countries.
- 6. Impact of a reduction in sugar prices on the budget.
- 7. Compensation for the ACP states in the event of reform of the common organisation of the market in sugar.
- 8. Competition in the sugar sector.
- 9. The need for a reduction in the sugar price.
- 10. International market in sugar.
- 11. Sugar: markets, prices and farm structures.
- 12. Prospects for using beet for bioenergy production.
- 13. Prospects for sweeteners.
- 14. Sugar market: prices and balance.

ANNEX III MANDATE OF THE GROUP

I. COMMISSION DECISION

When the Commission adopted its work programme for 2003²⁶, it planned a report in June 2003 accompanied, if necessary, by a proposal for a review of the sugar regime. It decided that this proposal would be the subject of an extended impact assessment under the aegis of DG AGRI, working with an inter-departmental steering group (ISG). This Decision refers to the June 2002 Communication on impact assessment²⁷, and in particular to the following passage, which establishes the mandate of the ISG.

"In some cases, the Commission may decide that, for the proposals with the most significant crosscutting impact and the highest political importance, the DG responsible for the Impact Assessment is assisted by, and normally chairs, an inter-departmental group including the most concerned DGs and the SG. The Commission will ensure that the design of these proposals takes into account the horizontal multi-sectoral aspects, in particular economic, social and environmental impacts as early as possible in the process. The task of the inter-departmental group is to define the scope, monitor the progress of the extended assessment, and supervise the completion of the impact assessment reports for crosscutting proposals."

II. BACKGROUND

The sugar regime has largely stayed out of the CAP reform process instigated in 1992 and pursued by Agenda 2000.

Its relative longevity testifies to a certain success in achieving its initial goals. Elements of flexibility also allow the adjustments needed to comply with the restrictions on subsidised exports under the Agreement on Agriculture (WTO).

The sugar regime has nevertheless been hit by criticism from various quarters - from development NGOs to the European Court of Auditors, via Brazil and Australia who lodged a complaint with the WTO. These criticisms mainly focus on the distortion of the world market and its prices by exports which are subsidised to the detriment of the income of developing countries which produce sugar; the cost to users and consumers; the quota conditions for the production of other sweeteners such as isoglucose; the concentration and lack of competition in the sector; the rigidity of the system of distributing production between countries; unfair treatment of farmers; the impact on the environment, and so on.

For certain producer regions in Europe, conversely, the high price of sugar can be akin to a form of regional development aid. Likewise, for those EU partners who have long benefited from trade concessions (ACP, India), authorising access for their sugar free of duty and at guaranteed prices would be akin to a form of development aid. These preferential imports have regularly been compensated by the export of equivalent quantities. The economic possibilities of these exports might be threatened in future by the current WTO negotiations. Moreover, other concessions have been granted to the Balkan countries and the LDC under the "Everything But Arms" initiative. In view of this, in the years to come, the share of imports which cannot be re-exported in the EU supply balance could seriously restrict Community production possibilities.

It should also be recalled that reforming the sugar sector along the lines adopted for other crops would be costly to public finances, whereas the current system is largely financed by sugar producers and ultimately by consumers. Moreover, an alignment of domestic prices on world market prices would have an unequal impact on the sugar industries of the Member States.

In October 2000, when the sugar regime was last reviewed, the Commission proposed an interim extension for two years "pending a more fundamental review which would require in-depth studies of its impact on

²⁷ COM(2002) 276 final, 5.6.2002.

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²⁶ COM(2002) 590 final, 30.10.2002.

the sugar sector itself, alternative crops, support for the industry, employment, consumers, the overseas countries and territories and the developing countries²⁸ $^{\circ}$.

It also noted that "fundamental reform of the sector to respond to the various criticisms will require both a review of the quota system, as well as of the level of intervention prices. Issues such as increasing market concentration, lack of competition or the gap between the price received by producers and the price paid by consumers are issues that are not only pertinent in the sugar sector, but throughout the food industry. Their relationships are complex and merit a thorough analysis.

The Commission will undertake a study in order to assess the above issues, as well as the degree of competition in major food sectors (not only in sugar, but also in meat, dairy and cereals). Further the issue of transmission of price changes and the reasons for the gap between producer and consumer prices need to be studied. In addition the impact on sugar and/or on competing arable crops of the continuation or the abolition of quotas needs to be studied. These studies should provide the Commission with useful information in its examination of the future of the quota regime."

The Council extended the regime for five years until 30 June 2006 while maintaining 2003 as the deadline for a mid-term review.

The Commission's proposals for the mid-term review of the CAP, the new cycle of trade negotiations within the context of the Doha development round and the prospect of partnership agreements (EPA) with the ACP states constitute the most recent elements shaping the context in which the ISG is pursuing its deliberations.

III. STAGES

The stages of work carried out by the ISG will follow the path set out in the Communication on impact assessment, as follows.

1. Analysis of problems

"The first question in the impact analysis process relates to the identification and analysis of the issue(s) in one or more policy areas. This will be described in economic, social and environmental terms."

