

COMMISSION OF THE EUROPEAN COMMUNITIES

COM(78) 432 final.

Brussels, 12 September 1978

Proposal for a
COUNCIL DECISION
on the grant of measures of support for Community projects in
the hydrocarbons sector
(1978)

(submitted to the Council by the Commission)

COM(78) 432 final.

REASONS

1. The Council of the European Communities adopted Regulation (EEC) No 3056/73¹ on the support of Community projects in the hydrocarbons sector on 9 November 1973. This support is intended to promote technological development directly related to those activities in prospection for, exploitation and storage or transport of hydrocarbons which are likely to increase the security of the Community's energy supplies.
2. In application of this Regulation, and following a proposal by the Commission, the Council authorised support measures involving a sum of the order of 128 million u.a. for the carrying out of 95 projects during the years 1974 to 1977².
3. For the current financial year the Commission, in the Official Journal - No C 292 of 3 December 1977 - published an invitation to all parties concerned to submit, by 28 February 1978, applications for support that might qualify for consideration in the course of the 1978 budgetary year.
4. In reply to this invitation the Commission received applications from 39 Community undertakings involving 64 technological development projects and estimated costs of some 163 million s.u.a. during the period 1978 to 1980.
5. The Commission, charged with processing applications for support gave the projects a preliminary examination to determine whether they were receivable under the terms of Regulation No. 3056. The purpose of this examination was to establish whether :

¹ OJ No L 312/1 of 13 November 1973.

² - Council Decision of 19 December 1974 on the grant of measures of support for 21 technological development projects in the hydrocarbons sector (Doc. R/3600/74).
- Council Decision of 4 May 1976 on the grant of support for 34 technological development projects in the hydrocarbons sector (Doc. R/854/76).
- Council Decision of 25 October 1977 on the grant of support for 40 technological development projects in the hydrocarbons sector (Doc. R/2416/77);

(i) the projects were relevant to technological development activities directly relating to the activities of prospectation for, exploitation and storage or transport of hydrocarbons;

(ii) The natural or legal person in charge of the project was duly constituted under the current laws of the relevant Member States of the Community.

6. The Commission then sent the documentation on each project to the Member States for the purpose of consultation and considered any observations or comments received.

7. On the basis of these preliminaries, as well as information provided by the applicant companies, the Commission proceeded to assess each project and draft those measures which the Council would possibly be called upon to grant.

8. As each project has to meet one imperative condition, namely that carrying it out would result in greater security of Community supplies of hydrocarbons, the Commission, in application of the provisions of Regulation No 3056/73, adopted the following assessment criteria :

- (a) degree of technical innovation in the project compared with the current state of the art;
- (b) technical feasibility of the project and probability of success;
- (c) the number or range of possible applications of the results of the project;
- (d) reliability of the project in relation to the health and environmental protection standards;
- (e) risk of duplicating other techniques already evolved or under development, and the possibility of cooperation between other similar projects;
- (f) the technical capacity and financial standing of the parties responsible for the project; the possibility of an association between the latter and the potential partners in the oil industry.

9. In making its assessment the Commission particularly took into account the question of certain objectives, which in the Commission's opinion have priority, being achieved by the project in question, e.g. :
- (a) increase in the overall recovery rate from known deposits;
 - (b) increasing the recovery rate by eliminating technical obstacles;
 - (c) making better use of small deposits;
 - (d) improving the degree of technical reliability in relation to production from the fields;
 - (e) shortening the period required before a known deposit comes into production;
 - (f) the possibility of exploiting heavy and viscous crudes as well as reservoirs containing crude of low mobility.
10. The Commission has moreover decided that no supporting measures should be considered in the case of projects which :
- (a) are simply preliminary studies or involve no technical risks;
 - (b) relate to the perfecting of equipment which, although representing technological progress, offer very limited prospects of use in the hydrocarbons sector;
 - (c) represent a stage in developing an existing technique but do not provide the type of solution which takes future needs into account.
11. In some cases the Commission has also made large reductions in the investment sums proposed for Community support whenever the assessed cost appeared disproportionate to the stated aims or where part of the project did not appear to correspond with the intention of Regulation 3056/73.
12. Once the process was completed, 47 projects were regarded as qualifying for Community support, the corresponding investment amounting to 98.738.793 e.u.a. for the three-year period 1978/1980.
13. The Commission proposes intervention ranging from 30 to 40% of these investments.
14. In order to determine how much support to grant each project, the Commission, taking account of the provisions of Article 4 of Regulation 3056/73 referred to above, namely :
- (a) Community support may constitute only a minority share of the financing of the project;
 - (b) the sum which may be granted to a project shall depend on expected results and the relevance of such projects to the Community ;

worked on the following principles :

