

Research for the benefit of SMEs

Per informazioni: Valentina Tegas - tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-2**

Deadline: **04/09/2007**

Programme:

Project Title: new functional foods with different functionalities:
antihypertensive, immunomodulating

Financial Scheme:

Description: SUMMARY:

The aim of this project should be to develop new functional foods, counting with results already obtained by other RTD projects. The duration of the project should be 24 months, and during that period we should develop 3-4 new functional foods with different functionalities: antihypertensive, immunomodulating etc. We should upscale the results, carry out tests in vitro and in vivo (in animals, and initial trials with humans) of different new foods. At present the company are offering to the market an antihypertensive product based on hydrolysed caseins.

Organisation Type: PMI

Partner Sought: PARTNERS ALREADY INVOLVED :
Spanish company (coordinator) with two universities
Portuguese University with a Portuguese SME
Greek University with a Greek SME

We are looking for an ITALIAN SME

Per informazioni: Valentina Tegas - tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-5**

Deadline: **04/09/2007**

Programme: CAPACITIES

Project Title: Measurement and Modelling of the Spatial Characteristics of Wireless Channels for use with Indoor Positioning Systems

Financial Scheme:

Description: We are a wireless systems company specializing in the design of physical layer, data-link layer and networking solutions for radio applications. We are currently focussed on the research and development of advanced wireless positioning systems.

Barriers to the ubiquitous adoption of existing positioning systems include:

- short range and low accuracy
- size, power and cost of tracked tags
- labour intensive deployment of tags and readers

We are developing low-cost, plug and play positioning systems which will overcome these market barriers.

Benefits:

The impact of this project will be the rapid development of next-generation positioning systems. This technology will be of benefit:

- Assisted Living: allowing elderly people to lead independent and better quality lives.1
- Airport Security: RFID tickets and luggage tags introduce a greater level of security and efficiency.2
- Inventory Control: supply chains are maintained in a more efficient and reliable way.3
- Emergency Services: better co-ordination between emergency personnel in hazardous environments helps to save lives.4
- Human-computer interfaces: next-generation gaming and physical rehabilitation systems will be improved through the use of positional information.1

Organisation Type: PMI

Partner Sought: Partner Profile:

We are currently seeking SME partners and research and technical development (RTD) providers to collaborate on this project:

1. RTD providers with expertise which includes the measurement and parametric modelling of MIMO wireless channels.
2. SME partners involved in the development of RFID readers and tags, with particular interest in antenna and passive tag design.
3. SME partners who seek to exploit broadband MIMO wireless channels to achieve very high speed indoor wireless communications, e.g. streaming HDTV high resolution content.

Initial contact will lead to a conference call and an in-person meeting within a two week period.

Aim and Deliverables:

We are seeking research partners with the aim of measuring and modelling the spatial characteristics of the indoor wireless environment, specifically to facilitate the rapid development of autonomously configured positioning systems. These new models will differ from those traditionally used in that they will parameterize the directional and spatial characteristics of indoor radio channels. SME partners will benefit from the deliverables:

1. Space-temporal radio channel measurements taken in a diverse range of indoor environments.

These measurements will be used to validate wireless positioning systems.

2. A set of parametric wireless channel models which are explicitly expressed in terms of spatial coordinates.

These models will be used to further develop and test wireless positioning methods in simulated indoor environments.

These new data sets will also be of benefit to SMEs currently developing indoor broadband wireless technologies:

wireless sensor networks, MIMO communications, IEEE 802.11/Wi-Fi, IEEE 802.15.4/Zigbee and in general any communications system which seeks to exploit the spatial diversity of wireless channels.

Reference n.: **PMI7-EU-BSGSME-16**

Deadline: **04/09/2007**

Programme:

Project Title: BINARO

Financial Scheme:

Description: Subject: New biobased and environmental friendly resin hardener system from renewable raw materials for industrial application

Proposal Outline:

The technical objective of this project is the development of reactive resin systems with epoxies obtained from natural oils, particularly from the oil of "Lallemantia Iberica" and of 'Linaceae' (flax, linseed). This new technology will enable the SME partners to develop new environmental friendly and thus highly competitive products with excellent market prospectives in Europe and abroad. Further general strategic objectives addressed are:

 the production of materials which neither affect man nor the environment negatively during production, application and use  the use of renewable, plant raw materials  sustainable improvement of the agriculture both in Central Europe and in the adjacent Eastern European countries  protection of fossil raw materials and primary energy (crude oil and coal)  climatic protection by reduction of CO2 emission

By the application of the research results, as coating materials and binders in mechanical and civil engineering tasks substantial benefit to EC environment and health protection policy will be provided. The technical progress in relation to producers of reactive resins of non-European countries will provide benefits to the SMEs of the project.

The proposal deadline is the 4th September 2007 in "Research for Benefit of SMEs" in the 7th framework programme.

Keywords: Resin, natural plant oils, environmental friendly, epoxidation

Organisation Type: Centro di Ricerca

Partner Sought: Required skills and Expertise:

- Manufacturer of industrial varnish or varnish for boats, any type of surface coating, anti-graffiti-systems
- End-user for EU project

Description of work to be carried out by the partner(s) sought:

- Substitution of petrochemical vehicle/ binder by chemically modified vegetable oils, tests with end-product

Type of partner(s) sought:

- Small and medium-sized enterprise
- Preferred from Eastern European Countries but other countries welcomed except Germany

The proposer is looking for a Coordinator: No

Reference n.: **PMI7-EU-BSGSME-18**

Deadline: 04/09/2007

Programme:

Project Title: DEARSUN

Financial Scheme:

Description: The main goal is to determine the overall conditions, especially the solar irradiation, under which the proposed innovative solar heating system can be used as an independant building heating system for annual needs coverage.

The system comprises vacuum solar collectors, thermal storage tanks, and an automation system. It should be used preferrably for low T° floor heating, but could be used in other configurations.

