Study for the
Ministry for Economic
Services, Malta

# Retention of the Status Quo Regarding the Exportation of Maltese Stone

July 2000

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# 1.0 Terms of Reference

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## *1.1 Purpose*

The purpose of this study is to put forward arguments on how Malta may build a case for consideration by the European Commission for the retention of the status quo regarding the exportation of Maltese Stone. In drafting this note the following entities had to be consulted: Environment Protection Department, Planning Authority, Department of Industry, Malta Development Corporation, Federation of Industry, Chamber of Commerce and the Building Industry Consultative Council.

## *1.2 Scope*

The scope of this study is to:

1. Estimate the currently available provisions of the resource at the identified specific grades (quantity and quality);
2. Review the relevant provisions of the *Acquis* and other European Union legislation in force, with particular reference to free movement of goods (horizontal issues) in particular those relating to limited national resources;
3. Identify and evaluate positions and practices of other European Union member states relating to the issue, especially those where export bans exist;
4. Assess the implications of compliance; that is, should and when the resources stock be depleted, identifying the economic and cultural effects of using other building materials to the local construction industry and market (user); and
5. Make recommendations for arguments to be forwarded by Malta in view of the accession negotiations, providing sufficient and legally substantiated reasons for Malta to maintain the current restrictive practices on export.

## *1.3 Timeframe*

The study has to be handed in to the Ministry for Economic Services within eight weeks from the date of signing of contract for consultancy services.

# 2.0 Introduction

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Malta is in the process of formulating its National Plan for the Adoption of the *Acquis Communautaire* of the European Union. This process concerns a number of products, one of which is Maltese stone, a sector which, in the opinion of the Government of Malta, may require significant restructuring and/or major considerations to be addressed before complying.

The *National Programme for the Adoption of the Acquis* states that [1]

> Current import/export legislation do not fully comply with the Acquis due to the presence of licensing procedures on various commodities including import/export bans on a few commodities.
>
> Current export restrictions include … Maltese stone.
>
> A special arrangement is required to maintain the export control in relation to Maltese raw stone, due to environmental considerations.

[1] Ministry of Foreign Affairs, *Malta: National Programme for the Adoption of the Acquis*, Draft, Malta 11 February 2000, pp.24-26.

# 3.0 The Maltese Stone

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## *3.1 The Industrial Minerals of Malta*

The industrial minerals of the Maltese archipelago are Oligocene and Miocene shallow water carbonates. They comprise limestone, clays, sandstone and phosphates. Only limestone is of any economic value. Economic mineral deposits occur in three formations: Upper Coralline Limestone, Lower Coralline Limestone and Lower Globigerina Limestone. The first two are referred to in the mineral extraction industry as hardstone while the last one is referred to as softstone.

Softstone is quarried from the south of Malta and northwest of Gozo mainly for use as dimension stone. Hardstone is quarried in central and western Malta and north-eastern Gozo mainly for use as aggregate for infrastructure subbases and concrete manufacture. Occasionally, especially the Gozo variety, is worked into dimension stone. Quarrying has increased by about 200 to 300% over the last decade.[2]

Although established in 1992, to date the Planning Authority does not have a complete picture of the quarrying industry in Malta. This is due to a number of reasons

> certainly highlighted by the mistrust which has been created between the P[lanning]A[uthority] and the operators following its over cautious and slow processing of the licenses renewals many of which ended up in curtailment or outright refusals.[3]

## *3.2 Uses of Limestone[4]*

### *3.2.1 Hardstone*

Traditionally, hardstone was used for kerbstones, doorsills, stairs, milestones, and monuments. Nowadays they are used as spalls in road construction and as fine and coarse aggregate in the production of concrete. Nowadays, concrete building blocks, precast and prestressed concrete planks and reinforced concrete are used in most

2 Balm, R., 'Big Holes in a Small Place' in *Geography: The Changing World*, 1996.

3 Building Industry Consultative Council, *Annual Report 1999*, Ministry for the Environment, Malta, p. 26.

4 Bianco, L, 'The Industrial Minerals of the Maltese Islands: A general Introduction' in *Hyphen*, Vol. VII, No. 3, 1995, pp.111-118.

building structures. The hard compact variety is still sometimes used as a dimension stone in important buildings and monuments. High market properties usually use this limestone as cladding. The soft limestone division within the Upper Coralline Formation has been extensively quarried for the manufacture of lime.

The word 'marble' traditionally applied to varieties of the Upper and Lower Coralline Limestone is a misnomer since they are not metamorphic in origin but are first quality limestone which take polish. Hyde limits polishable first quality limestone to the Upper Coralline formation.[5]

### *3.2.2 Softstone*

Since time immemorial, this limestone has been extensively used for masonry construction and as roofing slabs. It is still used as dimension stone and for ornamentation. A tradition of making sculptures and carvings out of this limestone exists. In both Malta and Gozo there is actually a small industry concerned with the manufacture of such objects of art. Inferior quality softstone does not weather well when exposed to the elements. Thus it is used for foundations and in other situations protected from the air.

Nowadays, the use of softstone is regulated by building permits and building regulations as stated in the *Codes of Police Laws*. The former relates to the use of stone in elevations of buildings, which elevations form part of streetscapes. The latter relates to the use of stone in all exposed elevations of a building.[6]

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5 Hyde, H.P.T., *The Geology of the Maltese Islands*, Malta, 1955.

6 In general, development planning permits issued by the Planning Authority include a condition stating that the facade of the building should be constructed in local stone.
Building regulations and building permits with respect to the use of local stone are not being effectively enforced and thus the objective of building permits to ensure continuity of local building tradition is not being achieved (Torpiano, A., *Rapport Tal-Bord Mwaqqaf mill-Onor Ministru M.Falzon Biex Jaghmel Rakkonmandazzjonijiet Dwar Riformi Fl-Industrija Tal-Barrieri Tal-Gebel Tal-Franka*, Unpublished report commissioned by the Minister for Infrastructure, 1993, Para. 5.1.4).

## *3.3 Considerations*

### *3.3.1 Mineral Reserves*

The *Mineral Resources Assessment* undertaken by the Planning Authority in terms of *Structure Plan* policy MIN 2[7] is a strategic evaluation of local mineral reserves. It assesses the distribution, quantity and quality of mineral resources of the islands.

According to official statements, assuming the current annual extraction rate of 860,000m$^3$ of Globigerina Limestone, the country can support less that 3 centuries worth of softstone.[8] These reserves include those located in environmentally sensitive areas. It is worth noting that in extracting this limestone, nearly half of the deposit is discarded.

For hardstone, though less wastage is present, current annual extraction rates of 1,400,000m$^3$ will cater for just over a century. Most of these reserves are located in highly environmentally sensitive settings and their extraction will generate negative environmental impacts if contemporary mining techniques are used.

### *3.3.2 Technical Aspects*

The physical and mechanical characteristics of the best local hardstone are inferior in quality to international standards for the use in which it is being employed. Aggregate crushing and impact values are much lower than those stipulated by international technical recognised standards for concrete manufacture. Although extensively used for road surfacing, it takes polish thus rendering roads unsafe, again to international standards.

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7 *Structure Plan* Policy MIN 2 states:

> The Planning Authority will undertake a strategic evaluation of stone, aggregate, and marble resources in the islands. This evaluation will assess the distribution, quantity and quality of the resources, including the existing licensed reserves and operating quarries.

8 Estimate by the Minerals Planning Unit of the Planning Authority (1999). Estimate of the Central Office of Statistics is circa 300,000m$^3$. Present published statistics are inadequate to make reliable estimates of production (Plachy, J., 'The Mineral Industry of Malta' in *Minerals Yearbook,* vol.III, United States Department of the Interior, Bureau of Mines, footnote 3). Data collected was not correct since it was based on the input of 43% of the licensed quarries, that is on the quarry owners who bothered to reply to the Central Office of Statistics questionnaire.

Softstone dimension stone is heavier than local standard concrete block but compared to overseas natural dimension stones, with a density of 1,700kg/m$^3$, is relatively light. It is creamy in colour and darkens attractively with age. If is porous and weathers well in the local climate.

Dimension stones of 230mm (9") width, 1 course high and a length of 533.4mm weigh 64 kg while a similar dimension stone but of 165mm (6.5") in width, as established by the Price Order of 1976, weighs 46kg.[9]

Softstone dimension stones in Malta are prepared to a height of 10.25" while in Gozo they are prepared to 11". Current practice of 'standard' sizes of dimension stone used in the Maltese Islands are given in Table 1. Section A9 of the 'Conditions for Development and Design Control (DC 1/88)' assumes the height of one course to be 280mm (11").[10]

*Table 1: 'Standard' sizes of dimension stone*

| | *Malta* | | | *Gozo* | | |
|---|---|---|---|---|---|---|
| *'Standard' practice for softstone dimension stone (in inches)* | *Height* | *length* | *width* | *height* | *length* | *width* |
| | 10$^1/_4$" | 24" | 10$^1/_4$" | 11" | 24" | 11" |
| | 10$^1/_4$" | 24" | 9" | 11" | 24" | 9" |
| | 10$^1/_4$" | 24" | 7" | 11" | 24" | 7" |
| | 10$^1/_4$" | 24" | 6" | 11" | 24" | 6" |

### *3.3.3 Socio-Economic Aspects*

The use of local stone is a vernacular tradition, leaving a legacy of historical and architectural artefacts sought after not only by locals and foreign cultural tourists alike but also by the general visitor.

Approximately 500 people are employed by the quarrying industry.[11] Hardstone quarry operators are organised, professional and conscious of the demands and expectations of the construction industry and society as a whole. On the contrary,

9 By end of 1991, the Government of Malta agreed to changes to the Price Order of 1981 which states the selling price of stone cut to 'standards' size, namely 230mm (9") and 178mm (7").

10 Planning Authority, *The Planning Fact Book* (Vol.1, pp.3/1-3/6).

11 Central Office of Statistics, *Industry Statistics*, vol. I and II, Department of Information, Malta, 1996.

softstone quarry operators are disorganised and inefficient. They are essentially family businesses and not companies as is the case with hardstone operators. The industry generates a value added of circa LM4-5 million per annum[12].

Malta with a population density of circa 1,200/km$^2$ is one of the most densely populated countries. The direct contribution to the Gross Domestic Product by the construction industry, including quarrying, is 3 to 4%, that is circa that of agriculture; tourism accounts for about 30% of the Gross Domestic Product.

Malta has a higher per capita stone extraction rate than anywhere else in Europe. As stated in the *Natural Stone Specialist*, [13]

> The rate of stone extraction from Malta … in 1996 was 1.6tonnes for each of the 340,000 people who live there (total output was 550,000 tonnes). Europe's biggest stone producer, Italy, by comparison, extracted 130kg per person.[14]

In Malta, quarrying is a resource to meet domestic needs. Environmental impacts and dilemmas in Malta are typical of a small island state: economic viability in a limited land area. In a typical softstone quarry, 46% of the expenses related to the production of dimension stone is for manual work in the quarry.[15] Quarrying is not economically viable when one has to take into account the durability and environmental costs involved. Quarries are prominent in the Maltese landscapes. Principal quarry sites are located close to areas of scientific and cultural interest. Yet, research has shown that imported hardstone will cost 2 to 3 times the cost of similar local material.

Recently, the demand for softstone decreased because of a decrease in the building activity and in shifts in the building industry to use other materials and systems of construction. Hardstone is still in demand both as aggregate for infrastructural works and in precast, prefabricated concrete blocks.

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12 Correspondence from the Director of Planning, Malta, dated 13th June 2000, Section 1.

13 Daniel, P., 'Globigerina goes to Crediton rectory' in *Natural Stone Specialist*, October 1997, p. 27.

14 If using the current rate of annual extraction of softstone as stated by the Planning Authority, that is 860,000m$^3$, and assuming the density of softstone to be 1,700kg/m$^3$, then per capita rate works out to be 4.23tonnes.

15 Torpiano, A., *Rapport Tal-Bord Mwaqqaf mill-Onor Ministru M.Falzon Biex Jaghmel Rakkomandazzjonijiet Dwar Riformi fl-Industrija Tal-Barrieri Tal-Gebel Tal-Franka*, Unpublished report commissioned by the Minister for Infrastructure, 1993, Para. 3.22.

Export of Maltese limestone is not a contemporary issue. In the nineteenth century, it was exported to a number of Mediterranean countries including Greece, Turkey and North Africa.[16] Export is still taking place both to countries of the European Union and elsewhere. In summer of 1997, a container and a half of limestone balustrades and steps was shipped into Crediton, Devon, from Gozo, to restore part of Chulmleigh Old Rectory.[17] Yet, the Government of Malta allows worked stone to be exported as according to the *Exportation (Control) Regulations, 1948*.

Good quality Lower Globigerina Limestone is available in very limited quantities. The deposits, which are yet not sterilised, should be protected from development and quarrying for use in restoration and conservation works of vernacular and historic buildings which covers substantial parts of the islands. As an example one may cite the capital city of Valletta, an UNESCO World Heritage Site full with structures worked out of the said limestone.

### *3.3.4 Environmental Aspects*

Mineral development is different from other forms of development. Two main differences are:

1. minerals are a finite resource which has to be extracted where it occurs naturally and
2. quarrying is a development that is irreversible.

Quarries are present in mainland Malta and its sister island of Gozo. Given the geology and the differing geomorphology of the islands, in Malta hardstone is located along valleys while softstone occurs on the flatter parts of the island. Thus, hardstone quarries are located in more environmentally sensitive areas. The main environmental concern of the sofstone quarries is their location with respect to the aquifer. The case for Gozo is opposite to the mainland scenario where softstone suitable for the building industry is found along valley sides and in areas, which are of natural beauty while hardstone quarries are less of an environmental threat than their counterparts in Malta.

[16] Ellul, M., 'Weathering and Deterioration of Malta Limestone - Causes and Remedies'; Paper read at the Second International Symposium on the deterioration of building stones held at Athens; Manuscript consulted.

[17] Daniel, P., 'Globigerina goes to Crediton rectory' in *Natural Stone Specialist*, October 1997, pp. 27-30.

Variations in topography where the deposits occur relate to quarry design, which in turn has a bearing on the mode of transport, and handling. In Gozo, quarries occur along slopes while in Malta along flat terrain. A ramp to a quarry in Gozo follows the natural contours while in Malta it has to be designed within the quarry itself. Due to the sheer size of a typical quarry in Malta, circa 13 tumuli, more than 25% is effectively used in designing access ramps, which, to European Standards, is a notorious, health and safety hazard. The ramp cannot be designed to a turning circle to accommodate the use of trailers for transport, as is the case in Gozo. In Gozo, trailers are used to transport stone from quarry to building site while in Malta transport is by trucks. Trailers are left at the building site for masons to unload the required stones to be used. This is not the case with trucks, which are required by the stone transporters for their daily distribution of stones to different building sites.[18] An alternative to the present practice in Malta is the use of cranes to lift stone from the quarry for loading onto trailers. Hardstone, which is mainly used as aggregate is transported by means of dump trucks.

Waste generated in the production of hardstone is insignificant because all material is crushed. On the other hand, nearly 60% of the volume of a softstone quarry ends up on the market; the rest is wasted. Only 40% of this amount is of a quality which is highly sought after by the construction industry; the rest is more difficult to sell.[19]

It is the opinion of the Director of Planning and Chairman of the Minerals Advisory Board to the Planning Authority that:

> A high production of local mineral resource combined with substantial mismanaged quantities of resource that fall under the denomination of building and construction waste is not sustainable by any international standards let alone the environmental burden that such operations imply on the local scenario. In allowing export of local mineral resources (in the raw state or worked) Malta would be adding to the already unsustainable burden on the environment.[20]

[18] For the stone transporter to have a number of trucks, which may be left on site, is not economically feasible.