- (a) maximum support will be given to projects, the exploitation of whose results would lead to an increase in the available quantities of, and/or speed up the process of making the best use of, the Community's hydrocarbon resources;
- (b) an intermediate level of support will be given to projects dealing with geophysics;
- (c) a minimum level of support will be given to projects concerning the hydrocarbons transport and storage sectors, in principle;
- (d) projects aimed at perfecting service activities will receive the minimum rate of support. Should this type of project lead to the elimination of a major bottleneck it could be assigned a higher rate of support.
15. In application of these principles and taking into account the project assessment results, the total support that the Commission proposes should be granted during the period 1978-80 to the 47 projects adopted amounts to 38.940.576 e.u.a.
16. These support measures should be granted in the form of subsidies repayable in the event of the commercial exploitation of any results obtained.
17. The Commission will ensure that the advantages granted by the Community to the promoters of these projects do not alter the existing conditions of competition in the Community market in any way incompatible with the provisions of the Treaty as it applies to this field.
18. Where two or more undertakings which receive Community support are pursuing similar objectives, the Commission will organise special meetings with a view to achieving a reasonable degree of cooperation.
19. The sum entered in the 1978 Budget to cover Community projects in the hydrocarbons sector amounts to 35 million e.u.a. in appropriations for the commitment. This amount has to be increased from the 1977 commitment appropriations available following the withdrawal of a certain number of projects adopted by Council decisions of 25 October 1977⁽¹⁾. The amount of support being proposed by the Commission in the framework of the 1978 budgetary exercise is consequently covered by the appropriations available.

The Council is asked to adopt the following decision :

(1) The projects are :

02.08/77 promoter : Norex	amount of support 3.934.033 u.a.
03.36/77 promoter : Foster Wheeler	amount of support 2.535.802 u.a.
07.12/77 promoter : Alstom/Wickers	amount of support 1.080.000 u.a.
07.17/77 promoter : Drägwerke	amount of support 491.803 u.a.
10.13/77 promoter : Gravatom	amount of support 336.600 u.a.

8.378.238 u.a.

PROPOSAL FOR A COUNCIL DECISION

on the grant of measures of support for
Community projects in the hydrocarbons sector

THE COUNCIL OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Economic Community

Having regard to Council Regulation (EEC) No 3056/73 of 9 November 1973 on the support of Community projects in the hydrocarbons sector⁽¹⁾, and in particular Article 6 thereof,

Having regard to the proposal from the Commission,

Whereas the said Regulation provides for the grant of measures of support for the implementation of technological development projects which are of fundamental importance in ensuring the Community's supply of hydrocarbons;

Whereas, it is essential to proceed with the implementation of the projects which are particularly capable of accelerating the development of resources and improving the storage and transport conditions for hydrocarbons in the Community and the completion of which could not be ensured or would have to be postponed without Community support,

(1) OJ No L 312, 13.11.1973, p.1.

DECIDES :

Article 1

For the period 1978-80, measures of support shall be granted for the Community projects shown in the Annex in the form of subsidies, repayable if the results prove commercially exploitable, up to a maximum amount of 38.940.576 e.u.a.

Article 2

The support measures referred to in Article 1 shall be granted for each of the projects on the basis of the percentages shown in the Annex of the actual cost, as verified and accepted by the Commission up to the maximum amounts also specified in the Annex.

Article 3

The Commission shall negotiate and conclude with the persons concerned the contracts necessary for the implementation of this Decision.

The Commission shall administer these contracts.

For the Council

Done at Brussels,

The President

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
01.10/78	Development of optical technological procedures for the recording processing and interpretation of seismic transverse waves	Agip	182.424	The purpose of this project is to test acquisition and processing of seismic data from transverse waves. Therefore a seismic survey with the transverse waves method will be carried out in the Po Basin, which has already been well studied stratigraphically and lithologically in numerous wells. Project parallel and coordinated with 01.12/78. Support recommended : 35%.	63.848
01.11/78	Correlator stacker demultiplexer	Sercel	859.097	This programme covers the development of a correlator stacker demultiplexer to be used with a seismic data acquisition system. In the case of a vibratory source it operates as a correlator stacker but when used with impulsive methods it can operate as a stacker only. It should process any number of channels within the limit of 240. Support recommended : 35%.	300.684
01.12/78	Seismic Transverse waves. Development of optimal technological procedures for the recording, processing and interpretation.	GERTH	177.590	The purpose of this project is parallel and coordinated with project 01.10/78. A seismic survey will be carried out in the eastern part of the Paris Basin. Support recommended : 35%.	62.156
01.13/78	Development of a seismic technology aiming at improving the resolution of infra-saliferous hydrocarbons problems in the Mediterranean Sea.	Compagnie Générale de Géophysique	670.152	The object of this project is to define and develop a specific seismic exploration technique particularly well adapted to the salt problems in the Mediterranean Sea. Support recommended: 35%.	234.553