We seek SMEs which will be end users of the technology at preferred access conditions, for performing tasks such as energy specification for some typical building cases and validation of all the project outcomes.

We also seek an industrial RTD provider to develop and manufacture a dedicated thermal storage tank with high insulation properties (possibly vacuum). So far, one contact taken in Austria.

Organisation Type: PMI

Partner Sought: We seek two profiles of partners:

1- End User SME

2- RTD provider for thermal storage development (and manufacture later on) , SME not compulsory.

Profile sought:

SME: Installer, maintenance, architect, building engineering>

Reference n.: **PMI7-EU-BSGSME-19**

Deadline: 04/09/2007

Programme:

Project Title: DIGITAILOR - Physical representation of DIGital body measurements to give custom TAILORs worldwide market reach>

Financial Scheme:

Description: The aim of the project is to develop a system to reduce direct client involvement in the fitting of custom tailoring products. This will be reached by developing a shape-shifting physical mannequin that can take on the exact shape of nearly any human body based on data from 3D body scanning process. Such a solution is beyond current state of the art as so far the body measurements have been represented only virtually.

Despite the availability of lower cost ready-made or made-to-measure garments, many people prefer custom tailored clothes as they are crafted uniquely for the specific customer to get best possible fit. However, this means a client has to come to the tailor for several fittings and hence a tailor can serve only nearby customers. Fittings also carry an extra cost for the customer - the time commitment. In addition, a tailor has to schedule her production according to the dates that the customer can come for a fitting. That can prolong the fulfilment of order and the increased wait is another barrier for customers.

The project aims to eliminate these problems by creating a technology that can replace customers in fittings. It has already become possible to obtain extensive data on customer body shape by 3D body scanners. The data can be used to create a virtual model of customer's body or obtain precise measurements. However, a virtual model can not be used in fitting of a physical suit. Therefore a mannequin will be developed that can physically take the shape of the customer based on the data from 3D body scanner.

As a result, customers can get scanned in the nearest body scanner and send the measurements together with an order to a tailor equipped with the system anywhere in the world. The tailor will use the mannequin to perform fittings at any time convenient to her and mail the finished garment to the customer.

Existing physical mannequins are not computer controlled and their ability to change is limited to only most basic measurements. The challenge in this project lies in creating a physical design of the mannequin that allows maximum freedom of change and precision while using minimal number of parts to keep reliability high and cost affordable; control algorithms that can govern the effects of interrelation of moving inner parts on the dimensions of outer shell; and software that ensures compatibility with most used 3D scan data protocols. The project relies largely on input from users (tailors) to identify the body dimensions relevant to custom tailoring and thus limit the changing capacities of the mannequin to only those that are necessary for tailoring, so that cost objectives can be met.

At the end of the project, the consortium will showcase a tested demonstrator system that includes both male and female physical mannequins capable of changing shape with sufficient freedom to be usable in fittings of custom tailored clothes and that is driven by software that uses raw data from different 3D body scanners as input.

Tailors using the system will have the following benefits:

- Increased market - instead of being limited to serving only local clientele, they can take orders from all over the world. The increase in potential market is most

advantageous to tailors in sparsely populated areas and lower income regions of EU whose market has been very limited so far. Other big gainers are renowned tailors and designers whose highest quality products are less affected by price competition.

- Lower cost to customers – together with travel time, the fittings can take up to 10 hours of time from the customer. Depending on customer, the value of this time might be anything from a few percent up to several times the price of the garment.
- More efficient production process – the mannequin is available for the fitting at any moment, eliminating delays in production and giving more freedom in scheduling. That increases productivity and shortens order fulfillment time, both of which make the products more competitive.

Organisation Type: PMI

<Partner Sought: Target Partner - SMEs:

Type of partner:

Custom tailoring company or fashion designer creating clothes for individual customers

Role:

Providing requirements for the system

Testing the system in its business

Expertise:

Custom tailoring process

Body measurements and properties relevant in fittings of custom tailored clothes

Reference n.: **NMP7-EU-LCP-4**

Deadline: 01/10/2007

Programme:

Project Title: Nanostructured toughened hybrid nanocomposites for high performance applications

Financial Scheme:

Description: Schema di finanziamento: 'Collaborative Project' a beneficio delle PMI.

Motivation: Nanocomposites are emerging new materials that promise improved properties. Their applicability, however, is presently limited by the cost of manufacture and lack of reproducibility. Literature shows that on the bench scale, dramatic improvement in polyolefin mechanical properties can be obtained by intercalation and exfoliation of nanoparticles in the matrix.

However, when materials produced using conventional equipment are tested, their performance does not meet expectations nor live up to the claims.

Project Goals: To remove technical barriers to producing high performance polymer nanocomposite materials on the industrial scale, fundamental insight into the dispersion of particles within the polymer matrix is needed.

The intension is to gain this insight through a series of carefully designed studies, using the most advanced experimental techniques, theoretical modelling, carried out by very experienced and skilled partners. The basic objective is to obtain a deeper understanding of the interfacial structure of nanocomposites. This knowledge will enable realization of the great performance potential of these materials through development of novel multiphase and hybrid nanocomposites. This knowledge will facilitate commercialization of polymer nanocomposite materials with superior properties that will lead to development of new products. To meet this objective, we aim to improve the stiffness of polyolefin nanocomposites while not only maintaining but also improving the toughness of the matrix considerably. The technological objective is to optimize and, through novel interface design, to develop new cost efficient hybrid (nanofiller-fiber) nanocomposites as an alternative to heavily filled polymers and expensive engineering polymers and fulfil industry requirements for high performance materials in high tech applications.

Organisation Type: Altro

Partner Sought: Industrial partners (preferably SMEs) particularly within the following sectors: construction, domestic appliances, medical or electronic devices, aeronautics.

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Reference n.: **PMI7-EU-BSGSME-4**

Deadline: **25/07/2007**

Programme: **CAPACITIES**

Project Title: Easy positioning of in-bed patients with reduced mobility

Financial Scheme:

Description: The Need:

The in bed repositioning of patients with limited mobility is of major importance in order to improve their comfort, give them some relief and prevent the worsening of their health condition.