[19] A typical softstone quarry in Malta is 33 metres deep. The 40% which is in high demand occurs in the top 18m.

[20] Consultation report of the Director of Planning and Chairman of the Minerals Advisory Board, dated 13th June 2000 also referred to in Section 6.2 of this Report.

# 4.0 Relevant International Conventions and Local Legislation

## *4.0 Relevant International Conventions and Local Legislations*

### *4.1 Rio United Nations Conference on Environment and Development (UNCED)*

Recent international agreements, declarations and resolutions indicate that the basic need of future generations have started to be recognised, although no legal rights have as yet been assigned to future generations. Current efforts are focused on responsibilities of present generations towards future ones. Hence, the concept of sustainability and environmental capital of future generations.

At the Rio UN Conference on Environment and Development of 1992, the importance of integrating the environment with development was highlighted in the following non-legally binding principles:

1. Agenda 21 : This programme of action was signed by 180 countries including Malta and it addresses the relationship between the environment and economy as a common heritage to all mankind requiring international cooperation. Para 8.7 of the Agenda extolls the importance of

   > socially responsible economic development while protecting the resource base and the environment for the benefit of future generations.

   By way of implementing Agenda 21, the Commission on Sustainable Development was set up.

2. The Rio Declaration on Environment and Development is a statement of basic guidelines consisting of 27 principles towards sustainable development and environmental protection.

   Principle 3 states that

   > The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

   Principle 8 states that

   > To achieve sustainable development and a higher quality of life for all people, States should reduce and eliminate unsustainable patterns of production and consumption…

Moreover, Principle 15 calls for a

> precautionary approach by States according to their capabilities.

### *4.2 Convention concerning the Protection of the World Cultural and Natural Heritage (UNESCO)*

This Convention was adopted by the General Conference at its seventeenth session, Paris, 16th November 1972. Malta accepted this convention on 14th November 1978.

An essential axiom of the Convention states that the responsibility to conserve elements of world heritage lying within a territory is primarily the responsibility of the State Party to whom that territory belongs. The State Party is obliged to "act to this end, to the utmost of its own resources".

Articles 1 and 2 of the Convention define what, for the purposes of same, is cultural and natural heritage. Article 1 considers sites where the combined works of nature and human activity, and areas including archaeological sites, which are of outstanding universal value from historical, aesthetic, ethnological or anthropological standpoints, as cultural heritage.[21] Article 2 considers natural features, geological formations, and natural sites of outstanding universal value from the point of view of science, conservation, or natural beauty, as natural heritage.[22]

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[21] Article 1 defines 'cultural heritage' as:

> Monuments : architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
> Groups of buildings : groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
> Sites: works of man or the combined works or nature and of man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological points of view.

[22] Article 2 defines 'natural heritage' as:

> natural features consisting of physical and biological formations or groups of such formations, which are of outstanding universal value from the aesthetic or scientific point of view;
> geological and physiographical formations and precisely delineated areas which constitute the habitat of threatened species of animals and plants of outstanding universal value from the point of view of science or conservation;
> natural sites or precisely delineated natural areas of outstanding universal value from the point of view of science, conservation or natural beauty.

Article 5 states that each State Party should adopt a policy aimed to integrate the protection of cultural and natural heritage into comprehensive planning programmes. It states that:

> To ensure that effective and active measures are taken for the protection, conservation and preservation for the cultural and natural heritage situated on its territory, each State Party to this Convention shall endeavour, in so far as possible, and as appropriate for each country:
>
> (a) to adopt a general policy which aims to give the cultural and natural heritage a function in the life of the community and to integrate the protection of that heritage into comprehensive planning programmes;
>
> (b) to set up within its territories, where such services do not exist, one or more services for the protection, conservation and presentation of the cultural and natural heritage with an appropriate staff and possessing the means to discharge their functions;
>
> (c) to develop scientific and technical studies and research and to work out such operating methods as will make the State capable of counteracting the dangers that threaten its cultural or natural heritage;
>
> (d) to take the appropriate legal, scientific, technical, administrative and financial measures necessary for the identification, protection, conservation, presentation and rehabilitation of this heritage; and
>
> (e) to foster the establishment or development of national or regional centres for training in the protection, conservation and presentation of the cultural and natural heritage and to encourage scientific research in this field.

In terms of paragraph 2 of Article 11,

> … The [World Heritage] Committee shall establish, keep up to date and publish … a list of properties forming part of the cultural heritage and natural heritage … which it considers as having outstanding universal value in terms of such criteria as it shall have established.

Paragraph 4 of Article 11 states that:

> The [World Heritage] Committee shall establish, keep up to date and publish … a list of property appearing in the *World Heritage List* for the conservation of which major operations are necessary and for which assistance has been requested under this convention. … The list may include only such property forming part of the cultural and natural heritage as is threatened by serious and specific dangers, such as the threat of disappearance caused by accelerated deterioration, large-scale public or private projects or rapid urban or tourist development projects …

Article 12 states that a property of cultural or natural heritage not included in the World Heritage List does not imply that the property does not have an outstanding universal value:

> The fact that a property belonging to the cultural and natural heritage has not been included in ,,, [the World Heritage List] shall in no way be construed to mean that it does not have an outstanding universal value for purposes other than those resulting from inclusion in these lists.

### *4.3 Chapter 54 of the Laws of Malta: Antiquities (Protection) Act, 1925*

Article 3(1) of the *Antiquities (Protection) Act* states that:

> The provisions of this Act shall apply to monuments and other objects whether movable or immovable having a geological, palaeontological, archaeological, antiquarian or artistic importance.

### *4.4 Act V of 1991 of the Laws of Malta: Environment Protection Act*

Article 36 of this Act states that:

1. The Minister may make special regulations for the conservation of the character of the towns and villages of Malta; and in particular but not only of Mdina, Valletta, Floriana, Cospicua, Senglea, Vittoriosa and for the Cittadella at Gozo, and may impose particular methods of restoration, maintenance and decoration of buildings within these localities. In the case of lack of conformance with regulations, he may also provide for the restoration, maintenance and decoration by Government at the owner's expense or for the compulsory acquisition by the State for the same purpose.
2. The Minister may declare that certain objects of artistic, historical or scientific importance may not be exported from these islands, and may also make regulations for the protection or the restoration of these objects, as well as for their acquisition by the State.

### *4.5 Act 1 of 1992 of the Laws of Malta: Development Planning Act*

This Act established the Planning Authority, which Authority by Article 18(1) of same

Act had to prepare a structure plan for the Maltese Islands. Though formally approved after the *Earth Summit*, ratification of *Agenda 21* and the development of the *Fifth Environmental Action Programme*, the *Structure Plan* was formulated prior and thus does not explicitly deal with the issue of sustainability.[23]

Article 18(1) of the *Development Planning Act* states that:

> The Authority shall prepare a structure plan and shall not later than one year from the coming into force of this Act submit it to the Government for consideration and approval as provided in the following provisions of this Part of this Act.

Quarrying is included under Article 30(2) of the *Development Planning Act* as 'development' and thus as the Act came into force, quarrying required a development permission. Article 30(2) states that

> For the purposes of this … Act, "development" means the carrying out of … quarrying, mining, …

The following mineral policies included in the *Structure Plan* are worth noting : MIN 1, MIN 4, MIN 10 and MIN 16.

*Structure Plan* policy MIN 1 states that

> Proven and potentially workable mineral resources will be safeguarded from development, which would lead to their sterilisation.

*Structure Plan* policy MIN 4 states that

> … The Planning Authority will seek to provide for the release of land for mineral extraction in order to maintain a level of economic reserves which is sufficient for about 20 years' extraction over the Islands as a whole, having regard to national and regional demands and an acceptable level of exports.

*Structure Plan* policy MIN 10 states that

> When granting permission, the Planning Authority will normally limit the permit to a fixed term, not usually less than 10 years, with a maximum of 20 years, conditional on a review of conditions every five years … .

[23] Monitoring Programme, *Structure Plan*, p.30.

*Structure Plan* policy MIN 16 states that

> The Planning Authority will undertake an immediate review of all existing quarry operations, their existing licences, and the environmental impacts resulting from their activities. Priority action will be initiated in environmentally sensitive areas and for quarries operating without a licence.

### *4.6 Legal Notice 44 of 1985*

This Legal Notice relates to the Exportation (Control) (Amendment) Regulations, 1985. As per said notice where "Malta stone and objects made therefrom" was inserted in the Schedule of the *Exportation (Control) Regulations* of 1948.

# 5.0 European Union Legislation

## *5.0 European Community Legislation*

Regulations, directives and decisions are the basic forms of European Community law. Regulations are binding in their entirety and directly applicable to all Member States. Directives are binding to Member States for the result to be obtained. Each Member State is free to implement directives in any form and method at their discretion. Decisions are binding to the parties in the legal suit. In European Community Law, private individuals who are not signatories to the Treaty forming the European Community, may claim and enforce their rights pertaining to them.[24] A Member State may be sued by any private individual for damages incurred due to lack of implementation of a European directive.[25]

### *5.1 Treaty Establishing the European Community*

Of central importance to European Community legislation is the *Treaty Establishing the European Community*. The *Treaty* is divided into a number of titles with respective chapters on various socio-economic and environmental aspects. Of particular relevance to this Report are the Sections on Free Movement of Goods, the Approximation of Laws and the Section dealing with the Environment.

Articles 28, 29 and 30 of Chapter 2, entitled 'Prohibition of quantitative restrictions between Member States', on Free Movement of Goods are of particular relevance. Article 28 states that no restrictions should be made on imports between Member States while Article 29 states that no restrictions should be made on export between Member States. In terms of Article 30, the liberalisation with respect to trade holds provided public morality, public security, protection of human, animal and plant health and life, protection of national artistic, historical and archaeological treasures, protection of industrial and commercial property are safeguarded.

Chapter 3 of the Section on Common Rules on Competition, Taxation and Approximation of Laws, relates to the approximation of laws. Article 37 (ex 100a) of this chapter deals with the dynamics of the internal market where harmonisation of standards is sought for, with main emphasis on protection of health, safety,

[24] Case 26/62 *Van Gend en Loos v Nederlandse Administratie der Belastingen* [1963].

[25] Cases C-6/90 & 9/90 *Francovich and Bonifaci v Italian State* [1991] ECR I-5357.

environmental protection and consumer protection. Article 37 further states that if necessary, national provisions will be maintained on non-economic grounds, namely the working environment, protection of the environment and factors relating to Article 38. Such protective measures have to be passed through a notification process. Article 38 makes provisions for protection from undue competition from other Member States having "national market organisation or international rules" with "equivalent effect" through countervailing charges.

Article 133 (ex 113) of Title IX stipulates a common commercial policy through the establishment of uniform tariff rates, liberalisation, export policy and measures to protect trade. Titles XVI of the *Treaty* deals with incentives for restructuring the industry. Title XIX establishes a common environmental policy. Under this title, protection of limited resources falls within its parameters, mainly through Article 174 (ex 130r) :

1. Community policy on the environment shall contribute to pursuit of the following objectives :
   - preserving, protecting and improving the quality of the environment;…
   - prudent and rational utilisation of natural resources
2. Community policy on environment … taking into account the diversity of situations in the various regions of the Community … shall be based on the precautionary principle and on the principles that preventive action shall be taken, that environmental damage should as a priority be rectified at source and that the polluter should pay.

### *5.2 Council Regulation (EC) No 3286/94 of 22 Dec 1994 laying down Community procedures in the field of the common commercial policy in order to ensure the exercise of the Community's rights under international trade rules, in particular those established under the auspices of the World Trade Organisation; amended by Council Regulation (EC) No 356/95 of 20 Feb 1995*

Article 1 (a) states that one of the aims of this directive is to remove obstacles from free trade

> …with a view to removing the injury resulting therefrom.

The Directive continues to describe the procedure to be adopted when complaints

against trade barriers are lodged by the Community industry or enterprises.

### *5.3 Council Regulation (EEC) No 2603/69 of the Council of 20 Dec 1969 establishing common rules for exports; amended by Council Regulation (EEC) No 3918/91 of 19 Dec 1991*

This Regulation comes in the spirit of Article 30 of the *Treaty Establishing the European Community*. It formulates the complete liberalisation of export in all Member States to third countries (Article 1):

> The exportation of products from the European Economic Community to third countries shall be free, that is to say, they shall, not be subject to any quantitative restriction, with the exception of those restrictions which are applied in conformity with the provisions of this Regulation.

Article 2 states that

> If, as a result of any unusual developments on the market, a Member State considers that protective measures … might be necessary, it shall so notify the Commission, which shall advise the other Member States.

Title III of the Regulation is dedicated to protective measures. Article 6 states that export of certain products may be limited

> in order to prevent a critical situation from arising on account of a shortage of essential products, or to remedy such a situation, and where Community interests call for immediate intervention…

In such an event, the Council and the Member States should be notified. To this, Article 7(1) adds that protective measures may also be sought

> to allow international undertakings entered into by the Community or all the Member States to be fulfilled, in particular those relating to trade in primary products.

Article 7(3) states that

> When quantitative restrictions on exports are introduced, account shall be taken in particular of :
>
> - the volume of goods exported … before the entry into force of a protective measure…; and
> - the need to avoid jeopardising achievement of the aim pursued in introducing

> quantitative restrictions.

Products listed in Annex I and II of the Regulation do not fall under the free movement of goods principle.

### 5.4 *Council Regulation (EC) No 520/94 of 7 March 1994 establishing a Community procedure for administering quantitative quotas; amended by Council Regulation (EC) No 138/96 of 22 Jan 1996*

This Regulation was established after the removal of internal frontiers within the Community and the establishment of the common commercial policy, where a new system of administering quantitative quotas was called for:

> …the administration of import and export quotas should be based on a system of licences issued by the Member States in line with quantitative criteria established at Community level

except for

> products listed in Annex II of the Treaty [establishing the European Community], nor to other products that are subject to specific common import or export arrangements laying down special provisions for quota administration.

Article 2(6) states that

> Save where other provisions are adopted when the quota is set, the release for free circulation or export of products subject to quotas shall be conditional on the presentation of an import or export licence issued by the Member States in accordance with this Regulation.

The Regulation gives a description of the different administrative methods that can be utilised in allocating quotas and establishes the rules by which import and export licences are subject to.

### 5.5 *Council Directive 89/106/EEC of 21 Dec 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products; amended by Council Directive 93/68/EEC of 22 July 1993*

This directive was drafted in the spirit of Article 37 of the *Treaty Establishing the*

*European Community*, with particular emphasis on the construction sector, where the removal of technical barriers is desirable for the proper functioning of the Community. To this end, harmonised standards are to be established specifically on construction products in order

> …to afford access to that [internal] market for as many manufacturers as possible, to ensure the greatest possible degree of market transparency and to create the conditions for a harmonised system of general rules in the construction industry…

In this directive, construction product is defined in Article 1 as:

> …any product which is produced for incorporation in a permanent manner in construction works, including both buildings and civil engineering works.

A construction product becomes "fit for use" only if it conforms with these harmonised standards or a recognised non-harmonised technical specification. Where a product is of "little importance with respect to the essential requirements" and it deviates from existing specifications, its fitness for use can be certified by an approved body.