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

01 Geophysics and prospecting

No.	Project Title	Promotor	Total investment 1978-1980 (sum)	Appreciation and rate of support	Amount of support (sum)
31.14/78	Pre-site surveys for geophysical measurements in ice-covered waters	Prakla Seismos GMBH	1.126.312	The aim of this project is the development of a system for optimum survey line planning by using picture transmission and exact navigation equipment with the aid of a computer and a helicopter for geophysical research vessels. Support recommended : 35%.	394.210

PROPOSED SUPPORT OF CAPACITY PROJECTS IN THE HYDROCARBONS SECTOR

O2 Drilling

No.	Project Title	Promotor	Total investment 1978-1980 (ena)	Appreciation and rate of support	Amount of support (ena)
02.10/78	Horizontal drilling technology for improving oil recovery	CERTH	9.566.412	(Project postponed in 1977 by Council Decision) The purpose of this project is to develop the flexodrilling to permit horizontal drilling. Uses of such a technique can be envisaged in the improvement and maintenance of flow, also in fields which have been flowing for some time. Support recommended : 40%	3.826.565
02.11/78	Oil and gas show analyser on drilling sites	CERTH	407.117	The development of such equipment offering knowledge about the presence of hydrocarbons in the drill cuttings should offer improved safety on drilling sites. Support recommended 40%.	162.847
02.12/78	Field operable source rock analyser using pyrolysis	CERTH	514.341	On a drill site, it is necessary to take decisions regarding the continuation of drilling. A valuable addition to the knowledge available to the responsible will come from the rapid processing of data which this apparatus will provide. Safety and efficiency of drilling would be enhanced. Support recommended : 40%.	205.736
02.13/78	Design and development of electro-optic interconnections for the offshore applications.	Filecq/Souriau	216.124	Through the use of fiber optics this device will permit the separation and identification of signals from seabed operations without the cross interference which is an integral weakness of present systems. Such a development will effect improvements in safety and performance of many underwater operations. Support recommended : 40%.	86.450

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
02 Drilling					
02.14/78	Gyroscopic inclinometer for remote controlled drilling	SAGEM/IFP	670.151	<p>The purpose of this project is to develop an inertial system for the measurement of drift, geographical azimuth and the orientation of the tool during drilling. The proposed system, based on gyroscopic and accelerometric inertial, will be independent of magnetic anomalies, which will improve speed and safety of well drilling. Support is recommended at 40%</p>	268.050
03 Production systems					
03.54/78	Installation of gravity platform above subsea wells	Sea Tank Co.	318.322	<p>While the overall objective is valuable, the proposal is limited to mathematical model simulations. There is no attempt to link this preliminary work with a possible actual situation. <u>No support recommended.</u></p>	
03.55/78	Gravity tower	Howard Doris	602.742	<p>The programme envisaged covers tests of mathematical models and dynamic model tests. The project is not oriented towards any specific objective, and the role of possible users is small. <u>No support recommended.</u></p>	
03.56/78	Jack-up rigs project	CFEM	1.306.795	<p>The purpose of this project is to generate a European design of jack-up rigs capable of operating in the N.W. European and Mediterranean theatres. <u>No support is recommended, as in the Commission opinion the safeguarding of the future hydrocarbon supplies of the Community do not depend upon the availability of jack-up rigs of the type proposed.</u></p>	