Patient positioning is also required for the administration of medical treatment and the basic nursing cares (feeding, drug administration, cleaning,...). Every 2 to 4 hours, nurses need to change the in bed position of patients with mobility limitations, such as disabled patients, postoperative patients or elderly people.

Nowadays, speciality beds in hospitals have electric systems for moving backrest and knee rest panels. Patients with limited mobility need to request aid from the nurses for any other change in their position (such as lateral rotation, sitting,...), the lack of autonomy cause them anguish and discomfort. In addition, patients positioning frequently cause serious injures to the nurses.

Manual lifting, transfer or repositioning of patients with limited mobility causes 63% of the back, neck and shoulder injures that suffer nurses and support staff.1

The Market:

Revenues in the speciality beds market reached ~€800 million in Europe in 2005.2 The annual growth rate for this market is estimated as ~9% as a consequence of the tendency in developed countries towards an increasing number of obese people and an aging population. The aim of this project is to enable European SMEs in the bed sector to either enter or strengthen their positioning in the speciality bed market by getting funding from the European Commission to develop new technology that fills unmet market needs.

The Solution:

A speciality bed with an automatic positioning system will be designed and validated. The novel system requires a pressure sensor network that detects small movements of the patient, intended to change his/her position. An embedded software system will interpret the sensor signal to determine the movement the patient is intending to do and automatically activate a servo system that aids the movement desired by the patient.

This novel speciality bed will have a major impact on patient comfort and independency, improving the quality of the patient health. This system will significantly reduce the hospitals expenditure associated to work-related injures in the nurses community and to the number of working hours spent in turning patients.

Organisation Type: PMI

Partner Sought:

We are seeking partner SMEs (Small to Medium Enterprises), each in the following areas:

 Actuators and controllers producers (specialist in systems for beds)

 Pressure sensors producers

 Sensor networks and embedded software specialists

 Speciality bed manufacturers (Eastern/Northern EU)

 Distributors of speciality beds directly to hospitals

By being part of this project you have the potential to realise significant commercial benefits with minimal real cost. Your contribution is not financial but "in kind effort" of your skills, knowledge and expertise. You will have the opportunity to meet the project partners and generate other commercial benefits.

The objective of EC funded projects such as this is to promote collaboration between European SMEs and Research Technology Organisations to enable the partner SMEs to obtain a significant market lead, generate sales revenue and create jobs.

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Reference n.: **PMI7-EU-BSGSME-3**

Deadline: **04/09/2007**

Programme:

Project Title: EXFREE

Financial Scheme:

Description: It is almost unavoidable that dust/air mixtures are produced for example in silo systems by the entrainment of the bulk material caused during the filling or emptying the silo cells. These mixtures can explode if there is at the same time a suitable ignition source and then endangers not only the silo itself but also the surroundings.

Corresponding statistics point to severe damages. For example, a dust explosion of this type took place quite recently on 20th august 1997 at Blaye on the Gironde in Bordeaux, southwest France, in a grain silo with a capacity of 350000 tonnes. According to press reports there were twelve victims killed, of whom seven were workers, and a number of injuries. What was left of the plant had to be demolished by blasting for safety reasons.

The requirements to prevent dust explosions generally have to be determined by an explosion protection expert or a very accustomed user.

Therefore a risk analysis is carried out that takes amount, among other things, of the plant safety regulations and the European Directive ATEX 99/92/EC. This risk analysis is based on classified danger zones, like the fire protection zones in a structure. The DIN 1127-1 specifies for example three zones for dust - zones 20,21,22.

As the definition of the zones is not exactly determined it leads very often to miscalculations of the danger risk.

The aim of this work is therefore to undertake the experiment of a new and clear definition of zones for dust. Additionally the extension of the dust explosion zones will be investigated, as it does not exist enough knowledge about now. At the moment this knowledge is for example based on a so called "collection of examples", which is not applicable to every case of an occurring dust explosion.

Organisation Type: PMI

Partner Sought: In the meantime there are 3 RTD partners in the team.

In the consortium there are also 3 SME-partners. They are from Hungary, Germany and Austria and are consultants for dust explosion affairs, substantially working on the following subjects: grain, wheat etc; coal and wood.

What we search now are SME-partners who are either consultants for dust explosion affairs or manufacturer of machinery or apparatus to transport any kind of dusty mediums such as coal, grain, wheat, wood, cement etc or manufacturer of silo systems.



ARDACO COMPANY PROFILE

The Ardaco, JSC. is an innovative technological SME coming from Slovakia. It was established in 2006 integrating business and marketing activities of three prosperous innovative technological companies with 15 years of experience: Infotrust JSC. and its subsidiaries Seetrust and Silentel. All these changes were initiated by the entrance of a distinguished investor.

EUROPEAN TECHNOLOGICAL COOPERATION

Ardaco, JSC. is actively involved in European technological cooperation structures:

- Artemisia JTI, founding member, Steering Board Member
- EpoSS ETP, member of the Steering Group, member of working group Telecommunication
- NESSI ETP, member of working group Trust, Security and Dependability
- eMobility ETP, member

Ardaco, JSC. offers its 15 year expertise in the area of security solutions for European research programmes as FP7 and CIP. The corporation is prepared to participate on research in areas requiring communication security/data transmission, GSM and UMTS, RFID/bringing all advantages of SME sized enterprise from a new member country of the EU for the benefit of projects.

SUMMARY

As a specialist in the area of information security the Ardaco group has developed some unique worldwide patented technologies from the field of the GSM mobile communication security - Silentel® SecureCall™, Silentel® SecurePTT™ and documents protection - PDMark®.

The clients of Ardaco, JSC. in more than 29 countries appreciate product portfolio which is suited for any corporate, governmental or individual users, providing secure mobile data and voice processing solutions and secure data management solutions which allow efficient storage, access and transferability irrespective of the form of data. With a possibility of integration of the physical (paper, people factor) and digital (documents stored on PCs) worlds in a highly secure and cost effective way.