In the absence of a harmonised standard and European technical approvals, national or other non-harmonised specifications may be used instead, provided the latter are recognised at the Community level as stated in Article 5:

> Where a Member State or the Commission is of the opinion that the harmonised standards or European technical approvals…or mandates…do not satisfy the provisions of Articles 2 and 3 [that is, that the product is fit for use in construction works], that Member State or the Commission shall notify the committee [Standing Committee on Construction]…, setting out its reasons. The committee shall deliver an urgent opinion…In the light of the opinion of the committee, the Commission shall notify the Member States whether the technical specification in question should benefit from the presumption of conformity…

Article 8 (3) states that

> In special cases, the Commission may, as a derogation…authorise the issue of European technical approval…for products for which there is a mandate for a harmonised standard, or for which the Commission has established that a harmonised standard can be elaborated. The authorisation shall be valid for a fixed period.

Once a product is considered fit for use, it can bear the CE mark and be allowed free movement and free use throughout the Community (Article 6)

> …Member States shall ensure that the use of such products, for the purpose for which they were intended, shall not be impeded by rules or conditions imposed by public bodies…

One should note that the CE mark on a product encapsulates "other aspects" if the product is "subject to other Community directives", as stated in Article 2 of the directive.

### *5.6 Council Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations; amended by Directive 98/48/EC of 20 July 1998*

This directive is intended to provide a blueprint for the setting up of technical standards to facilitate the free movement of goods within the internal market. In fact, it points out that trade barriers through the establishment of technical regulations is

> allowed only where they are necessary in order to meet essential requirements and have an objective in the public interest of which they constitute the main guarantee.

It emphasises that

> It is therefore necessary to enable economic operators to give their assessment of the impact of the national technical regulations proposed by other Member States.

The directive points out its awareness that there may be other needs, besides technical specifications, that need be assigned to a product:

> … requirements, other than technical specifications, referring to the life cycle of a product after it has been placed on the market are liable to affect the free movement of that product or to create obstacles to the proper functioning of the internal market.

In fact, Article 1(3) defines 'other requirements' as

> …a requirement, other than a technical specification, imposed on a product for the purpose of protecting, in particular, consumers or the environment, and which affects its life cycle after it has been placed on the market, such as conditions of use, recycling, reuse or disposal, where such conditions can significantly influence the composition or nature of the product or its marketing.

The directive emphasises that

> …Member States should refrain from adopting technical regulations once the Council has adopted a common position on a Commission proposal concerning that sector

and

> …national technical standards may have the same effects on the free movement of goods as technical regulations.

As regards the notification process, the directive makes it clear that this is

> …necessary only in the case of new subjects for standardisation and in so far as the treatment of these subjects at national level may give rise to differences in national standards which are liable to disturb the functioning of the market as a result; whereas any subsequent notification or communication relating to the progress of national activities must depend on the interest in such activities expressed by those to whom this new subject has already been communicated.

Article 8 lays out the method that should be adopted by Member States in communicating their draft technical regulations to the Commission, where a regulation

> …seeks to limit the marketing or use of a …product on grounds of public health or of the protection of consumers or the environment, Member States shall …communicate the anticipated effects of the measure on public health and the protection of the consumer and the environment, together with an analysis of the risk carried out as appropriate…. The Commission shall immediately notify the other Member States of the draft…

### *5.7 Draft European Landscape Convention*[26]

This draft has no legal status but it gives an indication of the philosophy being adopted by the Council of Europe vis-à-vis landscapes. This convention was drafted following urgent action to develop a comprehensive, legal instrument with respect to the protection, management and enhancement of landscapes of European Union Member States.[27] The scope of the convention is enshrined in Article 2, which states that:

> This convention applies to the entire European territory of the Parties and covers natural, rural, urban and peri-urban areas. It concerns ordinary or everyday landscapes no less than outstanding ones, since they all decisively influence the quality of the surroundings in which Europe's populations live.

26 Council of Europe, *Management and protection of the landscape : a European convention*, Doc. 8221, 2 October 1998.

27 Priore, R., 'Draft European Landscape Convention' in *Naturopa*, No. 80, 1996, pp. 22-3.

As per Article 5d of the said draft convention, each party undertakes to accommodate landscape systematically in its environmental planning policy and in other sectors which have direct or indirect impact(s) on landscapes.

The convention will aim to address specific measures as laid down in Article 6. One of the sections of this article relates to the identification and evaluation of present landscapes. Each State Party has to identify landscapes within its territory, including endangered ones, and analyse the character, dynamics and pressures which transforms them.

Article 12 contemplates the setting up of a list of landscapes of European significance. Inclusion in this list may be independent of or additional to inclusion in the UNESCO World Heritage List as per *Convention for the Protection of the World Cultural and Natural Heritage* [Article 12(10)]. Scientific co-operation and co-ordination between the Council of Europe and UNESCO is anticipated [Article 12(11)].

### *5.8 The Fifth Environmental Action Programme of 1992*[28]

The *Fifth Environmental Action Programme* states that although various measures where undertaken by the European Community over the previous two decades, the Community is still faced with a slow but gradual degradation of the natural environment within the Member States. The *Dobris Assessment*,[29] in 1995, arrived to similar conclusions of the notorious state of the environment of the *Fifth Environmental Action Programme*. Furthermore, *the Dobris Assessment* notes that at the European Community level [30]:

1. Data and information on the state of the environment of Member States are scarce and unreliable. Data is neither comparable nor compatible nor verifiable; and
2. Rather than co-ordination and concertation, legislative measures are less uniform and less harmonised.

[28] *Fifth Environmental Action Programme*, Official Journal EC 1993, no. C 138.

[29] Stanners, D. and Bourdeau, P. (eds), *European Environment Agency, Europe's Environment, The Dobris Assessment*, Luxembourg, 1995.

[30] Kramer, L., 'European Union and Environmental Law' in *A World Survey of Environmental Law* S. Nespor (ed), Giaffre Editore, Milan, 1996, pp.69-79.

The *Treaty Establishing the European Union* presents only broad aims, objectives and perspectives of a common environmental policy: high standards of environmental protection, a preventive polluter pays approach and ratification, when possible at source. The European reality is far from these aims:

> EC environmental legislation has not always lived up to these promises. Whatever level of protection was fixed, it was declared to be meant a high level of protection. This approach was favoured by the existence of Article 130t EC Treaty which allowed Member States to maintain or introduce more stringent environmental standards at national level than the EC standards. In practice, therefore, there was and is a tendency of Member States to agree to EC standards closer to the bottom rather than the top level of environmental protection.[31]

### *5.9 Case Laws*

Although the above mentioned directives allow trade barriers based on non-economic grounds, approval of such barriers are in reality governed by linear proportionality between the degree of protection required and the degree of restrictions to be conferred. A case in point is the European Court decision where Denmark sought protection against importation of beverage cans on Danish waste management criteria.[32] The Court acknowledged that the 1984 Danish law aimed to protect the environment and optimise re-use of waste, but the degree of protection was actually minimal due to the small quantities of imported beverages. In this case, protection was simply not balanced with less restrictive and alternative measures. In *Commission v Denmark*, which centred on the issue of deposit/return system for *Danish Bottles* driven by domestic ecosensitive legislation, the European Court ruled that:

> … by restricting … the quantity of beer and softdrinks which may be marketed by a single producer in no-approved containers [as per 1984 amended to the 1981 Danish legislation] …, the Kingdom of Denmark has failed, as regards imports of those products from other Member States, to fulfil its obligations under Article 30 of the EEC Treaty.

[31] Kramer, L., 'European Union and Environmental Law' in *A World Survey of Environmental Law* ed. S. Nespor (ed), Giaffre Editore, Milan, 1996, pp.69-73.

[32] Case 302/86 *Commission v Denmark* [1988] ECR 4607.

Scott, in reviewing the Danish case, argues that[33]

> The application of Danish rules on packing of imported goods would restrict trade and impede market penetration. This does no imply, according to the jurisprudence of the Court, that these rules must be set aside as incompatible with Community Law; but rather that a Member State may not insist upon compliance with them, in the case of imported goods, *except*, in so far as they are 'necessary' in order to satisfy a 'mandatory requirement' recognized by Community Law.
>
> …. [Yet,] it is … apparent that the Court, in construing Article 30, has sought to strike a balance between market integration and sometimes competing societal interests, such as the protection of the environment.

Similarly, Germany asked for a total ban on the importation of live freshwater crayfish in order to protect native crayfish from disease.[34] On this issue the Court turned down Germany' s request because alternative measures are present which are less restrictive to intra-community trade, such as checks and certification. With respect to mandatory requirement related to customer protection, Scott argues that[35],

> ... The Court has consistently adopted the view that consumers derive adequate protection from a system of compulsory labelling and hence that more restrictive impediments to trade cannot be justified. Even such labelling requirements must be demonstrated to be necessary and proportionate.

Scenarios whereby a Member State may restrict trade in the Community to enforce domestic environmental sensitive policies are wide. Restrictions may be qualitative but not quantitative as otherwise will be in breach of Article 30 of the *Treaty Establishing the European Community*. Quantitative restrictions are not limited to quotas and bans but also to any trading regulations of any Member State which may hinder in any manner free trade among members of the Community.[36] Article 34 of the *Treaty Establishing the European Community* postulates an equivalent prohibition to that of Article 30, but in this case with respect to exports.

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33 Scott, J., *EC Environmental Law*, Longman, London, 1998, pp.67-8.

34 Case C-131/93 *Commission v Germany* [1994] ECR I-3303.

35 Scott, J., *EC Environmental Law*, Longman, London, 1998, p.69 n.15.

36 In the Case 8/74 *Procureur du Roi v Dassonville* [1974] (ECR 837), the European Court ruled that Article 30 prohibits

> … all trading rules enacted by Member States which are capable of hindering, directly or indirectly, actually or potentially, intra-Community trade.

A European Union directive for full harmonisation of domestic legislation deprives a Member State to have reserves with respect to Article 36 of the *Treaty Establishing the European Community*:

> The Court has consistently held … that a directive providing for full harmonisation of national legislation deprives a Member State of Recourse to that article [Article 36][37]

This was part of the judgement of the European Court in the Case *Criminal Proceedings v Gourmetterie van den Burg*. *Gourmetterie van den Burg* was being criminally prosecuted by the Dutch Authorities for selling in the Netherlands dead, red grouse from the United Kingdom. The red grouse was hunted legally in terms of both United Kingdom and European Community legislation and the bird species is neither migratory nor endangered nor native to the Netherlands. The Dutch High Court requested preliminary ruling from the European Court regarding Articles 30-36 of the *Treaty Establishing the European Community* and Directive 79/409 on Wild Birds. The European Court ruled that prohibition to import and market such bird species is not justified.

Minimum harmonisation states the lower limits to be maintained by Member States. Scott notes that[38]

> 'Minimum' harmonisation is emerging as the rule rather than the exaction, with the Community rule prescribing the 'bottom line' below which the regulatory practices of the Member States may not sink.

A divergence in national standards does not imply fragmentation of the internal market, yet, they may hinder intra-Community trade.[39]

In the Case *Bic Benelux v Belgian State*, the European Courts ruled that national regulations requiring labelling of goods subject to an environmental levy amounts to a technical specification as per Directive 83/189, now superseded by Directive 98/34.[40]

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37 Case C-169/89 *Criminal Proceedings v Gourmetterie van den Burg* [1990] ECR I-2143.

38 Scott, J., *EC Environmental Law*, Longman, London, 1998, p.64. In discussing 'minimum harmonisation Scott cites (ibid. n.1) Weatherill seminal paper entitled 'Beyond Preemption? Shared Competence and Constitutional Change in the European Community' (O'Keefe and Twomey (eds), *Legal Issues of the Maastricht Treaty*, Wiley, Chancery, 1994, p.25):

> [W]hereas, under old-style preemption, the Community rules provided both floor and ceiling, now, under minimum harmonization, the rule provides the floor but Article 30-36 the ceiling.

39 Case 120/78 *Rewe-Zentrale AG v Bundesmonopolverwaltung für Branntwein* [1979] ECR 649.

40 Case C-13/96 *Bic Benelux v Belgian State* [1997].

# 6.0 Summaries of Consultation Reports

## 6.0 Summaries of Consultation Reports

### 6.1 Environment Protection Department[41]

Limestone, both as a geological material and as inert waste, is the only mineral resource in Malta. Sustainable use of this resource is needed through waste minimisation, reuse and recycling, with only unmanageable waste being landfilled with possible future recovery potential.

Even though limestone is not a renewable resource and hence its use can never be truly sustainable, current practices are definitely unsustainable. Between 1990-1997, $13x10^6$ tonnes of construction and demolition wastes were dumped at the Maghtab landfill.[42] To this figure one must also add other quantities which were used for infilling disused quarries. The Maghtab landfill now covers an area of about $600,000m^2$.

Locally, no current incentives are present to encourage reuse and/or recycling of inert waste due to low cost of raw stone and lack of internalisation of environmental or sustainability pricing in the selling price.

Since the construction industry is a prime mover of the Maltese economy, inert waste generation is foreseen to increase. Thus:

1. Environmental costs and sustainability pricing should be internalised as quickly possible;
2. Sustainable waste management should be undertaken through minimisation, reuse and recycling; and
3. Although export of raw stone and inert waste is not sustainable, still export of inert waste may be a solution to meet urgent waste issues whereby the Maghtab landfill is just a manifestation.

41 Correspondence from the Director, Environment Protection Department, Malta, dated 30th May 2000.

42 Environment Protection Department, *State of the Environment Report*, Malta, 1999.

### *6.2 Planning Authority*[43]

Potential quarrying output varies whether it is softstone or hardstone. Softstone is extracted from the Lower Globigerina Formation of central and south of Malta and northwestern Gozo for the production of dimension stones. Hardstone quarries extract the Upper and Lower Coralline Formations of western and central Malta for the production of aggregates, concrete and marble. Total surface area of quarries has doubled in the last three decades through the opening of new quarries and extensions to existing ones. Citing the Central Office of Statistics, the Planning Authority estimates that the workforce in the quarry industry amounts to circa 500. The Planning Authority acknowledges that statistical data on local mineral production is not reliable. The value added per annum is about LM 4-5 x $10^6$.

The local mineral industry is not sustainable from the point of view of resource management, which is characterised by high production and mismanagement, and high environmental costs. Thus, exporting local industrial minerals will increase environmental costs.

The *Environmental Appraisal of Quarries* identified hardstone quarries to have greater environmental impacts than softstone quarries.[44] Since the demand for local limestone seems to remain, the report recommends protection of mineral reserves from sterilisation; good operations management and updating quarry design, techniques and equipment to meet European standards.

Land use conflicts identified in the *Minerals Resource Assessment* undertaken by the Planning Authority and completed by 1996 are the following: areas of ecological value, infrastructure including air traffic, topography, cliffs/coastal areas, archaeological areas, urban conservation areas, industrial areas and limits of development. The *Minerals Resource Assessment* also highlights the relative scarcity of good quarryable hardstone.

There are 60 licenced softstone quarries, which cover a total surface area of 80ha. They employ circa 250 workers. Output of dimension stone is estimated at 860,000$m^3$ per annum (PA estimate). Inert waste generated amounts to 35-60% of

43 Correspondence from the Director of Planning, Malta, dated 13th June 2000 and bearing reference number GF/GC-78/575. The Director of Planning is also the Chairman of the Minerals Advisory Board for the Planning Authority.

44 Wardell Armstrong, *Environmental Appraisal of Quarries*, Unpublished report, 1992.

quarried material. In Malta, softstone quarries are located near residential units while in Gozo they are located in areas of ecological value, namely, Dwejra which is a candidate for World Heritage Site in terms of the UNESCO 1972 Convention.

In Malta there are 30 licenced hardstone quarries with a total surface area of 130ha and produce 1,400,000m$^3$ of products per annum on the market (PA estimate). Inert waste generated, mainly clay and clayey terra rossa, amounts to 5 to 15%. They employ nearly 300 employees. Most quarries occur at outcrops in areas of high ecological value.