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

O3 Production Systems					
No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support.	Amount of support (eua)
03.57/78	Increased production capacity by TFL techniques	B.P.	472.302	The immediate aim of the project is to develop equipment and techniques ensuring the use of flow-line sizes less dependent on tool diameter imposed by the wellhead completion. If successful, this project combined with an earlier one, will result in reduced costs per b/d of production schemes with remote subsea wells, with consequent improvement in production for smaller fields. <u>Support recommended : 40%.</u>	188.921
03.58/78	Production system for LNG and associated gas in North Sea	Salzgitter	6.795.153	The effective handling of LNG and associated gas is a crucial element in maximising the production of hydrocarbon resources in the Community countries. The purpose of this Project is to develop further the methods and systems for producing and transporting LNG and Associated Gas from offshore locations. The work will be related both to fixed platforms and tethered Buoyant Platforms. This will ensure full cover for all appropriate water depths. All aspects of offshore storage and loading must be incorporated. <u>Support recommended : 40%.</u>	2.718.061
03.59/78	Design and development of an insert well head completion system for the subsea production of hydrocarbons.	Shell Intl Maatschappij B.V.	5.191.924	Subsea well head completion system at present in use all expand some 30 to 40 ft. above the seabed. The purpose of this project is to develop a radically new design with a low profile overcoming the risks of damage to and by anchors and fishing gear. <u>Support recommended : 40%.</u>	2.076.770

PROPOSED SUPPORT OF CERTAIN PROJECTS IN THE PETROCIPIENS SECTOR

03 Production Systems

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
03.60/78	Design construction and field testing of a surface controlled sub-surface safety valve system in oil and gas wells.	Shell International Pet. M.B.V.	1.283.405	The purpose of this project is to develop a safety valve system incorporating the last of current practices, but using new methods to monitor the operation of sub-surface safety valves. It is expected that such a system will permit higher rates of production when using the sub-surface valves. <u>Support recommended : 40%.</u>	513.362
03.61/78	Articulated columns preparation for industrial realisations.	GERTH	2.027.208	The purpose of this Project is to develop further the successful results obtained during earlier ventures (4/75; 03.42/77) and to apply them to risers, new types of floating production systems, including developments for application to deep waters. <u>Support recommended : 40%.</u>	810.883
03.62/78	Production pilot No. 2	GERTH	9.382.120	The purpose of this project is to develop from results obtained under 4/75; 03.34/77. The proposal covers a production station for 100 m. to 200 m. water depth under North Sea conditions. <u>Support recommended : 40%.</u>	3.752.848
03.63/78	Deep Sea Production Equipments	GERTH	5.026.136	The purpose of this Project is to carry further the work undertaken in the range of projects from 1974, in preparing for production in deeper waters. Studies will be made to cover flares, loading stations and safety aspects. <u>Support recommended : 40%.</u>	2.010.494
03.64/78	Rapidly installed equipment decks for offshore production platforms	John Laing	1.105.027	The proposed Laing system permits any deck design and any tower design to be used, since it involves a special method of lowering the fully equipped deck on the substructure. <u>Support is recommended at 40%,</u> provided an oil company is in fact a participant or at least involved in an advisory capacity.	442.011

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

03 Production Systems

No.	Project Title	Promoter	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
03.65/78	Development of submerged flares for offshore and onshore use	B.P.	1.545.492	The purpose of the project is to design and test a novel gas disposal system based upon the principle of submerged combustion. This development will contribute both to safety, environmental security and economic viability of small fields. <u>Support recommended : 40%.</u>	618.177
03.66/78	Development of a novel system of propane recovery.	B.P.	1.081.845	This project could make available hydrocarbons from oil gas streams which could otherwise be unusable. It is based upon the development of a Vertical Rectifying condenser. <u>Support recommended : 40%.</u>	432.738
03.67/78	Development of a process for the exploitation of heavy oil.	British Gas	3.245.534	This proposal relates to a method for heating heavy oils, which will make available light hydrocarbons otherwise lost. Important improvement of supplies by heavy crude oils. <u>Support recommended : 40%.</u>	1.298.214
03.68/78	Design of a production circuit for viscous heavy oils (Rospo Mare)	GERTH	770.674	The purpose of this project is to develop methods for lifting very heavy crudes of which large quantities are known to exist on and offshore Italy, France and Germany. Community funding would be appropriate because, the risks to be taken are sizeable, and the value to the Community of the crude which could be recovered, if the project were successful, would be extremely high. <u>Support recommended : 40%.</u>	308.270
03.70/78	Development of columns not sensitive for motions	Linde A.G.	926.597	The purpose of this project is the development of motion compensating devices for columns inside cryogenic liquefaction plants offshore. This development is highly recommended for the recovery of natural and associated gases offshore. <u>Support recommended : 40%.</u>	370.638