TECHNOLOGIES, PRODUCTS, SERVICES

Secure data transmission - solutions for secure transmission of data via wireless transfer adjusted for project needs.

- Trusted and secure communication system of network devices
- Suitable for sensor and actuator systems, passive RFID, mobile networks or WLAN
- End-to-end encryption up to military level
- Strong authentication algorithms, secure key exchange and public key infrastructure

SecureCall™ - is a system that encrypts phone calls through the GSM mobile device and absolutely thwarts its tapping.

- AES algorithm with a 256-bit key for voice encryption
- One time encryption keys - there are always new keys created with every new phone call. The key used is destroyed after the completion of communication
- An RSA algorithm authenticates the phone call

SecurePTT™ - is an encrypted Push-To-Talk two-way communication system for GSM networks.

- End-to-end encryption with AES 256-bit algorithm
- One time session encryption keys - which are destroyed after the termination of session
- A 2048 RSA algorithm authenticates the session
- System consists of one PTT server and Secure PTT client applications (GSM smart phone, PC or PDA)
- Supported by roaming with 3G voice quality

Common platforms for Secure products are smartphones with Symbian and Microsoft operating systems that are decisive market leaders in contemporary mobile market.

PDMark® - is a unique patented technology developed to bring paper documents security to the level of electronic documents security. Thanks to PDMark, all methods used in the electronic world (data storage, compression, electronic signature, encryption ...) can be utilized also in the world of paper documents. The technology enables to store and to transfer data on the paper document background. The paper can be handled with the same way as a data file on the hard disk. Substantially, it is an electronic data storage that can be seen as a paper CD.

- Low cost and easy applicable solution deliverable also into a common office environment without the need of special expensive equipment
- Capacity of the created paper data storage enables to use it also for security purposes (electronic signature, biometrics, hiding confidential information, etc.)
- 100% error free in the process of conversion of information from paper into digital form
- High resistance to damage enables to recover the whole content from partially destroyed document (redundancy 20 - 40 %)

QSign® - is a quality tool designed for protection of electronic documents with guarantee for administrative and commercial contacts. It is intended to work with documents in Microsoft Windows as a universal tool for textual and graphic editors or any other application software. It provides a simple method for creation and verification of qualified electronic signature of documents. Application QSign certified by Slovak NSA as an application for creation and verification of qualified electronic signature. The application is delivered as a multilicence to the Slovak government.

- Creation and verification of qualified electronic signature
- Authentication/Key infrastructure RSA (for qualified electronic signature 1024 - 2048 bit, otherwise 4096 bit), SHA1 - SHA 512
- Encryption RSA 1024 - 2048 bit, AES 256 bit
- Standards LDAP v2, CRL v2, X.509 v3, PKCS
- Token PKCS#11 smartcard/token, PKCS#15 software token

PATENTS

- PDMark patent international PCT application has been placed at the Patent Office for protection of the intellectual property.
- SecureCall product line has entered national stage with the patent System and device for secure mobile communication PP 404-2004.

KEY SENIOR MANAGEMENT

Mr. Igor Kociš, Chairman of the Board and CEO, brings over 12 years of business development, software design, and management leadership experiences to the company. He spent 7 years as the founder and CEO of the technology company TAUREUS specializing in high-end security projects.

Mr. Tomáš Krištofic, Silentel director, is a co-founder of INFOTRUST. He has 12 years experience in hardware design and company management. He is the creator of hardware appliances for smartcard solutions, security tokens, mobile security system and special high-tech security devices. At present Tomáš is a director of Silentel division and is responsible for leading the development and customer relationship in the area of mobile security technologies. He is a member of Artemisia JTI Steering Board.

Mr. Ivan Kociš, IP manager and company founder, is an experienced business leader and computer industry veteran with 35 years of experiences in executive and R&D positions. He has been an active in numerous business developments within successful start-ups and large organizations. He is a member of EPoSS Steering Committee.

Mr. Richard Margala, Seetrust director, is a co-founder of Ardaco. He has 10 years experience in software design and company management. He managed the development of document security distributed systems and document management systems for the Slovak Customs and Tax administrations based on the exploitation of 2D barcodes. At present he is a director of Seetrust division and is responsible for leading the development and customer relationship in the area of document security technologies.

Mr. Igor Šenkarcin, Marketing and Sales Director, has almost 20 years of experience with managing of IT projects. He managed local and regional development projects for banking, insurance, energetic and industry.

TOP REFERENCES

- Customs and Tax National Authorities projects
- National Security Agency of the Slovak Republic projects
- Slovak Criminal Record project

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Reference n.: **PMI7-EU-BSGSME-6**

Deadline: **04/09/2007**

Programme: **CAPACITIES**

Project Title: Long Range FSO for telco networks

Financial Scheme:

Description: Considering Free-Space Optics (FSO) state of the art, the objective of this proposal is to identify and solve the main technical challenge through appropriate technology/network design and planning in order to meet telco networks requirements.

Due to the use of light rather to radio spectrum, the key benefit of optical wireless is to be totally free of license restriction. As a wireless solution, it bypasses the regulatory and construction problems that dog copper and cable connections. As a result, optical wireless is the one broadband internet solution that can be deployed immediately. The object of the proposal is to get over the hindrances of the current FSO system when dealing with long range application namely in the 3-5 km range. The main technical challenges being on one hand, the reduction of performances due to atmospheric conditions: beam wander (turbulence), beam spreading, absorption, and on the other the alignment issues (building sway, seismic activity,) that will strive on pointing and tracking systems.

Project will include design, prototyping and field trials. Duration should not exceed one year.