Both hardstone and softstone are main building materials in local construction industry. Demand for softstone decreased since 1991 as competition from concrete and steel structures increased. Hence protective measures are needed to broaden the use of softstone and marketing, research and recycling techniques need to be developed.

Traditional usage of softstone and hardstone are numerous. Softstone of the white statuary (prime quality) is used for interiors and worked stone while the white cream variety is used for building and engineering works. Inferior quality is utilised in foundations and basements while discarded waste is used for quarry reclamation. Prime quality hardstone is used for military structures, paving, kerbstones, civil engineering works such as breakwaters and quays and as aggregate for road surfacing. Aggregates produced from inferior quality hardstone are blended with better quality ones for road surfacing and for concrete. A variety of this inferior hardstone is used for the production of quick lime.

The *Minerals Subject Plan*,[45] based on the conclusions of the *Minerals Resource Assessment*, identified potential future resources, better known as Minerals Safeguarding Areas, to meet long term needs of the local industry.[46] The Planning Authority is of the opinion that controls commended in the *Minerals Subject Plan* should encourage minimisation of waste in mineral resources through proposals for local marketing of recycled mineral waste. The *Minerals Subject Plan* policy HS8 states that

> The Planning Authority will discourage the export of the Island's indigenous supplies of limestone.

45 Entec U.K, *Minerals Subject Plan for the Maltese Islands*, Unpublished draft.

46 The *Minerals Subject Plan* for the Maltese Islands was commissioned by the Planning Authority in June 1999.

Also, as a long-term strategy, it recognises the need for importation of mineral resources to substitute present hardstone resources.

The Planning Authority recommends that present export restrictions on Maltese Stone be maintained. In order to contain the economic implications associated with importation of construction material, export restriction should be extended to inert waste material, which is feasible to be recycled locally. It also recommends that imported foreign substitutes for local minerals should be encouraged through the introduction of import/custom concessions.

### *6.3 Department of Industry*[47]

The Department of Industry had no contribution to make on the issue of local limestone since it has never monitored this sector.

### *6.4 Department of Trade*[48]

A one month Export and Control Licence is required for the export of unworked or worked stone (Table 2). The licence is occasionally extended to two to three months.

Overseas demand for local stone is currently very low and cannot be gauged. When, in the past, an exporter requested a licence for regular export of local stone, he was informed by the Department that licence could be issued if quantities demanded are contained and not at frequent intervals. Hence, no quotas are in fact needed. The issue of a licence should act as a deterrent and/or controller if demand increases. In fact, licence is issued provided that export quantities are limited.

Given the island's limited resources, marketing of local stone is not encouraged since overseas demand would increase. Indeed, export of local stone is not an effective commercial proposition due to prohibitive transportation costs due to the weight and volume of the resource.

47 Correspondence from the Director, Department of Industry, Malta, dated 19th May 2000.

48 Correspondence from the Director, Imports & Internal Trade, Valletta, dated 5th June 2000 and bearing reference number DT 2/41/90.

Malta's entry into the European Union increases the possibility of free trade of local stone with European states, with increased need for monitoring of export quantities and possible prohibition of trading of local stone.

*Table 2: Export Licences for unworked and worked stone*[49]

| *Year* | *No. of licences issued for export of stone*[50] | *Description of stone to be exported* |
|---|---|---|
| 1994 | 25 | Gozo marble, stone slabs, worked stone, balustrades, tombstones |
| 1995 | 33 | Tombstones, worked stone, stone slabs, wall cladding, stone vases, carved stone, sculptures, stone fountains, stoneware, balustrades |
| 1996 | 18 | Balustrades, sculptures, worked stone, flagstones, plant pots, wall cladding, tombstones, stone slabs |
| 1997 | 16 | Worked stone, balustrades, sculptures, stone slabs, tiles, tombstones |
| 1998 | 21 | Worked stone, fireplaces, sculpture, tiles |
| 1999 | 24 | Fireplaces, sculptures, softstone slabs, worked stone, wall cladding, balustrades, pilasters |
| 2000 | 11 | Blocks, balustrades, engraved tiles, sculptures, worked stone |

### *6.5 Malta Development Corporation*[51]

Medistone Ltd is the only client of the Malta Development Corporation with significant export potential. It exports worked softstone and employs 25 to 30 people. Government policy is to be cautious due to long term environmental and economic impacts.

The ban of export of local stone should not affect the EU's internal market and hence a ban should not be a problem, except for added value goods such as worked stone. Due to the above-referred long-term impacts, the value of stone should increase.

49 Based on extract from the register at the Department of Trade kept for monitoring of export licences issued.

50 If deal falls through, export licence is not utilised and materials indicated may not have been exported.

51 Meeting of 26th May 2000 with Mr Marco Abela from the Estates Division and European Union Affairs Section of the Malta Development Corporation.

### *6.6 Malta Federation of Industry*[52]

The construction industry has two types of local mineral resources available - hardstone and softstone.

In the hardstone sector, the demand for aggregate has increased over the past two decades mainly for road construction and for concrete in buildings. The current supplies are fast diminishing and will be depleted within a few decades because

1. hardstone resources largely occur in areas of ecological value;
2. good quality resources are being sterilised due to large scale building development; and
3. past exploitation of best quality resources, even if this best quality is poor when compared to international standards.

Although the quality of local aggregate for buildings is adequate due to blending practices, the same cannot be applied to road construction. There is the need to import aggregate of better quality at least for the top 50mm layer of road surfacing. This will lead to a decrease in road maintenance and increase in road safety.

In the softstone sector, demand has been decreasing over the last two decades due to a shift to hardstone as an alternative building material. This shift is due to :

i. high occupational health hazard in extraction and handling of softstone and thus the number of softstone operators is decreasing;
ii. demand for hollow concrete blocks is increasing due to less hardship in handling and cheaper when compared to the use of softstone blocks, even though the use of concrete blocks requires pointing;
iii. greater architectural flexibility in design and planning and greater efficiency, offered by precast concrete and concrete frame structures, particularly in large buildings.

The future needs of the softstone industry are likely to be limited just for ornamentation and cladding. The official and projected lifetime of softstone resources, based on consumption of the past 20 years, is circa 40 years. Yet demand has decreased in recent years, thus the probable lifetime is about 100 years.

52 Consultation report by Mr Angelo Xuereb on behalf of the Malta Federation of Industry entitled 'The Construction Industry in Malta: Softstone and Hardstone Resources' (June 2000).

The softstone industry needs thorough modernisation to become economically feasible. Machinery and technology of the 1950s are still in use. In 1992, the Malta Federation of Industry recommended

1. a decrease in the size of dimension stones;
2. transport of dimension stones is to be by means of pallets and
3. on-site dressing.

These, the Federation argued, will reduce occupational health hazards and dust generation.

The Federation recommends re-use and recycling of construction and demolition waste through the establishment of four depots (three in Malta and one in Gozo) for inert waste screening and size separation to different fractions for reuse for landscaping, road construction, rubble walls, in unreinforced mass concrete, for soil development and civil engineering works.

The Malta Federation of Industry is against the import of softstone due to the high costs involved.

### *6.7 Malta Chamber of Commerce*[53]

The softstone resource is limited because :

1. natural deposits are limited, estimates show a lifetime of only about 200 years more;
2. most of the deposits are sterilised by built development;
3. there is a high percentage of wastage during stone extraction and preparation;
4. there are no incentives to re-use inert waste due to the high expense involved since fresh stone is still too cheap; and
5. if stone is exported in large amounts, Maltese character in constructions for future generations is lost at a higher cost. Also, since resource is cheap the imported building material would be much more expensive.

Thus, the resource needs protection and limited export.

The need for protection of the local softstone industry always existed. However, the Chamber is of the opinion that rather than protection, the industry needs thorough

53 Meeting on 1st June 2000 with Mr Nazzareno Vassallo and Mr Kevin Borg from the Malta Chamber of Commerce.

modernisation. In fact, circa a decade ago, partial dressing of stones within the confines of the quarry was commended, now a common practice.

Export of local softstone has always been very limited due to the common perception that local stone cannot withstand overseas environment. In fact, this perception was carried far even to the local scale. Thus, traditionally it was unthinkable to transport stone from the south of Malta to the north or vice versa; the transport of stone from Gozo to Malta or vice versa is still culturally prohibited.

The Chamber of Commerce is of the opinion that export of local softstone should only be allowed for value added goods, that is worked stone with local craftsmanship. Definitely, there should be no export of raw stone.

In the case of hardstone, there is a demand for imported aggregate due to the poor quality of local hardstone and limited natural deposits. In fact, given the present rate of extraction, current hardstone deposits will soon be exhausted. Already, there are no more deposits for the production of hardstone slabs.

As regards importation of hardstone, the most prohibitive factor is port charges. In general, overseas small islands such as Crete and Corfu lack mineral extraction sites and import building material from the mainland.

### *6.8 Building Industry Consultative Council*[54]

There are 18 hardstone quarries with 11 owners in Malta and 3 hardstone quarries and 2 owners in Gozo. Official estimates of current hardstone resources include sterilised locations. It is in fact difficult to indicate the current resources available, however there are about twenty years more of resources, given the current demand for aggregate. Absolute quantities of hardstone reserves are not available.

The lifetime of resources depends on supply and demand. Most of the hardstone deposits occur in areas of ecological value and hence have been scheduled by the Planning Authority. Moreover, local hardstone is unconsolidated and hence is of inferior quality to overseas ones, such as deposits found in Libya, Italy and the United

54 The Chairman of the Building Industry Consultative Council, during a meeting on 18th May 2000, recommended that consultations should be held with Mr Emmanuel Aquilina and Mr Antoine Baldacchino, General Retailers and Traders Union representatives for hardstone and softstone industries respectively on the Building Industry Consultative Council. Meetings were held separately on 22nd May 2000.

Kingdom; in fact, no one ever thought of exporting hardstone. There are very few areas identified by the *Minerals Resource Assessment* undertaken by the Planning Authority, as areas of good quality hardstone deposit. Thus, the lifetime of the current deposits may last about twenty years more. Within ten years, about seven quarries have to close down due to building constraints, hence future price for aggregate is likely to increase.

Large developments, which occur on hardstone deposits, are an added bonus once the deposits are exploited for the same development. However, the landfills at Maghtab and Wied Fulija occur on good quality hardstone deposits, which have thus been sterilised.

Importing construction material as a substitute for hardstone is very expensive and should be discouraged since it would heavily increase the building costs. In fact, local construction material is very cheap. Considering the occupational hazard involved and increasing administrative costs, especially due to regulatory agencies, the selling price should increase; the price has not increased for the last 22 years whilst labour and administrative costs have increased.

There are small states within the European Union with similar limited resources; for example, Minorca has limestone similar to ours : the softstone is like the local inferior quality and the hardstone is similar to ours. They import a lot of hardstone aggregate from Spain but use of concrete in their buildings is minimal.

There are 65 softstone quarries in Malta. Softstone reserves are substantial. Since the demand for softstone has decreased, current deposits may last more than a hundred years. Still building and planning constraints may restrict future exploitation of this type of construction material.

Although there may be economic advantages in exporting softstone, the representative of the softstone industry is against the exportation of such stone for cultural reasons. The tradition associated with quarrying and use of softstone should be revived for its intrinsic characteristics and applications.

### *6.9 General Retailers and Traders Union*[55,56]

The General Retailers and Traders Union is against restrictions on export controls with respect to Maltese Stone for two main reasons - there is no such request from the European Union and secondly recycling of construction waste is being undertaken and can be worked into value added goods having a potential foreign market.

55 Based on an extract of the General Retailers and Traders Union report in response to t

he *Malta: National Programme for the Adoption of the Acquis* (Ministry of Foreign Affairs, Malta) which extract was furnished by the Director General of the Union as part of the consultation process to prepare this report.

56 Mr Emmanuel Aquilina and Mr Antoine Baldacchino, as representatives of hardstone and softstone quarries respectively, suggested that consultations should also be held with the Director General of the General Retailers and Traders Union.

# 7.0 Arguments

## *7.0 Arguments*

### *7.1 Considering that*

- Maltese building tradition centres on local industrial minerals for development, construction and related uses;
- Malta has a tradition of exporting unworked and worked stone;
- Softstone and hardstone are the main industrial minerals of the Maltese archipelago;
- Softstone is quarried mainly for use as dimension stone. Hardstone is quarried mainly for use as aggregate for infrastructure sub-bases and concrete manufacture;
- Softstone dimension stone, dressed in accordance with domestic practice, is lighter than overseas natural dimension stones, more porous and weathers badly in central and north European climates;
- The physical and mechanical characteristics of the best local hardstone are inferior in quality to the use in which it is employed and thus do not conform to internationally recognised technical standards;
- Waste generated during the extraction of hardstone is insignificant while about 40% of softstone is wasted;
- Only 40% of extracted softstone is highly sought after in the domestic market; and
- Malta has a notorious environmental record.

### *7.2 Noting that*

- Mineral extraction has to take place where it naturally occurs;
- Quarrying is a development that is irreversible;
- Locally, quarrying has increased by about 200 to 300% over the last decade;
- The *Mineral Resources Assessment* highlights the relative scarcity of domestic good quarryable mineral reserves, especially with respect to hardstone;
- Most of these reserves are located in environmentally sensitive sites of scientific and cultural interest;
- Good softstone is available in very limited quantities. The unsterilised deposits should be protected from development and quarried for use in restoration and conservation works of vernacular and historic buildings such as for the Renaissance city of Valletta;
- Malta has a higher per capita stone extraction rate than anywhere else in Europe and this in spite of its being one of the world's most densely populated countries;
- Like agriculture, the construction industry, including quarrying, accounts to 3 to 4% of Malta's Gross Domestic Product while tourism accounts for about 30%;
- Approximately 500 people are employed by the quarrying industry;
- Locally, quarrying is not sustainable when one has to take into account the durability of the mineral extracted and the environmental costs involved in mining it;
- The *Minerals Subject Plan* identified potential future resources to meet long term needs of the local industry; and
- As a long-term strategy, the *Minerals Subject Plan* recognises the need for importation of mineral resources to substitute present hardstone resources.

### *7.3 Recalling that*

- Malta's entry into the European Union increases the possibility of free trade of local stone with European States, with increased need for monitoring of export quantities and possibly prohibition of trading of local stone;

- The Planning Authority recommends that present export restrictions on Maltese Stone be maintained. In order to contain the economic implications associated with importation of construction material, export restriction should be extended to inert waste material, which may be feasibly recycled locally;

- *Structure Plan* policy MIN 4 states that:

  > … The Planning Authority will seek to provide for the release of land for mineral extraction in order to maintain a level of economic reserves which is sufficient for about 20 years' extraction over the Islands as a whole, having regard to national and regional demands and an acceptable level of exports.

- The *Minerals Subject Plan* policy HS8 states that

  > The Planning Authority will discourage the export of the Island's indigenous supplies of limestone;

- At the *Rio UN Conference on Environment and Development*, the importance of integrating development with the environment was highlighted. Agenda 21 and the Rio Declaration on Environment and Development both discuss the concept of sustainability and environmental capital of future generations;

- The *Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO)* implies that the conservation of elements of world heritage value is the responsibility of the State Party to whom that territory belongs "to the utmost of its own resources";

- The *Treaty Establishing the European Community* liberalises imports and exports between Member States, provided public morality and security, human, animal and plant health and life, protection of national artistic, historical and archaeological treasures as well as industrial and commercial property are

safeguarded;

- The *Treaty Establishing the European Community* also seeks harmonisation of laws and technical standards for better dynamics of the internal market. If protective measures are desired, they have to pass through a notification process;

- The *Treaty Establishing the European Community* establishes free movement of goods also to third countries provided they are in conformity with the European Union trade restrictions, normally established to seek Community interests;

- In accordance with Article 7(3) of Regulation (EEC) No 2603/69, when quantitative restrictions on exports are introduced, account shall be taken of the volume of goods and the impacts such a restriction would have on the internal market;

- In accordance with Article 2(6) of *Regulation (EC) No 520/94*, trade restrictions imply the issue of an import or export licence;

- Article 1 of Directive 89/106/EEC defines a construction product as

  > …any product which is produced for incorporation in a permanent manner in construction works, including both buildings and civil engineering works.