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBON SECTOR

05 Secondary recovery	No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
	05.09/78	Development of drainage system for the recovery of heavy oils (Rospo Mare)	Elf Italiana	1.340.303	This project of enhanced recovery of heavy crude is complementary to the project 03.68/78. It might well prove applicable, perhaps with some modifications, to other fields in Europe containing heavy and viscous crudes. <u>Support recommended : 40%.</u>	536.121
	05.10/78	Application of new techniques to make possible the economic exploitation of the Piropo Field.	AGIP	6.632.739	In this project it is proposed to inject CO ₂ and natural gas to enhance the process of evaporation of the crude known to exist in the Piropo field. This should result in a reduction of viscosity and the oil should flow at lower differential pressure towards the wells. The results could be applicable to other similar fields. <u>Support recommended : 40%.</u>	2.653.096
	05.11/78	Improving recovery from heavy viscous oil reservoirs	CERITH	921.458	The purpose of this project is to attempt recovery of crude oils of very high viscosity. The method to be used consists of a combination of liquid solvents, injected appropriately, and thermal processes. The demonstration that this route is feasible and practical will have considerable value in considering the recovery of many such crudes. <u>Support recommended : 40%.</u>	380.583
	05.12/78	Development of an electrical system to prevent "water coning" in wells.	Syminex	1.926.685	The project proposes a system for preventing the coning of water into a producing well. If results achieved in Phase 1 justify an actual oil field trial, this will take place during phase 2, covered in the proposal. CFP is the oil company associated with this work. <u>Support recommended : 40%.</u>	770.674

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

05 Secondary recovery					
No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
05.11/78	Polymer controlled water flooding on-shore injection tests.	B.P.	1.382.597	The purpose of this project is to extend the work (already being supported 05.06/77) on "Development of Brine Soluble Polymers" to the stage of field testing. It is considered that results so far are sufficiently promising to justify the expenditure and effort to undertake the preparatory work. Bearing in mind the value to the Community of the success of this venture it is considered justifiable to recommend <u>40% support for the project.</u>	553.039
06 Auxiliary methods of Transport					
06.06/78	Development of Delta Wing floating breakwater	Taylor Woodrow Int. Ltd.	2.472.788	This project aims to develop a floating break-water to increase tanker loading time. It is not directly linked to production, transport or storage activities, as prescribed by Regulation 3056/73. <u>No support recommended.</u>	-
06.07/78	Novel hydraulic offshore pile hammer	BSP	1.115.845	The purpose of this project is to develop new designs of pile hammers for major offshore work. The very considerable amount of piling which has been necessary during the past 4 years to instal the major offshore platforms in N/W Europe waters has revealed a number of areas where improvement would be valuable. <u>Support recommended : 30%.</u>	334.754

PROPOSED SUPPORT OF OPPORTUNITY PROJECTS IN THE HYDROCARBONS SECTOR

07 Ancillary Ships, Submersibles and navigation.

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
07.22/78	Development of controls, drives & tools for u/w application	ZF/Herion	1.177.329	<p>This programme covers further development of diver. assistance capabilities and much of the work could be applied also to improving the flexibility and performance of unmanned submersibles. <u>Support recommended : 30%.</u></p>	353.199
07.23/78	Further development of a tool system for a submerged handling device.	Winn Technology Ltd.	772.746	<p>The purpose of this project is to develop further the tool systems already under development in an earlier contract. The further developments proposed will require very considerable technological effort and manpower, which can only be justified if the system and equipment developed can win work contracts, can be made available where work is, and will be capable of being serviced during such activities. We recommend the funding to be postponed.</p>	
07.24/78	Extending the operational capabilities of a submerged handling device	Winn Technology Ltd.	927.295	<p>The purpose of this project is to design, develop and manufacture a system of underwater power points and associated equipment. Owing to the company dimensions, the staff effort required for such a development casts doubt upon the ability of successfully to handle this project, on the time scale and for the budget suggested. We recommend that the funding be postponed to next year.</p>	
07.25/78	Development of trenching equipment for submarine pipelines	Netherlands Offshore Company	4.086.729	<p>The purpose of this project is to develop a new method trenching for the burial of submarine pipelines. This proposal merits attention and has possibilities for introducing a much improved capability. <u>Support recommended : 30%</u></p>	1.226.019