Key Words

Free Space Optics, mobile telecom, core network, last mile access

Organisation Type: Impresa>

Partner Sought: Partner Profile Sought:

Required Expertise

There are already three partners in the proposal :

- (leading the project)
- ONERA (French Aeronautics Research Agency)
- FOI (Swedish Defense Research Agency)

We are in search of 3 other partners (One mobile or fixed telecom operator and two SME's partners) who are willing to do research and/or to acquire or enhance their know-how as FSO equipment end-users.

Two types of profile are requested for the SMEs: network planning software editor, telco network integrator. We will give preferences to Southern European located partners, others being not excluded.

Work to be carried:

The requested partners should be able:

- To contribute to specifications overall definition (equipment, installation, network management) and validation process)
- To improve state of the art of network planning tools when considering FSO technology
- To contribute to field trials operations
- To contribute to results delivery and dissemination

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Reference n.: **PMI7-EU-BSGSME-7**

Deadline: **27/07/2007**

Programme: **CAPACITIES**

Project Title: SLUDGE-SAFE: ALTERNATIVES IN WATER-TREATMENT PLANTS OF RUMINANT AND NON RUMINANT SLAUGHTERHOUSES

Financial Scheme:

Description: Regulation 1774/2002 of the European Parliament and of the council lay down health rules concerning animal by-products not intended for human consumption. In this way, the regulation establishes different methods for the treatment of sludge and waste-water of water-treatment plants, depending on different categories of products.

The main objective of the project is the design and development of specific equipment for the application of the method 1, according to Regulation (thermal treatment at 135 °C and 3 bar during 20 minutes) to the sludge of water-treatment plants included in category 1, in case of sludge from ruminant slaughterhouses, and category 2 material in case of sludge from non ruminant slaughterhouses.

Treatment application cost will be taken into consideration in the design, in order to get a lower cost system than incineration.

As support tool, a protein detection method in waste-waters will be developed.

The final goal of the project will be the:

 Assessment of the applicability of treated sludge for its use in agriculture.

In a parallel way, secondary objectives of the project are:

 Study the real presence of proteins (pathogen or non pathogen) in the sludge and waste-water of water-treatment plants of ruminant and non-ruminant slaughterhouses.

 Study of protein (pathogen or non pathogen) elimination processes and their effectiveness in water-treatment plants of ruminant and non-ruminant slaughterhouses.

With these secondary objectives, scientific precedents will be set for a later review of the European legislation.

KEYWORDS: PROTEIN, PRION, SLUDGE, WASTE-WATER, WATER TREATMENT.

Organisation Type: Altro

Partner Sought: PARTNERS INVOLVED: (new partners: preferably non-Spanish precedence but they will be taken into consideration)

Coordinator - SME. Integral management in water-treatment processes.

Partner 1 - Private non-profit institution. It provides technical assistance, analytical services and R&D&I for the food and agriculture sector.

PARTNER SOUGHT:

PARTNER 2

EXPERTISE REQUESTED: Protein detection, kits developer.

ROLE:

-Technology development
-Research
ORGANISATION TYPE:
-SME

PARTNER 3

EXPERTISE REQUESTED: Filtering membranes developer.

ROLE:

-Technology development
-Research
ORGANISATION TYPE:
-SME
-Other enterprise

PARTNER 4

EXPERTISE REQUESTED: Manufacturing of special furnaces for thermal treatments

ROLE:

-Technology development
ORGANISATION TYPE:
-SME

PARTNER 5

EXPERTISE REQUESTED: Prion manipulation. P3 laboratory capability. Interested in working in water, sludge and ground matrix.

ROLE:

-Technology development
-Research
ORGANISATION TYPE:
- Research
-Education/training

Per informazioni: Valentina Tegas - tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-8**

Deadline: **04/09/2007**

Programme: **CAPACITIES**

Project Title: G2T: GREENING GRINDING FOR TRANSPORT PRODUCTS

Financial Scheme:

Description: Brief Description:

Grinding process is widely used in many industrial machining processes mainly in automotive, aeronautical, capital goods sectors. It is a compulsory process to obtain the required accuracy but is a very dirty and high-energy consumption process. Nowadays in many of industrial applications more than 50% of occupied area and more than the 50 % of the consumed energy of a grinding machines is due to the coolant system. The project aims to reduce drastically either occupied area and the energy consumed by the coolant system nearly by the 100%. The economic impact is relevant and the environmental consequences are drastically reduced.

Description:

.-Need:

Grinding is the most pollutant machining process. More than turning, milling or any other cutting process. But it is the best economical solution for high production and high precision and the only economical solution for several difficult to machining materials.

There are a lot of process where the only economical solution it is grinding..

The coolant fluid it is necessary in grinding. The flow of coolant in grinding can be until 1000 lts/min in creep feed applications, and from 25 to 150 lts/ min are very usual. The expected flow of coolant after the development of CAMEL project would be of 0,01 lts/min or less.

The occupied area by the coolant and filtration system it is the 50 % of total area and the energy consume by coolant and filtration system it is the most important representing the 50 % of total energy consumed by the whole system (Grinding machine +Coolant and filtration system). If the project results are satisfactory the energy consumed and area occupied by filtration system could be near of total elimination and pollution produced by liquid residues as well.

.- Innovation:

Within the CAMEL project a new grinding coolant concept named: OQC."Optimal quantity coolant will be developed.

The idea it is to impact with oil spray in the wheel, so that, the oil goes inside the porous of the grinding wheel and after a very cool gas impacts the wheel. The oil is frozen and the porous are not empty: there are frozen oil or very cool oil adhered to the wheel grains. When grinding, in the contact line between piece and wheel the oil is unfrozen and lubrication and cooling is performed in an optimal way.

.- Technical benefits expected

Drastic reduction of coolant nearly the 100%

Reduction of energy consumption in the whole system of 50%

Reduction in pollution by liquids residues until the 95 %

.- Economical benefits expected

Reduction in machining costs by the 20 %

Reduction in surface occupied by the whole system (machine + coolant and filtration system) of 50 %

Reduction in cost installation 25 %.

.- Other benefits expected

Environmental friendly process.