- In terms of Directive 89/106/EEC, a construction product is fit for use only if it conforms with harmonised standards or a recognised non-harmonised technical specification. Once it is fit for use, it can bear the CE mark and be allowed free movement and use throughout the community. In the absence of a harmonised standard and European technical approvals, national or other non-harmonised specifications may be used instead, provided the latter are recognised at the Community level;

- In accordance with Directive 98/34/EC,

  > …Member States should refrain from adopting technical regulations once the Council has adopted a common position on a Commission proposal concerning that sector

  and

  > …national technical standards may have the same effects on the free movement of

goods as technical regulations;

- The *Draft European Landscape Convention* declares that each party is to undertake to accommodate landscape in its environmental planning policy and in other sectors having direct or indirect impact(s) on landscapes;

- The *Fifth Environmental Action Programme* of 1992 states that although various measures where undertaken by the European Community over the previous two decades, the Community is still faced with a slow but gradual degradation of the natural environment within the Member States;

- In Case 8/74 *Procureur du Roi v Dassonville* [1974], the European Court ruled that Article 30 of the *Treaty Establishing the European Community* prohibits

  > … all trading rules enacted by Member States which are capable of hindering, directly or indirectly, actually or potentially, intra-Community trade.

- In Case C-169/89 *Criminal Proceedings v Gourmetterie van den Burg* [1990],

  > The Court has consistently held … that a directive providing for full harmonisation of national legislation deprives a Member State of Recourse to that article [Article 36 of the *Treaty Establishing the European Community*];

- In Case 120/78 *Rewe-Zentrale AG v Bundesmonopolverwaltung für Branntwein* [1979], the European Court stated that differences in national standards may hinder inter-Community trade; and

- In Case 302/86 *Commission v Denmark* [1988], the European Court ruled that Danish legislation on packing of imported goods restricts trade and hinder market penetration. The Court has interpreted Article 30 of the Treaty such that a compromise is reached between market integration and competing interests such as protection of the natural environment.

### *7.4 Safeguarding heritage for future generations*

The protection of existing deposits of Maltese limestone may be considered as protection of our cultural heritage for the sake of future generations. The importance of the concept of future generations has been highlighted in such international

instruments as the *Rio Declaration on Environment and Development*. Amongst other aspects, protection of cultural heritage may be considered as including the protection of the local landscape (vide *Draft European Landscape Convention*) and the protection of local buildings having a cultural value.

The protection of the environment is another reason why limestone should be protected. As stated in Article 30 of the *Treaty Establishing the European Community*, a balance has to be reached between trade liberalisation and, inter alia, protection of human, animal and plant health and life and protection of national, artistic, historical and archaeological treasures. The European Union is very much aware of the threats facing the environment in Member States. This is shown by the *Fifth Environmental Action Programme*.

Limestone is very much a part of the Maltese urban and rural environment. In this densely populated island state, the preservation of the relatively few remaining open spaces assumes added value in relation to the quality of life. Further quarrying of limestone will certainly result in more damage to the environment.

Apart from the above, the countryside – constituting as it does an integral part of the Maltese landscape, can also be considered as a national treasure, even though it does not fall neatly within any of the brackets of the above referred Article 30. Indeed, although the countryside is neither exclusively an “artistic”, “historical” or “archaeological” treasure, it may well be considered as falling to some extent within all three descriptions.

Malta, as a State Party of the UNESCO *Convention concerning the Protection of the World Cultural and Natural Heritage*, is bound to safeguard the protection, conservation, presentation and transmission to future generations of the cultural and natural heritage of the Islands.

Yet, our past environmental record is very poor. A case which has attracted international attention concerns the applications for quarry extensions along the panoramic road to GHar Lapsi, close to the World Heritage Sites of Hagar Qim and Mnajdra Temples. Full development planning applications for extensions to quarries (PA 3863/93 and PA 3897/93), both of which have been turned down by the Development Control Commission due to the fact that they lie within an area of international archaeological importance, are typical case studies which exhibit lack of

commitment or otherwise by the responsible authorities.[57] Although lying in the vicinity of the prehistoric structures of Hagar Qim and Mnajdra, recognised by UNESCO as World Heritage sites due to the fact that they are the oldest free-standing stone structures in the world, quarrying operations are still present in the area and the boundary walls to the said quarries - built illegally to several courses high along the panoramic road, which road is highly used by locals and foreign tourists - are still present. The authorities responsible for removing such structures, which are otherwise creating a negative visual impact when seen from the surrounding areas and especially from the panoramic road, have done nothing in this respect.[58]

### *7.5 Safeguarding landscapes*

Limestone forms Maltese cultural and natural landscapes. Most of the architectural structures and historical cities are of significant international importance. They form part of mankind's fingerprint though time. Good quality limestone of Malta is a limited, highly sought-after resource. The remaining limited, good quality limestone should be restricted to the restoration and preservation of this heritage. These reserves are found in areas of high landscape value and, to be in line with the *Fifth Environmental Action Programme* and *Draft European Landscape Convention* of the Council of Europe, quarrying should be kept to a minimum. It will further help limit unsustainable patterns of production of local stone and thus in agreement with Principle 8 of the *Rio Declaration on Environment and Development*.

Environment protection in Member States, as per *Fifth Environmental Action Programme*, is still poor and though, on paper, the European Union aims at high environmental standards, environment seems to run low on the agenda. Although, this argument may read as if Malta is prepared for this Programme and in line with the *Rio Declaration*, Malta's environmental record is even more notorious. A case in point is the latest dispute taken even to the Maltese parliamentary level on illegal dumping of inert construction waste and illegal quarrying at Dwejra/Qawra, Gozo following an

57 Objections to quarrying operations in the area dates back to the early 1960s when the Museums Department refused to give the go-ahead for the issuing of a licence to operate a quarry in the area. This stand was subsequently taken by the Antiquities Committee and the Ministry of Tourism but overruled by other government departments without any clear justification.

58 Another argument put forth by individuals who are keen to justify the development is that once there are mineral deposits within the quarry boundaries, these can be extracted thus arguing for vertical rather than horizontal extension. "In planning terms this is similar to the continuation of an established use, which is not classed as development" (Planning Authority, *New Procedures for Regulating Quarry Development*, Unpublished report, February 1993).

article on a daily newspaper. At the official level, this site was recommended as a candidate for a World Heritage Site.[59]

Incidentally, a research project, entitled *National Resource Management in the Qawra/Dwejra Region*, was undertaken at the European Association for Environmental Management Education.[60] The project focused on the environmental issues of the Qawra/Dwejra region of Gozo.

Another example is a study commissioned by the Government of Malta to rehabilitate a disused quarry using construction waste (PA2502/96). Landscape archaeology was identified as the best solution to restore the landscape.[61] The philosophy outlined in this study is in line with what is being recommended in the *Draft European Landscape Convention*. The study included numerous recommendations, mitigation measures, and monitoring indicators. These were endorsed as conditions to the planning permit. Yet, no monitoring and enforcement was undertaken by the relevant authorities and the site was neither infilled as recommended nor monitored nor restored as stated in the study. This despite the fact that the Planning Authority had just prepared and published a policy and design guidance on inert waste disposal in quarries.[62]

Although Malta as a Member State would be able to introduce environmental protection measures which are more stringent than those prescribed by the European Union, this right to derogate from European Union legislation, which is granted under Article 37 of the *Treaty Establishing the European Community*, is by no means absolute. Hence, Article 37 lays down a procedural formality which seeks to ensure that the measures involved do not constitute a disguised restriction on trade or arbitrary discrimination.

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59 Allowing quarrying in World Heritage Sites illustrates that either, as a country, Malta has not understood the concept of a World Heritage Site and the relevant UNESCO convention, or that it is making light of the responsibilities imposed by such conventions. In either case, it is Malta's credibility which is suffering, as well as the standing of the local sites included in the World Heritage List.

60 A copy of this research project is included in the publication of the European Association for Environmental Management Education (*The Second Year 1993-1994*, p. 82). Two years after completion of this work, the author of this project was commissioned to undertake an ecological study and an assessment of ecological impacts likely to be generated by a full development application for an extension for a disused softstone quarry just off the Qawra/Dwejra region, Gozo (PA 0602/96). Although the Environmental Protection Department, in a letter of 25th November 1996, stated that the author is "ideal to undertake the ecological study of the site in question", he was not accepted by the Planning Authority to undertake such a study because he was not qualified for the task.

61 Bianco, L, *Environmental Planning Statement: Rehabilitation of disused softstone quarry at Tal-Ksajjem, l/o GHarb, Gozo*. Unpublished report prepared for the Parliamentary Secretariat for Gozo, Office of the Prime Minister, 1997.

62 Planning Authority, *Policy and Design Guidance: Inert Waste Disposal in Quarries*, June 1997.

This procedure involves notifying the commission of the intended derogations, and of the grounds for introducing such derogations. In the absence of such procedures, the intended derogations will not be applicable.

Malta would find it rather difficult to plead for and justify an export ban or export limitation on environmental protection grounds, when the competent authorities tend to give such a low priority to the local environment.

### *7.6 Safeguarding local mineral deposits*

Given Malta's population density and competing land uses, land available for exploitation is becoming more restricted. Industrial minerals of good quality are limited and thus they are a strategic resource, which use should be restricted for use in places of high priority.[63] Good quality softstone that is located in less sensitive natural landscapes, is required for the restoration and upkeep of cultural sites. Good quality hardstone, which mainly occurs in sites of ecological and natural beauty, are of inferior quality for the use in which they are employed and do not conform to internationally recognised technical standards. As from June 2000, the Malta Standardisation Authority is to be the official authority to implement European Standards as national standards.[64]

Malta is maintaining stringent controls on exploitation of local limestone to minimise waste at source, encourage recycling and optimise uses of local natural resources. Present deposits of softstone that are in areas with limited environmental impacts, will be prevented from being sterilised in terms of *Structure Plan* policy MIN 1. It is the intention of the Government of Malta to maximise available resources rather than wasting them. Waste in the production of hardstone is minimal as compared to softstone. In extracting the softstone, a lot of waste is generated mainly due to the local geology, mode of quarrying and handling of the finished product. The latter two need upgrading to meet acceptable technical standards recognized in Member States of the European Union. Such upgrading will be coupled with control of the number of trading licences to operate and produce 'standard' dimension stones and on a quota

63 Figures for official mineral reserves of softstone vary (vide Sections 3.3.1, 6.6 and 6.7 above). Yet, taking the maximum being stated, circa few hundred years, this is very little for a country. For hardstone, there seems to be an agreement that reserves will be exhausted within a few decades.

64 General Retailers and Traders Union, *Report in Response to the Malta: National Programme for the Adoption of the Acquis*, p.2.

on the output for such licensed quarries. Article 29 of the *Treaty Establishing the European Community* caters for a licence to operate but make outright prohibition of Member States to restrict, or control in any manner, free movement of people and goods. Also, quotas are allowed under free movement because no distinction is made between products for the domestic market or for export. Thus, at source, the Government of Malta will be having control on the minerals extracted irrespective of by whom, whether a local or a citizen from another Member State. Also, although the Government will not be prohibiting he still has full control of the rate at which local mineral reserves are being depleted. If domestic limestone resources are limited then the export potential of such low value commodity decreases.

The Article 30(2) of the *Development Planning Act* did not repeal the sections of the Code of Police laws relating to quarry licences.[65] The Police licence system for quarrying continued to be operated in parallel with the planning system introduced by the *Development Planning Act* and in terms of *Structure Plan* policy MIN 2.[66] The new system is related to the use of the land and thus it does not require annual renewal but is valid until the deposits present within the approved site for development are exhausted. It was anticipated by the Planning Authority that both systems run concurrently "at least for the time being".[67] Although *Structure Plan* policy MIN 10 recommends that permits are issued for a minimum of 10 years, presently permits are issued for a maximum of one year and effectively are reverting to the licence system but, rather than the licence being tied with the individual, it is tied with the land.[68]

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65 Letter of Director of Planning to all architects dated 13th May 1993 entitled Development Permits for Quarrying.

66 The quarry licensing system used prior the *Development Planning Act* did not specify a boundary to a licensed quarry area. Licences were renewed annually. But apart from this, a licence by the Commissioner of Police used to be granted for the following scenarios: opening a new quarry, extending an existing quarry, 'transfer' of existing quarry to another location and when ownership is transferred from one operator to another. All scenarios, except for the last one, qualifies for development in terms of the *Development Planning Act* since they involve land not previously quarried. Transfer of ownership is not related to land use and thus does not require a permit. 'Transferring' a quarry to a new location involved effectively the establishment of a new quarry.

67 'New Procedures for Regulating Quarry Development', February 1993 and Letter of Director of Planning to all architects dated 13th May 1993 entitled Development Permits for Quarrying.

68 A Seminar held on 5th February 1999 by the Building Industry Consultative Council highlighted a number of issues facing the mineral extractive industry. It states that (Building Industry Consultative Council, *Annual Report 1999*, Ministry for the Environment, Malta, p. 25) :

> Although the two types, those for hardstone and those for softstone, shared common problems such as the status of their licences, they also have a series of particular ones, solutions for which did not seem to be contemplated within the existing policies, nor did there seem to be apparently serious enough effort by the Planning Authority to sort them out. Moreover, as expressed by the operators themselves, the accumulation of these negative factors destroyed all incentives for the trade to invest in modernising itself.

However, arguing for safeguarding local mineral deposits is very difficult. Tal-Qroqq tunnels are a fine contemporary example. Although located in an area of renowned good quality softstone and surrounded by a number of disused quarries, quality was confirmed by expensive testing regimes prior construction of tunnels. Yet, the planning permit issued in the mid 1990s allowed the destruction of this mineral deposit, thereby augmenting the already massive problem of inert waste, and then exhaust a quarry to built the massively thick retaining structure of the tunnels.

### *7.7 Waste management strategies*

Due to the restricted amount of land available for building, the tendency is to resort to building in a vertical rather than a horizontal direction. Nevertheless, because of local height limitations, which are necessarily dictated by the nature of the Maltese skyline, any vertical expansion will need to take place downward rather than upwards.

The consequence of such an expansion will be an increase in the potential of the building industry to create inert waste. Developments located in areas where hardstone occurs is not an issue since material is generally recycled for use as aggregates. It is more of an issue where developments are in other areas. Limiting wastes in this case is countered in two ways, that is, either through on-site quarrying of material which is suitable for use as a dimension stone or through the recycling of limestone waste into reconstituted stone if material excavated is of inferior quality.

However, it is suggested that the local construction industry is bound to resist implementing changes in excavation techniques on account of the ultimate increase in costs, which it would have to bear. Hence, in line with the polluter pays principle, which is very much a part of modern environmental law, the imposition of a substantial landfill tax is being suggested.

In the United Kingdom, a Member State of the European Union, a new landfill tax was introduced to promote recycling of aggregates and the use of secondary materials. This is likely to increase the cost of disposal of such materials. Furthermore, research is being undertaken to minimise and include such waste as a by-product in the construction industry.