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBON SECTOR

07 Ancillary ships, submersibles and navigation

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
07.26/78	Research into submerged trenching using water jets	BHRA	383.282	The programme envisages covering the use of water jets, to be followed by tests on jetting assisted by mechanical cutting, to be followed by spoil removal. This is an interesting research venture but does not fall under the provisions of art. 2 of regulation 3056/73. We recommend <u>no support</u> for the project.	-
07.27/78	Development of a system to embed submarine pipelines in the sea bed.	Land and Marine Engineering	5.922.327	The purpose of the project is to develop a new and improved system to embed pipelines. The programme will be aimed at satisfactory operation in cohesive clay sea bed materials. This laboratory programme will be followed by full scale trials as a result of which there will be designed a complete system. <u>Support recommended: 30%</u>	1.776.698
07.28/78	Design and development of a fast slipway launched life boat	RNLI	1.655.222	The project is outside the provisions of Regulation 3056/73. <u>No support recommended.</u>	-
07.29/78	Improvement of the technology of deep sea exploration	GERTH	3.677.456	The purpose of this project is to develop highly advanced operational instruments to permit many physical and analytical measurements at main ocean depths (to 3000 m). We are reluctantly forced to the conclusion that any application of this venture to the aspects covered by Regulation 3056 lie in the future. We recommend case should be presented again in 5 years time.	-
07.30/78	Development of new 3000 ft. rated observation and manipulation submersible	Wharton Williams.	1.491.400	The purpose of this project is to develop a new 3000 ft. glass fiber reinforced plastic submersible for use for observation, construction and maintenance work. The success of this venture would make possible the availability of more economic submersibles for underwater work. <u>Support recommended: 30%.</u>	447.420

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

No.	Project Title	Promotor	Total investment 1978-1980 (eua.)	Appreciation and rate of support	Amount of support (eua.)
09.09/78	Atmospheric Pressure v/w welding chamber	CG Doris/BOC	3.350.757	<p>The purpose of this project is to develop an atmospheric welding chamber which can be removed from the pipeline once the weld has been completed. This is a normal industrial venture consisting of rationalising an existing system. <u>No support recommended.</u></p>	-
09.11/78	Pipeline Repair test at water depths of 3000 m.	GERTH	2.513.068	<p>The purpose of this project is to complete the Weidap test programme. We recommend no support as the additional costs involved are to be born by the promotor itself.</p>	-
09.13/78	The development of a pipeline pig	LPS	1.854.591	<p>The development proposed will provide an innovative solution to pipeline testing and inspection systems and it is regarded as one of considerable significance to the safety of the environment and to the maintenance of hydrocarbon supplies. <u>Support recommended : 30%.</u></p>	556.377
09.14/78	Pilgrim pipe coupling and associated development.	P. & O.	1.670.677	<p>The programme covers the development of full sized coupling systems of a new design, based upon prototype work already completed. The use of such coupling systems can be extended to cover pipe clamps, repair sleeves and model repair joints for general platform use, with considerable value in respect of the safety of structures. <u>Support recommended : 30%.</u></p>	501.203

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBON SECTOR

No.	Project title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
10 Pipeline transport					
10.14/78	Cryogenic Flexible pipes	Coflexip	988.473	<p>The purpose of this project is to develop a new generation of flexible pipes for use in handling fluids down to temperatures as low as -160°C. This project is regarded as one of considerable potential significance, especially in the context of handling gas liquids offshore. <u>30% support is recommended for the design and development phases.</u></p>	296.541
10.15/78	Safety Assessment of Protect International Deep water Pipelines		733.710	<p>The purpose of this project is to establish a comprehensive set of design equations for deep water pipelines. This is a research project, the results of which, although valuable, will have little significance in the light of actual experience available by the time the work is complete. <u>No support recommended.</u></p>	
10.16/78	Development of high pressure flexible piping.	Dunlop Ltd.	3.090.985	<p>The main application of this project is seen to be for subsea completions, in which considerable time and cost savings can be foreseen. This leads directly to earlier production, the rendering viable of marginal fields with difficult crudes. <u>Support recommended : 30%.</u></p>	927.296
10.17/76	The development of improved system for transferring liquefied gases.	Salzgitter/FMC	2.134.027	<p>The purpose of the project is to develop a new system for handling the transfer of liquefied gases from offshore plants to gas carriers. Bearing in mind the significance of the movements upon over all hydrocarbon supplies, and the capabilities and trade record of the companies involved, <u>support at 30% is recommended.</u></p>	640.208