Fast replacement of new coolant system in case of failure.

Key Words: Grinding process, coolant system, energy consumption, pollution

Organisation Type: Impresa

Partner Sought: Required Experience

.- 1 SME: manufacturer of new lubricants

.- 1 SME manufacturer of grinding machines in automotive, railway, etc sector

Profile of required organisations

2 SMEs END USERS not from Spain, Germany and Portugal

Number of partners required: 2

Framework

FP7 Capacities Work Programme: Part 2 – research for the benefits of SMEs

Call identifier: FP7-SME-2007-1

Deadline for project: 4 September 2007

Topics: open to all research fields

About Chempilots and its expertise areas

Chempilots is a specialist in polymer chemistry and process technology. We provide contract R&D, process development and production to the medical device and pharmaceutical industries. Over the years, our contract R&D work has been instrumental in bringing many innovative new products to market – from tinted contact lenses to catheters and implants.

Chempilots' core competence is the fundamental understanding of polymers – their chemistry, structure, and related chemical, physical and mechanical properties. We are intimately involved in the development of a wide range of polymeric systems for transporting and releasing substances under specific conditions as well as synthesis and formulation of polymer systems for controlled drug release is one of our major R&D activities.

Chempilots can provide technology know-how and clean rooms for the custom production of medical devices, polymers, specialty materials and formulations. Custom production is often an extension of our earlier R&D and process-development contributions, and typically, our production customers want us to actively participate in downstream innovations.

By combination of our understanding of polymer properties with in-depth experience and capabilities within polymer synthesis, characterization, formulation, and processing technologies, we are able to assist customers in the creation of unique, highly integrated product and process solutions.

FP7 - Research for the benefits of SMEs

Chempilots is interested in a project where we can provide the R&D/part of the R&D to European SMEs primarily in the medical device and pharmaceutical industries.

We can contribute with the R&D-part of the project i.e. R&D of a complete new idea, R&D of an improvement of an already existing product as well as R&D of processing and production technologies. Finally we can assist in coordinating the project and make sure the final product/process complies with international standards, quality assurance systems, validation and regulatory requirements.

We seek to elaborate our existing international network with serious industrial partners within polymer science, chemistry engineering and medical sciences. We expect our partners to have an innovative project idea within the field of medical devices and/or drug delivery systems.

We look forward to hearing from potential partners and jointly develop innovative products and/or processing technologies.

Countries of preference

Europe

Deadline for partner search

For this specific call the deadline for partner search is 1 July 2007 approx.

However, we're open to discuss future collaboration possibilities and project ideas for the upcoming calls in this category.

Read more about Chempilots at www.chempilots.com or contact Birgitte Kynde, sales and marketing coordinator, bk@chempilots.dk / +45 4495 1

Per informazioni: "Valentina Tegas" tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-9**

Deadline: **04/09/2007**

Programme: **CAPACITIES**

Project Title: **MAGO - Optimization of Freight Capacity Management and Goods Tracking System for Road Haulage Companies**

Financial Scheme:

Description: **PROJECT OBJECTIVES**

The project goal is to develop a platform through the research of different business models in the road haulage value chain and by tracking freights location. This will allow an easy and dynamical optimization of the capacity and the resource management of small companies in the road transport sector.

Developing a system which:

 Allows truck companies to know their freight's location at all times. (RFID)(SIG).

 Favors the best haulage management by interchanging freights and subcontracting other trucks companies, saving money, avoiding situations where trucks come back empty, following the law, finding the best way to transport the freights, etc. (business models).

 Entails effective capacity management by an exhaustive demand control and resources assignation  Secures the system from impeding fraud situations, such a way that every user should be properly registered establishing certain requisites. (GRID computing)  The system will be intuitive, seamless, and dynamic, taking into account truck drivers' knowledge about ICT technologies and mobile devices. (multiplatform) (multilingual)

Organisation Type: **Centro di Ricerca**

Partner Sought: **Small Long hauliers transport companies.**

Per informazioni: "Valentina Tegas" - tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-10**

Deadline: **04/09/2007**

Programme: **CAPACITIES**

Project Title: OPTIROUTING - A low cost and modular solution for routing optimisation in transport and distribution SMEs

Financial Scheme:

Description: The aim of this project is the development of a routing optimisation software solution easy to configurate and to use it, based on a low cost subscription fee that ensure easy maintenance and future updates. The solution to develop will be modular and includes a standarized GIS based solution. The solution supports fleet trace and tracking, real time planning and mobile communication with the fleet.

The SMEs will be able to appropriately plan the service of distribution by optimising the kilometers traveled and the fleet utilisation, reducing distribution cost around 10%.

Different type of distributors SMEs will participate in order to cover a wide diversity of business cases and restrictions to test and validate different optimal route search algorithms.

Organization Type: Centro di Ricerca

Partner Sought: Distribution and transport companies with own fleet where distribution cost could be reduce by optimising the route planning. Normally capillar distribution.

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- Food & beverage
- Gas and Fuel distribution
- Courier or home delivery companies

Per informazioni: "Valentina Tegas" tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-11**

Deadline: **04/09/2007**

Programme: **CAPACITIES**

Project Title: VALUETRACE - Quality Monitoring & Traceability for the Supply Chains in Fresh Foods, Pharmaceuticals and Healthcare

Financial Scheme:

Description: The aim of this project is the development of a system for quality monitoring and traceability of products for fresh food, pharmaceuticals and healthcare supply chains, based on reasonably reusable cheap RFID identification & security control tag that allow for continuous quality logging/monitoring and able to be read by any of the partners in the supply chain, i.e. supplier, distributors, logistic operators.

The project includes

- Research in demands related to technology in fresh food, pharmaceuticals and healthcare supply chains.
- Development of innovative solutions for SME where RFID solutions is a part of it.
- Development of prototypes and different piloting programmes.
- Testing of solutions in laboratories on a pilot basis.
- Testing into practise in different SME's (parts of supply chains) including implementation programmes.