Rather than speaking of sustainable growth, Malta has to start talking of sustainable

development. A few years ago, a full development permit was issued to construct an underground carpark in Floriana, just off the main City Gate of Valletta, a World Heritage Site in terms of the UNESCO *Convention concerning the Protection of the World Cultural and Natural Heritage*. The resultant was a large 'square' shaped quarry, several metres deep. Waste generated, together with other associated environmental impacts such as heavy traffic, was extravagant. Locally, it is too cheap to excavate. No costs other than those to cover labour, machinery and profits for the contractor are involved in excavations. No building levies are present vis-à-vis material to be put on the road and dumped as part of utilising a development permit.

One may argue, and certainly this is the position of official bodies, whether governmental or otherwise, that export of waste will at least mitigate the immediate problem of dumping of inert construction wastes. Local retailers and traders are thinking in terms of free movement of goods. They argue that waste may be exported either as raw or as worked. In the latter case, they will be considered as works of art with a considerable added value. Such works may take the form either of sculptures from disused material per se or from crushed, reconstituted material. The latter may be an avenue to be exploited also locally as a substitute for presently quarried dimension stone.

### *7.8 Qualitative and quantitative restrictions to export*

European Union law requires the complete liberalisation of trade not only between Member States but also between the European Union and third countries. Nevertheless, it allows for protective restrictions in certain limited instances.

One instance which may be availed of by Malta, if and when it becomes a Member State, is where there is "a shortage of essential products". One may argue that Maltese stone is an essential product, that it has become scarce and that therefore no more than a certain amount of stone may be exported, would have to show that the restriction has been imposed in good faith.

However, the European Union would never accept a situation where limestone continues to be used in Malta when other equally suitable alternatives are available. This would amount to a restriction on the free movement of goods, and hence would obviously be in breach of Article 29 of the *Treaty Establishing the European*

*Community*. Furthermore, it will not be possible to ban export of Maltese stone through the use of particular technical standards. This is further emphasised by Directive 89/106 EEC which, however, allows the use of national specifications where no harmonised European Union standard exists. Nevertheless, such specifications would have to be recognised by the European Union.
It is submitted that such a recognition will not be forthcoming in the case under examination unless the Union is satisfied that the national specifications are not intended to create obstacles for exportation of the limestone (vide Case 120/78 *Rewe-Zentrale AG v Bundesmonopolverwaltung für Branntwein* [1979] and Case 302/86 *Commission v Denmark* [1988]).

Moreover, the protection afforded to the environment by Article 30 of the *Treaty Establishing the European Community* will probably not enable Member States to avoid having to obtain European Union recognition of any technical specifications introduced with regard to limestone.

Local policies on minerals planning on the issue of exports of Maltese stone may prove to be a problem. The *Structure Plan* established by the *Development Planning Act* makes it mandatory for the Planning Authority to release land for mineral extraction in order to satisfy both domestic and export demands as per policy MIN 4. On the other hand, the *Minerals Subject Plan* policy HS8 discourages the export of local stone. The *Mineral Subject Plan*, yet not an approved document, indirectly calls for restrictions on export on local stone consistent with the position of the Department of Trade undertaken in terms of the *Supplies and Services Act* of 1947, *Exportation (Controls) Regulations* of 1948 and Legal Notice 44 of 1985. But the *Structure Plan* was prepared as per *Development Planning Act* and policy of this document, which is approved, provides for an acceptable level of exports but no provisions are included in “discouraging” exports. This may be read that irrespective of the arguments based on objective or semi-objective criteria, the latent aim of Malta is to short-circuit Article 29 of the *Treaty Establishing the European Community* and calls for export restrictions under different disguise. Arguments on sustainable development and environmental impacts become weak due to poor past records.

# 8.0 Final Comments

## *8.0 Final Comments and Recommendations*

Balm, in his paper 'Big Holes in a Small Place', notes that[69]:

> It is equally clear from the [Structure] Plan's wording, however, that stone is seen as a valuable mineral that should remain open to exploitation. Particularly troubling is the Plan's assumption that Malta must be self-sufficient in limestone building materials. The document is unspecific on the question of monitoring and control.

Limestone resources, though finite, are being exploited uncontrollably at an alarming rate. Sites are environmental sensitive, population density high, waste generation in production is high and no remedy has been forthcoming, thus increasing the waste disposal issue.

An objective study of minerals planning in Malta will reveal that quarrying is not sustainable. Protection of the environment is good lip service that is manipulated to excuse planning decisions with respect to development control. On account of Malta having limited mineral reserves, the environmental and social costs of mining such reserves require a re-drafting of present minerals planning policies.

A publication by the United States Department of the Interior states that[70]:

> Malta's efforts to become a full member of the European Union will compel the Government to cut state subsidies, further remove protective tariffs, and end state monopolies. This may adversely affect the small-scale limestone industry … .

The notification procedure referred to in Section 7.5 above seems to afford the best chance of Malta obtaining at least the right to impose restrictions on limestone export.

Although it would probably be more feasible to gradually phase out limestone quarrying, on account of the limited resources available and the threat which quarrying constitutes to the environment, this is not politically expedient.

However, in order to obtain derogation in this area, Malta will definitely have to show more commitment to its urban and rural environment than it is doing at present. The country cannot afford adverse publicity in this field. Thus, the following

69 Balm, R., 'Big Holes in a Small Place' in *Geography: The Changing World*, 1996.

70 Plachy, J., 'The Mineral Industry of Malta' in *Minerals Yearbook,* Vol.III, United States Department of the Interior, Bureau of Mines. Text of this section was prepared by April 1995 as stated in the footnote of this section of the Yearbook.

recommendations are being put forward. It should be pointed that these recommendations are presented in a logical sequence and not necessarily in order of priority.

1. Softstone, whether natural or reconstituted, is to be supplied on the market, whether domestic or foreign, at the following dimensions based on current quarrying practice:

| ***Height**** | | ***Length*** | ***Width*** | |
|---|---|---|---|---|
| ⩾ | ⩽ | = | ⩾ | ⩽ |
| $10^1/_4$" | 11" | 24" | $10^1/_4$" | 11" |
| $10^1/_4$" | 11" | 24" | 9" | 9" |
| $10^1/_4$" | 11" | 24" | 7" | 7" |
| $10^1/_4$" | 11" | 24" | 6" | 6" |

* Section A9 of the 'Conditions for Development and Design Control (DC 1/88)' assumes the height of one course to be 280mm (11")

These technical specifications are positive restrictions applicable to both the domestic and foreign markets. They are aimed to put our house in order to ensure an effective and sustainable extractive industry to contemporary socio-economic and environmental standards and practices of the various Member States of the European Union. These specifications should be incorporated under the *Conditions for Development and Design Control Policy* of the Planning Authority known as DC1/88.

2. Organise statistics on the mineral extractive industry.
Once there is co-ordination between the authorities responsible for trading licences, Value Added Tax and planning, a realistic progress and evolution of the local mineral extractive industry is possible. It is only once statistics are consistent that national quotas on mineral production could be issued.

3. Introduce environmental and sustainability costs in the selling price of stone.
Mineral is cheap to buy and cheaper to excavate by mechanical means. Presently, the only costs for a developer requesting excavation works are labour, machinery and profits for the contractor commissioned[71]. If

[71] Price order on stone has established the selling price of 7" width dimension stone to 17.4 cents at the quarry. This may be sold at 20 cents when it is good quality stone and 7.5 cents when it is of inferior quality (Torpiano, A., *Rapport Tal-Bord Mwaqqaf mill-Onor Ministru M.Falzon Biex Jaghmel Rakkonmandazzjonijiet*

environmental costing are carried out adequately, then the profit margin for inert waste should be lower than that for a standard stone since environmental costs would be higher for the production of inert waste.

4. Only standardised stone has to leave the quarry, any rejects have to be reused or recycled.

5. If stone is to be extracted, then it has to be either by means of quarrying of dimension stone or through means of excavators. In the former case, the building levy endorsed by recommendations 14 and 15 below do not apply.

6. Set up a Co-operative for the softstone industry to manage recycled inert waste generated both from quarries and from construction sites.
   The Co-operative will purchase all inert wastes, which wastes will be bought at open market prices. Presently, the Planning Authority does not allow dumping and stock piling of inert waste in quarries without full development permission.

7. Introduce a landfill tax
   In line with the polluter pays principle, a landfill tax promotes recycling of the parent rock and reuse of secondary material;

8. Excavations in full development permits for building and civil engineering works should be either through quarrying of material if of suitable quality or, if material excavated is of inferior quality, transported to sites for recycling.
   This is the scenario for softstone not hardstone. The latter is already being recycled into aggregate. Most settlements or parts thereof, are within limits of development overlying Lower Globigerina Limestone Formation, a material culture consideration of traditional, sustainable urban and proto-urban planning practice;

9. Redraft policies of *Mineral Subject Plan.*
   The *Mineral Subject Plan*, which is yet not an approved document, has to complement the recommendations herein listed help in their effective implementation;

*Dwar Riformi Fl-Industrija Tal-Barrieri Tal-Gebel Tal-Franka*, Unpublished report commissioned by the

10. Delete *Mineral Subject Plan* policy HS8.
    This policy calls for indirect restriction and discouragement of export of local stone. It may be read as a call for export restrictions under a different disguise. The *Mineral Subject Plan* has to be in line with the *Structure Plan*, established by the *Development Planning Act* of 1992, which plan calls on the Planning Authority to release land for extraction for both domestic and foreign markets.

11. Schedule and grade sites identified to have quarrying potential as per *Mineral Resources Assessment* in terms of quality of reserves
    *Structure Plan* policy MIN 1 states that workable mineral resources will be safeguarded from being sterilised by other forms of development. Scheduling is a planning consideration of effective use in assessing both full and outline planning applications;

12. Restrict good quality, Grade 'A', scheduled mineral resources sites for use in restoration and conservation works.

13. Recommendation 1 re standardisation of stone does not apply for Grade 'A' scheduled mineral resources sites.
    In restoration and conservation work, limestone which has deteriorated and needs replacement has to be cut and dressed from a quarry to the original dimensions.

14. Update Schedule One of Legal Notice 112 of 1996: Building Levy Rates, Regulations of 1996 to include building levy for full development permission which involves excavations.
    The levy should be computed on the volume to be extracted and not the area. Development Planning applications should be edited to include, for a given development, the volume of material to be excavated.

15. Update Legal Notice 103 of 1997: General Development Order to include building levy for development such as basements, swimming pools and underground reservoirs.

16. Full development permits which include excavations should include a bank bond in favour of the Environment Protection Department, equivalent to the

Minister for Infrastructure, 1993, Para. 4.1.3). The cost of excavating a cubic metre of rock is circa LM1.

market value of the deposit calculated at the price of dimension stones on the open market.

This bank bond should be staggered in order to be gradually released to take into account progress of works. Bond is to be released following certification from Environment Inspectors within the same Department otherwise it will be forfeited. Permits should be issued subject to the bond.

17. Revoke standard conditions re use of Maltese stone for permits issued by the Planning Authority and the Building Regulations as stated in the Code of Police Laws.

    By removing such controls one is opting for a proactive rather than a reactive approach. If quarrying is by quota and conditions to permits and building regulations remain unchanged, it will have an adversely negative impact on the local building industry.

18. Full development planning permits for quarries are to be issued for a minimum of ten years as per *Structure Plan* policy MIN 10.

    The current practice of issuing permits for one year with the excuse for a restoration bond, is destroying the incentive and initiatives of the quarrying industry to upgrade itself.

19. The softstone industry should be upgraded by having a quota for the number of trading licences to operate and produce 'standards' dimension stone.

    Each licence will specify the quota on the output based on volumetric measures of the quarry. Qouta is for production of softstone regardless of market destination, whether domestic and/or overseas.

20. A Trading Licence for quarries is not to be paid at a flat nominal rate but should be rated on production/quota.

# A.1 Environment Protection Department

MINISTERU
GHALL-AMBJENT

MINISTRY
FOR THE ENVIRONMENT

*Dipartment Ghall-Harsien Ta' l-Ambjent*

**MALTA**

*Environment Protection Department*

30th May, 2000

*Mr. L. Bianco*

**Re: Export of limestone**
**(some thoughts related to the management of this resource)**

Limestone is Malta's only mineral resource. It exists as virgin geological material and as waste from quarrying activities and from the construction industry.

Sustainable use of this resource compels us to use this resource in such a way as not to compromise the needs of future generations. Since limestone is not a renewable resource, it follows that its extraction and use can never strictly speaking be sustainable. However, we should strive at the goal of sustainability by minimising squandering of this resource as much as practicable.

Present practices are far from sustainable. In fact, quarrying activities, as well as the excavation of building sites and the demolition of buildings result in the generation of limestone waste. The State of the Environment Report for 1998 states that during the period 1990-1997, a total of 13 million tonnes of construction and demolition waste, were accepted at the Maghtab landfill. In addition, unquantified amounts of similar waste were used to restore disused quarries.

This waste has created an untenable situation. The Maghtab landfill occupies approx. 600,000m$^2$ of land, and is expanding both vertically and horizontally covering agricultural land and garigue areas. It is also an eyesore. Maghtab has indeed become an urgent problem.

It is realised that the construction industry is one of the pillars of the local economy. As such, therefore, it is envisaged that the rate of construction will not subside appreciably in the foreseeable future. This means that building waste will continue to be produced.

The fundamental reason for this squandering of material is because the price of virgin stone does not reflect the real costs, in particular the cost incurred by future generations which would have to import building material, and the cost of degradation of the environment. It is proposed that these costs should be internalised over a realistic period of time.

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admin@environment.gov.mt

The waste management hierarchy mandates that firstly, the generation of waste should be minimised, secondly waste should be reused, thirdly recycled and only what cannot be so managed should be landfilled. Moreover, appropriate landfilling may leave the option for the recovery of the material at a later stage. Landfilling the limestone mixed with other waste and marine dumping makes the eventual recovery of the material difficult if not impossible.

Export of limestone, both as virgin material, as well as waste also makes the material unavailable, at least within the Maltese boundary. As such, therefore, this practice should be discouraged. On the other hand, an urgent solution must be found to provide an alternative to landfilling at Maghtab. Export of the material provides a solution which out of necessity must be considered.

*V. Gauci*
*Director*

## A.2 Planning Authority

AWTORITÀ TA' L-IPPJANAR
PLANNING AUTHORITY

**Our Ref : GF/GC-78/575**
**Your Ref: 9/00**

13 June 2000

Mr Lino Bianco A&CE
99 Vincenzo Bugeja Street
Hamrun HMR 10

Dear Mr Bianco

**Study on how Malta may build a case for consideration by the European Commissikon for the retention of the status quo regarding the exportation of Maltese Stone**

Following a meeting held on 26 May 2000, please find attached a consultation report on the above subject.

Please be guided accordingly.

Yours sincerely

**Godwin Cassar**
A&CE, FRTPI, D.Univ
**Director of Planning**

Enc

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# Controls on Export of 'Malta' Stone - Review of position in view of the adoption of the Acquis Communitaire

## 1. Potential Quarrying Output

The minerals industry is one of Malta's most important industries, with limestone being the only rock of economic value. The Maltese islands are made up exclusively of marine sedimentary rocks /of shallow water aspect[1], mainly Tertiary limestones. The stratigraphic succession of the Maltese islands runs as follows:

- Quaternary Deposits;
- Upper Coralline Limestone;
- Greensand;
- Blue Clay;
- Globigerina Limestone;
- Lower Coralline limestone

Worked limestone comprises of softstone quarried in the South of Malta and north west of Gozo from the Lower Globigerina formation, used as cut building blocks, and hardstone quarried mainly to the West and central Malta from the Upper and Lower Coralline formations, used for marble, aggregates and concrete. The area quarried has approximately doubled in the last 30 years with existing quarries often trebling in area and new quarries being created. The quarrying industry is operated by a work force in the region of 500 (Central Office of Statistics estimate[2]), of which a good proportion is made up of part timers and members of the quarry owners' family members. The industry generates a value added of some Lm 4-5 million per year.