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
12.05/78	The proving of an internal Insulation and Barrier System for marine transport and strage of LNG	Shell Research Ltd.	8.191.110	<p>The purpose of the project is to develop an insulation/barrier system for use at temperatures down to -160 C, moving and storing LNG. The programme envisaged consists of the developing the spraying a special polyurethane foam on the inner hull of the vessel, and reinforcing the polyurethane foam with glassfibre epoxy resin. Design criteria are to be established and the appropriate materials developed. Devices will be developed to prove the commercial application of the system, and approvals will be sought from the certifying authorities. <u>Support recommended : 30%</u></p>	2.457.333
13 Subsea	Power Production				
13.05/78	High density sub-sea power source	Comex	804.182	<p>The purpose of this project is to develop an improved power source for submersible. The programme covers the further development of the Stirling engine to the new combustion system and its fitting into a container. The whole development to be taken to the point where the appropriate governmental and certifying bodies give approval. The proposal presented is innovative; it stands a very good chance of being used if it is successful, and the team of contractors and sub-contractors provide a very good expectation of success. <u>Support recommended : 30%</u></p>	241.255

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

14 Storage

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
14.03/78	Hydrocarbon storage	Sir Robert McAlpine & Sons Ltd.	2.032.322	The main purpose of this project is to develop the optimum design for various types of hydrocarbon storage and to construct a carefully instrumented full scale storage unit. Safety in operations will be an important aspect of the programme. Support recommended: 30%.	609.697
14.04/78	Self installing subsea storage	EMH/Holorow Ewbank & Co.	2.094.223	The system envisaged is a sea bed prestressed concrete tank to which the EMH articulated column is hinged to provide tanker loading facilities. This combination of concrete storage structure and articulated columns is seen to have potential for the marginal oil fields. We recommend 30% support provided the involvement, even in an advisory capacity, of a significant operator.	628.267
14.05/78	Use of underground storage	Cromarty Petroleum Co. Ltd.	1.846.863	The purpose of this project is to develop methods of high pour-point crude oil storage in sandstone caverns which will be applicable in many places. Funding of this project of 30% is recommended.	554.059
14.06/78	Development of unlined concrete storage facilities for LNG	Taylor Woodrow Construction Ltd.	2.089.351	The purpose of this project is to provide data to permit the design of unlined as well as lined prestressed concrete storage facilities for LNG. We recommend funding for this project at 30%, provided that the companies referred to become involved. Among them should be an operating oil company, if only in an advisory capacity.	626.805

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

15 Material testing

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
15.08/78	Development of a system for monitoring and optimising structural design of offshore platforms	Symnex	921.458	The purpose of this project is to excite an offshore structure positively at certain points and determine, from a measurement of the forces and accelerations the overall spectrum of response frequencies. It is proposed to commence with wave parameters in the slamming zone and follow this by using an excitation system of the impulse type. <u>Support recommended: 30%.</u>	276.437
15.09/78	Development of an inspection and repair capability for offshore concrete structures	Taylor Woodrow	2.551.299	The purpose of this project is to create a capability to inspect and repair offshore concrete structures. Bearing in mind the limited number of structures in service without the knowledge of possible failures, technological methods for repair and maintenance <u>this project seems not to justify community support.</u>	-
15.10/78	Development of the performance for hydrostatic conditions for offshore applications.	Taylor Woodrow	1.947.320	The purpose of this project is to obtain fundamental data regarding the performance of concrete as a material for possible use offshore. It is considered that the programme proposed falls entirely within the business interests of those marketing concrete for offshore uses. <u>No support recommended.</u>	-

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

15 Material testing

No.	Project Title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
15.03/77	Total structural monitoring for offshore platforms	IIRS	108.686	The first part of this project has already been approved by the Council on October 25, 1977. According to the minutes of this Council session a support of 35% for the second phase of the project is to be recommended by the Commission.	38.040
15.04/78	Offshore structures surveillance by acoustics	Bertin	335.070	The programme proposed consists of the application of present known technology - to which reference is made in the text. The project can be considered as a normal commercial development venture. <u>No support recommended.</u>	-
15.05/78	Design techniques for Taylor Woodrow instability problems in concrete offshore structuring.	Taylor Woodrow Ltd.	2.704.612	This project appears as a comparatively fundamental research project relating to the normal business development of offering concrete as an offshore material in the future. <u>No support recommended.</u>	-
15.06/78	Diagnostic methods for offshore structures	Tecnomare	1.403.260	This is a research programme relating to structural monitoring. The company envisages the development of a capability to diagnose the safety conditions of a structure, both by occasional checks and by continuous monitoring and to evolve an optimum strategy for checking the conditions of structures. All aspects will be brought together to permit the improvement of designs of structures. <u>Support recommended : 30%.</u>	420.978
15.07/78	Measurement of the environmental factors and the stresses in structures to attempt an improvement in structure design	ACIP	595.920	The purpose of this project is to instrument a fixed structure "Barbara" due to be ready at the end of 1979, so as to measure the environmental forces imposed and to reveal the effect of these forces upon the dynamic and static behaviour of the structure. A normal industrial type venture. <u>No support recommended.</u>	-