Organization Type: Centro di Ricerca

Partner Sought: Suppliers with temperature monitoring requirements, i.e. fresh and frozen food, pharmaceuticals and/or healthcare products (i.e. bio-pharmaceutical)

Per informazioni: Valentina Tegas - tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-12**

Deadline: **04/09/2007**

Programme: CAPACITIES

Project Title: INGREFUN: UPSCALING OF THE RTD RESULTS CONCERNING BIOACTIVE PEPTIDES OBTAINED FROM CASEINS IN ORDER TO DEFINE NEW FUNCTIONAL FOODS

Financial Scheme:

Description: The aim of the project is to carry out the optimization of scale-up process in a pilot plant of the new functional and bioactive products (market studies, influence of scale-up process on sensory quality of the products developed) and the realization of in vivo trials in animals and preliminary studies in humans.

KEYWORDS: Ingredient, functional, bioactive, peptide

Organisation Type: **PMI**

Partner Sought: PARTNERS INVOLVED:

SME's and RTD's producing and marketing proteins, peptides or ingredients.
RTD's with expertise in in vivo trials of health effects. SME's or RTD's specialising in product development and market studies/analysis of functional foods products and end users interested in new functional foods.

PARTNER SOUGHT

EXPERTISE REQUESTED:

ROLE:

Research
 Demonstration

ORGANISATION TYPE:

SME

HOW MANY PARTNERS ARE REQUIRED? 5-6

Per informazioni: Valentina Tegas - tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-13**

Deadline: **04/09/2007**

Programme: **CAPACITIES**

Project Title: Netwis: METROPOLITAN METERING WIRELESS SYSTEM

Financial Scheme:

Description: In the water and gas supplier's context, taking into account the new wireless communication technologies, nowadays is possible to develop a new metering solution. Market is asking for a regular and distanced reading for the supplied gas or water metering, always low cost, and if possible optimising the control centre management.

KEYWORDS: RADIO-FREQUENCY, SENSOR-NETWORKS, MESHING-NETWORKS, AUTOMATIC REMOTE METERING, BATTERY-POWERED, SELF-MAINTENANCE, EXTERNAL-SYNCHRONIZATION.

The project's finality is to develop a scalable new wireless system to get secure, reliable and distanced reading, using a universal solution based in optical recognition, cost acceptable by industry, and applicable to all kind of metering. We are already studying the use of a wireless system combination for different distances (ZIGBEE, GPRS, RF868,...).

Objectives:

- Universal solution. Applicable to all kind of metering and different meters
- A metropolitan gas/water metering wireless system to send gas and water supplies readings to their control centre.
- Low cost.
- Authenticable and secure data transmission.
- Zero maintenance, battery powered sensors.

Organization Type: PMI

Partner Sought: PARTNERS INVOLVED:

•Spanish RTD specialized in electronics, with a new business branch for this working subject.

•Spanish company oriented to electronic metering

We look for partners willing to participate as:

•RF EXPERT RTD

•RADIO FREQUENCY COMPONENTS MANUFACTURER FOR ULTRA LOW POWER CONSUMPTION RADIO DEVICES

•SENSOR NETWORKS HARDWARE OR SOFTWARE DEVELOPERS OR INTEGRATORS

•METER MANUFACTURER (WATER/GAS/ELECTRICITY)

•SOFTWARE DEVELOPERS WITH NETWORK BUILDING EXPERIENCE IN EMBEDDED SYSTEMS

•METER READING COMPANIES

ROLE:

X Technology development

X Dissemination

X Other

ORGANISATION TYPE:

X SME

X Technology Transfer

HOW MANY PARTNERS ARE REQUIRED? 3-5

Per informazioni: Valentina Tegas - tegas@apre.it

Reference n.: **PMI7-EU-BSGSME-14**

Deadline: **04/09/2007**

Programme: **CAPACITIES**

Project Title: Development of laboratory based distribution test to simulate transport and handling of packaged products through the supply chain of developing regions

Financial Scheme:

Description: To have confidence that materials and components being imported and finished products being exported to developing regions will pass through the distribution chain in fit for purpose condition ready for use.

A significant amount of materials and components are imported from the Far East and other developing regions, and high value goods produced in Europe are increasingly being sold in developing regions (and are therefore being transported from Europe to these areas). Pack handling and transport practices in developing regions are different from those employed in Western countries, which can result in packaging or product damage. The need to accurately assess the fitness for purpose of packaged products with respect to this distribution environment is growing.

Main objectives of the project are:

- To review the physical hazards of the supply chains of developing regions through visual audit and data gathering
- To analyse the observed and measured hazards in order to develop a laboratory based test method to simulate the physical hazards
- To validate the test method through initial laboratory tests, comparing the results to real life product/pack damage observations

Organization Type: Centro di Ricerca

Partner Sought: Any SME importing components or finished goods or exporting goods to developing regions including toys, home and personal care, electrical and electronic goods, pharmaceutical goods, medical products, automotive and industrial machinery

Reference n.: **PMI7-EU-BSGSME-15**

Deadline: **04/09/2007**

Programme: CAPACITIES

Project Title: IMS based Service Creation Framework for Niche Broadband Service Operators

Financial Scheme:

Description: Abstract:

The aim of the project is to undertake research and development in the domain of IMS (IP Multimedia Subsystem) service conceptualisation, creation and validation with specific sensitivity to the needs of niche and community based Broadband Service Provider's .

This will enable community based Broadband Service Providers compete effectively with the larger global players and use the richness of IMS services to create applications and services that uniquely serve the communities in which they operate

Main Objectives and Research Results Sought:

Main objectives are to deliver an IMS based service creation and deployment framework which is (1) scaled to and (2) cost effective for the specific needs of the smaller Broadband Service Providers.

The project will further investigate integrating into the framework a service adaptation layer which enables adaptive mobility to underlying network conditions and multi-network inter-operability.