A high production of local mineral resource combined with substantial mismanaged quantities of resource that fall under the denomination of building and construction waste is not sustainable by any international standards let alone the environmental burden that such operations imply on the local scenario. In allowing export of local mineral resources (in the raw state or worked) Malta would be adding to the already unsustainable burden on the environment.

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[1] Reference: *The Geology of Malta and Gozo*. H.M. Pedley, M.R. House and B Waugh, 1976

An "***Environmental Appraisal of Quarries***[3]" in its assessment of the local minerals industry completed in 1992 highlights the significant and serious impact that quarries have on the environment both locally and at a national level. According to this report mitigation measures that are required to counteract the consequential arising severe and complex problems are by no means of a straightforward nature. Hardstone quarries have been identified as the cause of greater environmental impacts as compared with softstone quarries.

In view of the fact that the need for local mineral resources may be expected to remain for some considerable time in the future, the appraisal concludes that there is an urgent need to make use of all the available planning tools/legislation to control and closely monitor the industry. Additional factors such as recycling of building materials and changes in building construction are similarly considered as leading to significant changes in the minerals industry.

Identified (*Environmental Appraisal of Quarries*) key factors that may be expected to provide a framework to facilitate a modernisation of the industry include:

- Added protection to mineral reserves vis-à-vis growth and spread of residential areas through improved strategic planning by providing safeguards of adequate buffer zones;

- Introduction and execution of operational design whereby the extent, timing and phasing of all quarry operations is known and consequently formulation of the sequence of phased extraction and restoration is made possible at an early stage of quarry design.

- Gearing up towards a progressive minimisation of environmental impacts; hence achieving European standards for operating designs and techniques. This is achieved by phasing in to existing police/PAPB licence conditions to provide for a progressive updating of quarry design, techniques and equipment.

A "***Minerals Resource Assessment***"[4] for the Maltese islands completed in June 1996 identified the following land use conflicts:

a) Ecologically sensitive sites
b) Local infrastructure
c) Special zones (topography and landscape)
d) Maritime zones and cliffs
e) Archaeological zones

f) Zones proposed for air traffic
g) Urban conservation areas
h) Industrial development zones
i) Limits of development

### 1.1 Softstone Quarrying

The softstone industry is mainly located in Central and Eastern Malta. A small number of quarries are also located in Gozo in the San Lawrenz, Kercem and Gharb districts. Total number of licensed softstone quarries in Malta and Gozo amount to 60 with an overall surface area of about 80 ha. The softstone quarry industry is operated by a work force in the region of 250.

Figures available through the Central Office of Statistics[2] (COS) provide indicative quantities for production and stocks of marketed products, based on feedback from questionnaires forwarded to quarry owners. The data collected is not representative of the majority of softstone quarries in Malta and Gozo (26 reported as compared to 60 licensed quarries), and a closer estimate of annual softstone production of products is more likely to be in the region of 860,000 $m^3$ (PA estimate) rather than 276,750$m^3$ reported by COS. On the basis of a rough estimate, quantity of inert waste produced as a result of soft stone quarrying amounts to 35% - 60% of the quarried rock. This assumption is based on the types of softstone resource being marketed as a proportion to the general stratigraphy of most softstone quarry sites.

While softstone quarrying in Malta is for the greater part located in close proximity (between 40 to 100m) to built up areas, in Gozo softstone quarrying is dangerously encroaching onto a unique ecologically sensitive and pristine stretch of coastline presently being considered (submissions made to UNESCO) as a candidate for a World Heritage Site.

### 1.2 Hardstone Quarrying

The hardstone industry is mainly located to the west of Malta adjacent to cliff faces and north and central Malta in land depressions associated with fault planes and structural highs. The total number of licensed quarries in Malta and Gozo amount to 30 with an overall surface area of about 130 ha (Planning Authority estimate). The hardstone quarry industry is operated by a work force in the region of 300.

The estimated annual production of hardstone products (aggregate, spalls, marble products, etc.) is in the region of 1,400,000 $m^3$. Unlike the softstone industry the extent

of inert waste that results from hardstone quarrying and processing constitutes a small part (5% - 15%) of the gross production. Inert waste resulting from hardstone quarrying is mainly due to more or less limited quantities of clay or clayey/terra rossa material.

Quarrying of this resource, given its occurrence(valleys, cliffs, fault planes, etc.), is in direct conflict with wide variety of environmental resources. The "*Minerals Resource Assessment*"[4] also highlights the relative scarcity of this resource.

## 2. Local Requirements for Malta Quarried Stone

Marketing of softstone products is at present facing strong competition from concrete and steel substitutes in the construction industry. As a result, the use of softstone in the building industry has declined since 1991.

If present trends are allowed to persist unabated the softstone quarries industry will be condemned to die a slow natural death. The ever decreasing proportion of marketed product compared with the fraction that is disposed of as inert waste, will result in a further blow to the detriment of available reserves of the resource. The continued availability of this resource in moderate supply is essential in order to maintain Malta's cultural identity in stone and built up environment in general.

It has now become critical to introduce protective measures into the industry which will promote a broader use of the quarried material. In addition to plans that will ensure an intensification of marketed softstone products it is necessary to research and introduce recycling techniques which will secure a high degree of reutilization of softstone minerals resources.

The two types (hardstone and softstone) of limestone quarried in Malta constitute a substantial proportion of building materials used in the local construction industry. Usage of local minerals has progressively shifted towards a more intensive use of hardstone products and a decrease in the use of softstone products. A direct consequence of this trend is a drastic increase in softstone mineral waste resulting both directly at the quarry site and in the form of building and construction/excavation waste.

Use of local stone products for construction purposes date back several thousand years. Traditionally softstone enjoyed wide usage throughout the local construction industry. The extensive array of massive historical monuments and millenary hamlets that lie at the heart of present day villages is living proof of a deep rooted traditional softstone industry. Early burial grounds were hewn out into in situ` softstone/hardstone rock outcrops and up to recently individual houses were whenever possible constructed out of the softstone resource that was recovered from excavation of the basement. Since the

earliest evidence of human presence in Malta, and in relatively more recent times cave dwellings played an important role in providing shelter for entire communities and their cattle. Since the Medieval period whole structures were built within or in front of large cave dwellings to augment and improve facilities; hence the emergence of vernacular farmhouses in the Maltese oper countryside. Evidence of early use of hardstone products was limited to decorative stone, paving, kerbstones and military fortifications. Early use of hardstone blocks on a reduced scale was mainly limited to exposed areas, such low lying coastal areas.

Prime quality softstone often referred to as "white statuary" besides providing one of the finest building stones for interior works is ideally suited for carving. However by far the softstone best suited for exterior works (building / engineering works) is the white cream variety. These two softstone varieties are produced from a number of quarries located in the Mqabba and Luqa districts. The uniform colour and their often excellent grain and structure along with their resistance to all climates have rendered these two softstone varieties in high demand for construction and artistic (sculpturing, etc.) works. Throughout history the softstone resource has been employed for architecturals, sculpturals, statuary, caryatid, capitals, sarcophagus, monuments, mausoleums, altars, urns, pilasters and circular works, buildings, forts, docks, harbour works, bridges, and public works. Use of inferior quality softstone (soll) has traditionally been limited to foundations, construction of basements and construction of various types of walls. Discarded softstone waste is used to reclaim depleted quarry sites as part of the restoration process. Well compacted and graded softstone material has also been extensively employed for land reclamation works, as sub-base for various types of foundations and to a lesser extent to provide a daily cover at landfill sites.

First quality (tal-Prima) hardstone has been mainly exploited in the past for military structures, as decorative stone, kerbstones, paving and other civil engineering works such as breakwaters and quays. With the introduction of concrete works and successively of Macadam road surfacing ) in the mid 1800s by the British Armed Forces, (mainly for military purposes and to a lesser extent for civil works), the importance of first quality hardstone increased considerably; this in spite of the fact the they imported substantial quantities of aggregate. Early examples of use of concrete for civil works include surfacing at Addolorata Cemetry, a stretch of Strada Reale (Republic Street) road between Porta Reale and the Teatro Reale in Valletta and a number of Moles in Marsa[5]. Bighi Hospital (Georgian) and Teatro Reale (Victorian) and an arch way across Triq tat-Tromba, Marsa (Victorian) are early examples of use of local (Gozo) Hardstone. Second quality hardstone offers inferior resistance to weathering and other agents of wear. As such it is either mixed to first quality hardstone to produce an improved conglomerate or

employed in concrete products with lower strength specification requirements. A variety of second class hardstone is employed in the production of quick lime.

Quarried and otherwise excavated hardstone resource is almost entirely channelled into construction works. Given the relatively (compared to foreign substitutes) inferior quality of local hardstone products, all hardstone quarries operate a system of tight management over the marketed products, in such a way as to limit to a minimum the extent of quarry waste.

The "*Minerals Subject Plan*"[6] still in its final stages of preparation, derives its short-term and longer-term strategy in meeting the demand for minerals on the basis of the "*Minerals Resource Assessment*"[4], which was carried out in conjunction with a number of target areas that were strategically located throughout the Maltese Islands. On the Basis of the conclusions of the "*Minerals Resource Assessment*"[4] the "*Minerals Subject Plan*"[6] identifies potential future resources (or Minerals Safeguarding Areas) of hardstone and softstone which may meet the longer term requirements

In view of the lack of reliable statistical data on minerals production levels in Malta, particularly on reserves, the Plan adopts a cautious approach to site development, with no new quarries to be permitted, at least until the first review, and a framework is put in place to guide quarry extensions.

The Plan affirms that due to inevitable close proximity, the quarrying industry has resulted in potential conflicts with the built environment and other adjacent sensitive land uses. It assesses the impacts that may arise through the operations of quarries.

The "*Waste Subject Plan*"[7] liaises with the "*Minerals Subject Plan*"[6] in promoting a conservation policy for the minerals resources of the Maltese Islands, through its waste policies that center the waste hierarchy principle (reduce, reuse, recover, dispose).

The need for conservation of minerals resources is such that *the "Minerals Subject Plan*"[6] shall only allow the disposal of mineral waste within the framework of approved projects detailing the need for reclamation and land leveling works.

Stringent control on development of additional mineral workings as proposed by the "*Minerals Subject Plan*"[6], should serve as an incentive for quarry operators and developers to maximise on the use of the minerals resources that are extracted. This approach to minerals planning shall further encourage increased marketing locally of recycled mineral waste.

Amongst other policies the "*Minerals Subject Plan*"[6] recommends that "*The Planning Authority will discourage the export of the Island's indigenous supplies of limestone*". The Plan on the other hand recognises the need for importation of alternative mineral substitutes; an issue to which the Plan attributes an increasing role in the longer-term. The Plan further points out that Government Intervention in the phased importation of foreign mineral substitutes should be viewed as part of the long term strategy for meeting the demand for hardstone on the islands.

The emerging policies as a direct result of the above mentioned subject plans are expected to feed into the review process of the existing "*Structure Plan for the Maltese Islands*"[8]. Minerals strategic policies that shall form part of the reviewed Structure Plan are expected to focus on a more conservative and environmentally friendly approach in addressing minerals development proposals.

## 3. Recommendations re Export of Local Stone Products

Malta hosts limited and finite reserves of local mineral resources, and most limestone quarries (especially hardstone) are unavoidably sited in environmentally sensitive rural areas. Land use conflicts also arise due to the close proximity of quarries to archaeological sites and urban development. It is as such necessary to limit and mitigate the environmental impacts resulting from quarrying operations and identify methods whereby local mineral resources could be recycled. It is also essential to address the issue of how quarried material could be utilised to the utmost, in line with accepted national and international standards. Additional mineral resource reserves may conveniently be tapped and recovered through underground mining techniques.

Maximising on available local mineral reserves would benefit Malta economically, since importation of mineral substitutes would translate into an increase in the cost of construction materials by about 300% (rough estimate). Given the above constraints it is highly recommended that Malta maintains stringent controls on the exploitation of local mineral reserves. The mere size of Malta and its high (1200 per $km^2$) population density necessitate stricter controls over the allocation of land for quarrying purposes. A direct consequence of such controls is that no extent of export of local mineral resources (raw and processed) should be allowed, thus reducing the requirement to extend beyond control the land use occupied by quarrying. On the other hand foreign sources of local mineral substitutes should be identified and wherever feasible their importation encouraged as a means to limiting as much as possible the resulting environmental impacts arising from the local quarries industry.

**4.** Export Restrictions & Recommendations.

It is recommended that present restrictions as controlled by the Department of Trade under the provisions of the 'Supplies and Services Act', 1947, the "Exportation Controls Regulations of 1948 and by legal notice 43 of 1985 be maintained. In view of the economic implications deriving from the expected sharp rise in prices of imported construction products it is further recommended to extend the above export restrictions to inert material/waste that can be feasibly recycled locally. It is further recommended that importation of foreign mineral substitutes be encouraged through the introduction of import/custom concessions.

A three pronged approach is thus recommended, consisting of a planning policy directed at a more conservative exploitation of Malta's mineral resources, controlled exports of recycled softstone products and eased (customs exemptions, subsidies, intergovernmental trade agreements, etc.) importation of foreign mineral substitutes of local mineral resources. Such an approach should not only translate into a reduction of the quantity of inert waste presently being generated, but shall induce an desirable element of protection against over exploitation of Malta's mineral resources and consequential unnecessary derogation of the Maltese countryside.

Quarrying is by its very nature destructive, exploiting a resource that is not renewable and highly restricted geographically. This is even more so when considered within the confines of Malta's congested land and often conflicting land uses. Although limestone resources are abundant on an international scale, the same does not hold for a small and densely populated island state like Malta. A sustainable development strategy requires remedies /mitigation measures against the scars left on the face of the earth and the resulting destruction or impairment of other resources as a consequence of quarrying. Malta shall need to strike a balance between the least impairment it will allow its environment to sustain as a result of quarrying operations until such time when importation of foreign mineral substitutes become feasible.

The role of quarrying in Malta will however retain its millennial prestige as a means of maintaining its unique character and equally important heritage in stone. Irrespective of innovations that may in time materialise with respect to adopted methods of construction, a significant production of local stone shall still need to be produced in order to cater for restoration works of ancient and historical monuments and as a means of maintaining/renewing Malta's esthetic beauty.

**Resferences:**


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|---|---|
| [1] | The Geology of Malta and Gozo, H.M. Pedley, M.R. House and B Waugh, obo Oil Exploration Department, Office of the Prime Minister, Malta,1976 |
| [2] | Industry Statistics vol. I and II, Central Office of Statistics, Department of Information, Office of the Prime Minister, Malta, 1996 |
| [3] | Environmental Appraisal of Quarries, Wardell Armstrong obo Planning Authority Malta, 1991 |
| [4] | Minerals Resource Assessment, Wardell Armstrong obo Planning Authority Malta, 1996 |
| [5] | British Colonial Architecture Malta 1800-1900, Malcolm Borg, , University of Malta, Msida, Malta, 1996 |
| [6] | Minerals Subject Plan for the Maltese Islands, Entec, UK, obo Planning Authority, Malta (still in draft form) |
| [7] | Waste Management Subject Plan for the Maltese Islands, Enviros Aspinwall,UK, obo Planning Authority (still in draft form) |
| [8] | Structure Plan For The Maltese Islands, Planning Services Division, Ministry for Development of Infrastructure, Malta, 1990 |

## A.3 Department of Industry

DIPARTIMENT TA' L-INDUSTRIJA
Triq il-Kukkanja,
Santa Venera CMR 02

MALTA

DEPARTMENT OF INDUSTRY
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Our Ref. .....