To identify and analyse the key problems and issues in the sugar sector, the group will be able in particular to draw on:

- the report on the evaluation of the common organisation of the markets in the sugar sector²⁹.
- the special report of the Court of Auditors concerning the management of the common organisation of the market for sugar, together with the Commission's replies³⁰.

Over the coming months, reports should become available on the studies requested by the Commission when examining the last reform proposal and implemented by inter-departmental groups with the participation of DGs BUDG, COMP, DEV, ECFIN, EMPL, REGIO, SANCO and TRADE. These studies cover:

- analysis of the impact of the various scenarios for the reform of the common organisation of the markets in sugar;
- the degree of concentration and competition in four food sectors, including sugar;

http://europa.eu.int/comm/agriculture/eval/reports/sugar/index en.htm.

Court of Auditors, Special Report No 20/2000 (OJ C 50, 15.2.2001, p. 1).

²⁸ COM(2000) 604, 4 October 2000, point 2 of the explanatory memorandum: Reflections on reform.

Report by the Netherlands Economics Institutute (NEI),

prices in four food sectors, including sugar.

2. Identifying the policy objectives

"On the basis of the problem analysis, the policy objectives will be expressed in terms of expected results in a given timeframe."

The proposal should seek to align the sugar regime and its specific objectives with the policy objectives of the CAP and the arrangements for intervention chosen by the Commission in its mid-term review. The necessary changes will also have to be taken into account to continue meeting these objectives within the context created by the EU's new international commitments.

3. Identifying policy options and alternative instruments

"Alternative options or instruments to achieve the policy objective(s) should always be considered at an early stage in the preparation of policy proposals. The principles of subsidiarity and proportionality should also be taken into account and studied in the impact assessment process. The "no policy change" scenario must always be included in the analysis as the point of reference ("counterfactual situation") against which other options are compared."

Reform options for the sugar regime were already looked at in an inter-departmental context in the process of drawing up the terms of reference for the study "Analysis of the impact of reform scenarios for the common organisation of the market in sugar". The options chosen fall within the competence of the CAP's own instruments. They could be adjusted and/or supplemented to take account of the intervention arrangements proposed by the Commission within the context of the mid-term review of the CAP.

With a view to presenting more integrated proposals at Commission level, the group could consider the assistance that other Commission policies and instruments might bring to achieving these objectives or to alleviating the costs of the reform for the different parties concerned.

4. Analysing the impact

"For the policy option retained, and where possible for selected alternatives all relevant positive and negative impacts should be examined and reported on in the impact analysis, with a specific emphasis on their environmental, economic and social dimensions. This process has two stages: first the relevant impacts are identified, then they are assessed in qualitative, quantitative and/or monetary terms."

The directorates-general participating in the ISG will be invited to examine the impact of the different options for sugar on their area of competence and in particular to assess the results of the study "Analysis of the impact of reform scenarios for the common organisation of the market in sugar".

The two phases of identification and evaluation will take account of the EU enlarged to the acceding countries.

5. Implementing, monitoring and evaluating ex-post

"The impact assessment should identify any possible difficulties in implementing the options assessed and describe how these will be taken into account, for example in the choice of implementation periods or the gradual phasing-in of a measure. The subsequent ongoing or ex-post evaluations will follow the rules of the Communication on Evaluation, i.e. an overall ex-post or interim evaluation at a periodicity not exceeding six years, depending on the nature of each activity."

IV. EXTERNAL CONSULTATIONS

"The purpose of the extended impact assessment is to... consult with interested parties and competent experts... to supplement and validate data collection ... and to allow a debate on the wider issues."

The reform options chosen and the impacts examined by the screening group (see 3.5, *screening*) will be the subject of consultations in the standing group on "sugar" in the advisory committee in which the various interested parties are represented.

The Commission departments will, on an informal basis, seek the opinions of experts from the acceding Member States as they do with experts from the present Member States.

V. DEADLINES AND REPORTS

_	Problems and key issues	mid-February 2003
_	Identification of options	late February 2003
_	Identification of impacts	early March 2003
_	Consultation of stakeholders	March-June 2003
_	Evaluation of impacts	mid-May 2003
	Final report	_

ANNEX IV

INTER-DEPARTMENTAL STEERING GROUP (ISG)

SG Christine DALBY

Fréderique LORENZI

Lea VATANEN

AGRI Florence BUCHHOLZER

Bruno BUFFARIA

Jean-Marc GAZAGNES

Alain LECOMTE

Notis LEBESSIS (discussion leader, rapporteur)

Matthias LOESCH

Javier MAEZTU NIEVA

Franz-Rudolf SCHLOEDER

Vesa-Pekka TERAS

BUDG Jennifer Brown

Marco PECCI-BORIANI

Marc VANHEUKELEN

COMP Hubert DE BROCA

Christof SCHOSER

DEV Lotta ISAKSSON

Philip MIKOS

ECFIN Rainer WICHERN

ELARG Claude VERON-REVILLE

EMPL Michel BIART

Katarina LINDAHL

ENTR Louis-Marie BOUTHORS

Jaime SILVA

ENV Bernhard BERGER

REGIO Pierre NICOLAS

SANCO Cathal O'CIONNAITH

TRADE Mariella CANTAGALLI

Lisa MACKIE

TREN Richard HADFIELD

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