PROPOSED SUPPORT OF COMMUNITY PROJECTS IN THE HYDROCARBONS SECTOR

No.	Project title	Promotor	Total investment 1978-1980 (eua)	Appreciation and rate of support	Amount of support (eua)
20.01/78	An integrated project of management system	Scomagg Ltd.	1.653.677	The purpose of the project is to provide a software package capable of tracking the movement of 500 X pieces of equipment and a hardware package for storing and sorting the materials. This project might have served a useful purpose at one time, this approach is now standard by offshore operations. <u>No support recommended.</u>	-
	Total		136.972.842.- =====		38.940.576.- =====

FINANCIAL RECORD

1. Relevant budget heading code : Article 320 - Item 3200
2. Title of budget heading : "Community technological development projects in the hydrocarbons sector".
3. Legal basis :
 - 3.0 Regulation (EEC) No 3056/73 of the Council of 9 November 1973 on the support of Community projects in the hydrocarbons sector (OJ No 312 of 13 November 1973).
 - 3.1 Council Decision of 19 December 1974 on the grant of measures of support for Community projects in the hydrocarbons sector (Doc. 8/3600/74).
 - 3.2 Council Decision of 4 May 1976, on the grant of support for Community projects in the hydrocarbons sector (Doc. R/854/76)
 - 3.3 Council Decision of 25 October 1977 on the grant of support for Community projects in the hydrocarbons sector (Doc. R/2416/77)
 - 3.4 Commission proposal on the granting of measures of support for Community projects in the hydrocarbons sector the period 1978 to 1980.
4. Description of the measure : Granting 39 Community undertakings financial aid for use on projects in the hydrocarbons sector.
5. Objective : To promote technological development directly related to the activities of prospecting for, and exploitation, transport and storage of hydrocarbons likely to increase the security of the Community's supplies in hydrocarbons.
6. Justification of the Project : Because of the technical risks and the financial burden involved in carrying out the technical development projects, they would not be carried out or would have to be postponed (thus considerably prejudicing the security of hydrocarbons supplies) unless the Community provided financial support.
7. Appropriations : (see Table* on next page).
8. Type of control to be applied :
 - 8.1 There is to be no control by Member States. The authorising department and Financial Control will carry out regular on-the-spot checks on documents, and will follow the completion of the projects by means of the technical and financial reports which the undertakings are required to send in regularly.
 - 8.2 The Commission is to present an annual report to the Council on the state of progress of each project and the sums committed in carrying it out; the Commission also has to submit an annual report to the Council and the European Parliament on the implementation of Regulation No 3056/73.

7.1. Multi-annual timetable for differentiated and non-differentiated appropriations (in U.A. until 1977) (in E.U.A. from 1978)

Year	PAYMENTS										TOTAL	
	1975	1976	1977	1978	1979	1980	1981					
<u>Non-differentiated appropriations</u>												
1974 : 25.000.000	25.000.000	-	-	-	-	-	-	-	-	-	-	25.000.000
1975 : 25.000.000	226.960	14.872.456	477.847 ⁽¹⁾	7.522.153 ⁽⁴⁾	-	-	-	-	-	-	-	23.099.416 (2)
1976 : 28.000.000	-	-	9.121.128	15.000.000 ⁽¹⁾	-	3.878.872 ⁽³⁾	-	-	-	-	-	28.000.000
<u>Appropriations for Commitment</u>												
1977 : 50.000.000	-	-	2.265.261	12.734.739	15.000.000	20.000.000	-	-	-	-	-	50.000.000
1978 : 35.000.000	-	-	-	15.000.000	10.000.000	10.000.000	-	-	-	-	-	35.000.000
1979 : 20.000.000	-	-	-	-	6.000.000	7.000.000	-	-	-	-	7.000.000	20.000.000
Total	25.226.960	14.872.456	11.864.236	50.256.892	31.000.000	40.878.872	7.000.000	7.000.000	7.000.000	7.000.000	7.000.000	181.099.416

1 Re-entered

2 The balance of 1 900 584 u.a. represents the total appropriations lapsed.

3 To be re-entered

4 Carried over appropriations