Your Ref. .....

TELEPHONE: (+356) 446250
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19th May 2000

Mr. L. Bianco
Lino Bianco & Associates
99, Vincenzo Bugeja Street
Hamrun

**Maltese Stone**

I have received your fax message dated 17th instant and am also referring to our tele-con of the same date wherein I regretfully informed you that this Department has no contribution whatsoever to make on the subject of 'Maltese Stone' since it has never monitored this sector of Industry.

C.V. GALEA
Director
Department of Industry

## A.4 Department of Trade

DIPARTIMENT TAL-KUMMERĊ
LASCARIS, VALLETTA

DEPARTMENT OF TRADE
LASCARIS, VALLETTA

DT 2/41/90

Our Ref: .....

Your Ref: .....

TELEPHONE: 242270/6
224411/2
FAX: 246800, 237900

5 June, 2000

Mr. L. Bianco
Bianco & Associates
99 Vincenzo Bugeja Str,
Hamrun

Dear Sir,

**STUDY ON MALTA STONE**

Please refer to your letter of the 31st May, 2000 and our meeting of the 1st June, 2000.

As explained to you, while the exportation of Maltese raw stone is not allowed, requests for export licences for worked stone is allowed as long as the demand continues to prove limited. I enclose extracts from a register kept for the purpose of monitoring export licences issued. I regret that it is not possible to furnish details of exporters, licence numbers and dates as this is restricted information. You will note that stone consisted of balustrades, sculptures, fireplaces, cladding and other worked stone and minimal isolated quantities of Maltese unworked stone required for sculpting purposes.

There have in the past, been formal requests for regular exports but exporters were informed that this could only be possible if the quantities required were contained and not at frequent intervals. It has been explained that as long as the situation was kept at such limited levels it would be possible to consider the continuance of such policy.

As you can see from the said lists, present measures seem reasonable. I may add that the material shown may not have been exported in full. If deals fell through, licences may not have been utilised.

For actual exports I would advise you to contact the Central Office of Statistics.

Should you require further information please feel free to ask. I am returning your minutes of our Meeting of the 1st June, 2000 which I have slightly corrected.

Yours faithfully,

L.C. Coppini
Director (Imports & Internal Trade)

# Study for consideration by the European Commission re: exportation of Maltese stone

## Minutes of Meeting with the Department of Trade

*Date :* 1st June 2000

*Present for meeting :* Lawrence Coppini, Director, Imports and Internal Trade, Department of Trade
Lino Bianco, Study Co-ordinator
Joanne Muscat, Lino Bianco & Associates

---

1. The export of unworked stone or worked stone such as carvings, balustrades, fireplaces and wall cladding, falls under the Export & Control Licence. There is not a great demand for the export of local stone but the licence is there as a deterrent and/or controlling agent if demand increases. The licence is issued for one month, occasionally extended to 2-3 months.

2. The Department's records are only qualitative in nature because the licence is issued before the actual export. There are no export limits or quota because the effective overseas demand cannot be gauged and hence there is no need for a threshold. To date, demand for export of local stone is minimal.

3. The export of local stone is not promoted so that overseas demand does not increase, given its limited natural deposits. Indeed, Mr Coppini does not think the export of local stone is an effective commercial proposition since the resource is heavy and cumbersome to transport.

4. Currently, no difference is made by the Department between the export of softstone or hardstone. Effectively, all demands are for softstone; there was once a demand for two containers of *gagazza* but it was refused because it is a highly limited resource.

5. Malta's entry into the European Union increases the possibility of free trade of local stone with European states, with increased need for monitoring of export/import quantities and possibly prohibition of trading of local stone.

6. It was agreed that the Department will furnish Lino Bianco & Associates with a formal consultation report including the number of licences and a description of the type of export of local stone, over the past years. The consultation report is to be submitted by Tuesday, 6th June 2000.

## A.5 The Malta Federation of Industry

# The Construction Industry in Malta
## *Softstone and Hardstone Resources*

by Angelo Xuereb, Chairman, AX Holdings Ltd, and
representative of the Malta Federation of Industry

## INTRODUCTION

The two main types of mineral resources available for the construction industry in the Maltese Islands are hardstone, known as lower coralline limestone and softstone, known as globigerina limestone. During the last 20 years, the demand for these resources has seen significant changes. In fact, the use of softstone has been gradually decreasing and it is evident that this type of stone will soon be more limited and we shall see more uses for cladding and ornamentation purposes rather than being utilized for dividing walls. There are various reasons for the shift from softstone to hardstone, the main ones being:

1. The hardship involved in the process of the softstone sector. In fact stone blocks weight approx. 70Kgs each. The manual handling of these blocks constitutes a significant health risk factor. As a result the number of stone builders is diminishing fast.
2. The increased demand for hollow concrete blocks as building material since the process is less labourious to handle.
3. There is now a greater demand for precast concrete and concrete frame structures for large buildings since these give greater architectural flexibility in design and planning as well as greater efficiency when compared to the traditional stone.

## HARDSTONE – (LOWER CORALLINE LIMESTONE)

This change in the building method is resulting in an increased demand for hardstone aggregate for buildings and road construction, which implies that available hardstone resources are being used up at a very fast pace, thereby placing a very heavy burden on the available resources. The current resources are therefore expected to be exhausted in the coming few decades. The situation is complicated further by the various problems which are manifest in the hardstone industry in Malta. The main obstacles are:

1. hardstone resources often occur along valleys, that is, in areas of ecological value;
2. the recent mushrooming of building developments added another constraint on the quarrying industry in Malta, sterilising vast quantities of good quality hardstone; and
3. the best sources of hardstone have already been exploited in the past. This situation stands to reason when considering the limited size of our islands. One must also bear in mind that the local hardstone has lower strength properties as an aggregate to that of other E.U. countries.

## SOFTSTONE – GLOBIGERINA LIMESTONE

Some surveys show that the raw material of softstone in our islands would last for only another 40 years, based on the consumption of the last 20 years. This figure would have to be extended much further due to the fact that the use of softstone is on the decrease and in the near future, as mentioned earlier, it would be used mainly for more specific purposes. The demand would shift to hardstone for use as aggregate for manufacture of concrete bricks.

The absence of proper regulation is witnessed by the fact that the machinery which is still being used within the quarries dates back to the 1950s. The industry is in dire need for modernisation in order that it may become more economically viable.

The FOI encourages initiatives to modernise this sector of the construction industry. For example, in 1992, I had put forward the recommendation of decreasing the size of softstone dimension stones, and transporting on pallets dressed to the right standard sizes thus minimising the substantially high current occupational hazard and on-site dust generation.

The importation of a limited amount of hardstone could probably become a reality in the near future. The problem with hardstone availability is already acute. It is therefore recommended that while preserving the hardstone industry, aggregate of superior quality could be imported at least for the top layer of road tarmac, say a thickness of 50mm, thereby drastically minimising road maintenance costs and achieving a better grip for tyres, thereby reducing the many traffic accidents. It is relevant to note that the use of local aggregate for concrete making is adequate due to blending of hardstone aggregates of different quality.

## RE-CYCLING OF C&D WASTE

Malta also requires an immediate change of culture towards Construction & Demolition (C&D) waste disposal issues and should start preparing for the recycling of such waste. This is inert material and in this regard, I would propose that Malta establishes four depots for recycling of inert waste, three in Malta (to cater for the North, Central and South regions) and one in Gozo. These depots would be used to screen inert waste and separate it according to size. Each fraction could then be reused for various purposes, including: landscaping, construction of road foundations, the building of rubble walls, in unreinforced mass concrete, and for soil. In this way, this type of waste would be transformed into a viable resource. Any excess over demand of C&D waste should be landfilled within identified used quarries.

Another use for construction waste could be to build underwater breakwaters at the mouths of Malta's bays by using large boulders from the segregation depots. This would help to expand the sandy beaches around the Maltese Islands which would be a definite plus for the local tourism industry, which has become one of the major motors powering the Maltese economy.

***June 2000***

Ref:DF/FOI-JUNE2000

## A.6 The Malta Chamber of Commerce

# Study for consideration by the European Commission re: exportation of Maltese stone

## Minutes of Meeting with the The Malta Chamber of Commerce

*Date :* 1st June 2000

*Present for meeting :* Nazzareno Vassallo, Chamber of Commerce representative in BICC
Kevin Borg, National Affairs Executive, The Malta Chamber of Commerce
Lino Bianco, Study Co-ordinator
Joanne Muscat, Lino Bianco & Associates

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1. To date, The Malta Chamber of Commerce has not prepared a report on the issue.

2. According to Mr Vassallo, the control of export of local stone comes more from quarry operators rather than from the authorities.

3. The softstone resource is limited because :
   a. natural deposits are limited, estimates show a lifetime of only about 200 years more;
   b. most of the deposits are sterilised by built development;
   c. there is a high percentage of wastage during stone extraction and preparation;
   d. there are no incentives to re-use inert waste due to the high expense involved since fresh stone is still too cheap; and
   e. if stone is exported in large amounts, Maltese character in constructions for future generations is lost at a higher cost. Also, since resource is cheap the imported building material would be much more expensive.

   Thus, the resource needs protection and limited export.

4. The need for protection of the local softstone industry always existed. However, Mr Vassallo is of the opinion that rather than protection, the industry needs thorough modernisation. In fact, circa a decade ago, Mr Vassallo had recommended partial dressing of stones within the confines of the quarry, now a common practice.

5. Export of local softstone has always been very limited due to the common perception that local stone cannot withstand overseas environment. In fact, this perception was carried far even to the local scale. Thus, traditionally it was unthinkable to transport stone from the south of Malta to the north or vice versa; the transport of stone from Gozo to Malta or vice versa is still culturally prohibited.

6. The Chamber of Commerce is of the opinion that export of local softstone should only be allowed for value added goods, that is worked stone with local craftsmanship. Definitely, there should be no export of raw stone.

7. In the case of hardstone, there is an actual demand for imported aggregate due to the poor quality of local hardstone and natural deposits are highly limiting. In fact, current deposits may soon be used up. Already, there are no more deposits for the production of hardstone slabs.

8. As regards importation of hardstone, the most prohibitive factor is port charges.

9. In general, overseas small states such as Crete and Corfu, import building material from the mainland and in fact lack mineral extraction sites.

10. A formal consultation report will be prepared by The Malta Chamber of Commerce by Friday, 9th June 2000.

## A.7 Building Industry Consultative Council

# Study for consideration by the European Commission re: exportation of Maltese stone

**Minutes of Meeting**
**with**
## Building Industry Consultative Council

*Date :* 18th May 2000

*Present for meeting :* Robert Musumeci, Chairman, BICC
Lino Bianco, Study Co-ordinator
Joanne Muscat, Lino Bianco & Associates

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1. The aim of the study is to :
   a. Put forward estimates of resources (deposits and inert wastes) at identified grades;
   b. Present pertinent legislation such as departmental policies, EU policies…;
   c. Evaluation of the current situation vis-à-vis the construction sector; and
   d. Present economic, natural and cultural impact assessment and recommendations.

2. It was agreed that consultations will be held with representative members of the respective building sectors, namely :
   - Mr Emmanuel Aquilina, representative of hardstone quarry owners;
   - Mr Anthony Baldacchino, representative of softstone quarry owners;
   - Mr Nazzareno Vassallo, representative of the Chamber of Commerce; and
   - Mr Angelo Xuereb, representative of the Federation of Industry.

3. Minutes of the meetings will the forwarded to the Chairman of the Building Consultative Council.

4. It was also agreed that a study on hardstone deposits, carried out by Mr S. Scerri, will be forwarded to Perit Lino Bianco in due course.

# Study for consideration by the European Commission re: exportation of Maltese stone

**Minutes of Meeting**
**with**
## General Retailers and Traders Union

*Date :* 22nd May 2000

*Present for meeting :* Emmanuel Aquilina, GRTU Representative for Hardstone Quarry Owners
Lino Bianco, Study Co-ordinator
Joanne Muscat, Lino Bianco & Associates

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1. Official estimates of current hardstone resources include sterilised locations. It is in fact difficult to indicate the current resources available, however there are about twenty years more of resources, given the current demand for aggregate. Absolute quantities of hardstone reserves are unavailable since the Planning Authority has brought quarry owners into a position that if real value is stated, the same Authority castigates the owners for that same information !

2. To Mr Aquilina's knowledge, there are 18 hardstone quarries with 11 owners in Malta and 3 hardstone quarries and 2 owners in Gozo.

3. The lifetime of resources depends on supply and demand. Now, most of the hardstone deposits occur in areas of ecological value and hence have been scheduled by the Planning Authority. Moreover, local hardstone is unconsolidated and hence is of inferior quality to overseas ones, such as deposits found in Libya, Italy and in the United Kingdom; in fact, nobody is thinking of exporting hardstone. There are very few areas identified by the *Minerals Resource Assessment* undertaken by the Planning Authority, as being of good quality hardstone deposit. Thus, the lifetime of the current deposits may last about twenty years more. Within ten years, about seven quarries have to close down due to building constraints, hence future price for aggregate is likely to increase.

4. Large developments which occur on hardstone deposits are an added bonus once the deposits are exploited for the same development. However, the main landfills in Malta (Maghtab and Wied Fulija) occur on good quality hardstone deposits which have thus been sterilised.

5. Importing construction material is very expensive and should be discouraged since it would heavily increase the building costs. In fact, local construction material is very cheap. Considering the occupational hazard involved and increasing administrative costs, especially due to regulatory agencies, the selling price should increase; the price has not increased for the last 22 years whilst labour and administrative costs have increased.

6. There are small states within the European Union with similar limited resources; for example, Minorca has limestone similar to ours : the softstone is like the local 'sol', more like the Siggiewi 'laxka' and the hardstone is similar to ours. They import a lot of hardstone aggregate from Spain but they do not use a lot of concrete in their buildings.

7. There are very little cultural effects of dwindling hardstone deposits since very little hardstone is used in restoration works since there are only a handful of historic buildings made of hardstone, although there are outstanding examples such as Il-Fortizza (which unfortunately was restored in softstone) and Villa Gasan for which, unfortunately, a planning permit was issued for it to be pulled down.

# Study for consideration by the European Commission re: exportation of Maltese stone

## Minutes of Meeting with General Retailers and Traders Union

*Date :* 22nd May 2000

*Present for meeting :* Twanny Baldacchino, GRTU Representative for Sofstone Quarry Owners
Lino Bianco, Study Co-ordinator
Joanne Muscat, Lino Bianco & Associates

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1. To Mr Baldacchino's knowledge, there are 65 softstone quarries in Malta. Thus there are substantial softstone reserves. Since the demand for softstone has decreased, current deposits may last more than hundred years. Still building constraints may restrict future exploitation of this type of construction material.

2. One cannot import softstone due to a legal notice to that effect, except as ornament stone; in fact, a Ricasoli based factory exports such ornamented stone.

3. Although there may be economic advantages, Mr Baldacchino is against the exportation of softstone for cultural reasons, namely that the use of softstone should be revived for its beautiful characteristics.

4. Mr Baldacchino stated that material re softstone quarries is available at the General Retailers and Traders Union. The Director General of the General Retailers and Traders Union, Vince Farrugia, is away from the island. Material re softstone quarries is with him.