The project will include developing a prototype Community Linking application development which will validate the service creation framework

Innovative Aspects:

Customisation of a service delivery platform specific to the needs of the smaller Broadband Service Provider.

Building in a service adaptation layer which enables adaptive mobility and multi-network inter-operability.

Main Advantages (Impact):

Project deliverables will provide a means for niche and community based Broadband Service Providers to compete effectively in the marketplace and to use the richness of IMS services to create new applications and services that uniquely serve the communities in which they operate.

Organisation Type: Centro di Ricerca

Partner Sought: This project is now seeking SME partners . The goal is to build a consortium representing the supply chain of value added service provision with a service provider , a Telco or IT Systems Integrator and an Application Developer .

We are specifically seeking a Broadband Service Provider with a Fixed Wireless or Wireline access network that has an established customer base and is committed to expanding their product offering with value added services. This partner is required

to participate in the Environment and Market Analysis phase of the project and also to participate in a user trial using their live network.

We are additionally seeking a Telco / Systems Integrator that has a direct interest in providing integration services for Next Generation Networks and IMS . The anticipated role of this SME is to assist in the Environment Analysis phase , System Analysis and Description phase , in the development of deployment methods and tools and to assist in the preparation and execution of a user trial.

Reference n.: **PMI7-EU-BSGSME-18**

Deadline: **04/09/2007**

Programme:

Project Title: **DEARSUN**

Financial Scheme:

Description: The main goal is to determine the overall conditions, especially the solar irradiation, under which the proposed innovative solar heating system can be used as an independent building heating system for annual needs coverage.

The system comprises vacuum solar collectors, thermal storage tanks, and an automation system. It should be used preferably for low T° floor heating, but could be used in other configurations.

We seek SMEs which will be end users of the technology at preferred access conditions, for performing tasks such as energy specification for some typical building cases and validation of all the project outcomes.

We also seek an industrial RTD provider to develop and manufacture a dedicated thermal storage tank with high insulation properties (possibly vacuum). So far, one contact taken in Austria.

Organisation Type: PMI

Partner Sought: We seek two profiles of partners:

1- End User SME

2- RTD provider for thermal storage development (and manufacture later on) , SME not compulsory.

Profile sought:

SME: Installer, maintenance, architect, building engineering

Reference n.: **PMI7-EU-BSGSME-19**

Deadline: **04/09/2007**

Programme:

Project Title: DIGITAILOR - Physical representation of DIGItal body measurements to give custom TAILORs worldwide market reach>

Financial Scheme:

Description: The aim of the project is to develop a system to reduce direct client involvement in the fitting of custom tailoring products. This will be reached by developing a shape-shifting physical mannequin that can take on the exact shape of nearly any human body based on data from 3D body scanning process. Such a solution is beyond current state of the art as so far the body measurements have been represented only virtually.

Despite the availability of lower cost ready-made or made-to-measure garments, many people prefer custom tailored clothes as they are crafted uniquely for the specific customer to get best possible fit. However, this means a client has to come to the tailor for several fittings and hence a tailor can serve only nearby customers. Fittings also carry an extra cost for the customer - the time commitment. In addition, a tailor has to schedule her production according to the dates that the customer can come for a fitting. That can prolong the fulfilment of order and the increased wait is another barrier for customers.

The project aims to eliminate these problems by creating a technology that can replace customers in fittings. It has already become possible to obtain extensive data on customer body shape by 3D body scanners. The data can be used to create a virtual model of customer's body or obtain precise measurements. However, a virtual model can not be used in fitting of a physical suit. Therefore a mannequin will be developed that can physically take the shape of the customer based on the data from 3D body scanner.

As a result, customers can get scanned in the nearest body scanner and send the measurements together with an order to a tailor equipped with the system anywhere in the world. The tailor will use the mannequin to perform fittings at any time convenient to her and mail the finished garment to the customer.

Existing physical mannequins are not computer controlled and their ability to change is limited to only most basic measurements. The challenge in this project lies in creating a physical design of the mannequin that allows maximum freedom of change and precision while using minimal number of parts to keep reliability high and cost affordable; control algorithms that can govern the effects of interrelation of moving inner parts on the dimensions of outer shell; and software that ensures compatibility with most used 3D scan data protocols. The project relies largely on input from users (tailors) to identify the body dimensions relevant to custom tailoring and thus limit the changing capacities of the mannequin to only those that are necessary for tailoring, so that cost objectives can be met.

At the end of the project, the consortium will showcase a tested demonstrator system that includes both male and female physical mannequins capable of changing shape with sufficient freedom to be usable in fittings of custom tailored clothes and that is driven by software that uses raw data from different 3D body scanners as input.

Tailors using the system will have the following benefits:

- Increased market - instead of being limited to serving only local clientele, they can take orders from all over the world. The increase in potential market is most advantageous to tailors in sparsely populated areas and lower income regions of EU whose market has been very limited so far. Other big gainers are renowned tailors and designers whose highest quality products are less affected by price competition.
- Lower cost to customers - together with travel time, the fittings can take up to 10 hours of time from the customer. Depending on customer, the value of this time might be anything from a few percent up to several times the price of the garment.
- More efficient production process - the mannequin is available for the fitting at any moment, eliminating delays in production and giving more freedom in scheduling. That increases productivity and shortens order fulfillment time, both of which make the products more competitive.

Organisation Type: PMI

Partner Sought: Target Partner - SMEs:

Type of partner:

Custom tailoring company or fashion designer creating clothes for individual customers

Role:

Providing requirements for the system

Testing the system in its business

Expertise:

Custom tailoring process

Body measurements and properties relevant in fittings of custom tailored clothes

Reference n.: **PMI7-EU-BSGSME-20**

Deadline: **04/09/2007**

Programme:

Project Title: Development of a set-up technology for the quick exchange of tufting tools

Financial Scheme:

Description: Proposal Summary

The production of tufted floor coverings is of great economic importance to Europe. In 2006 1.500 million m² of floor coverings were produced in Europe. 38% of this amount were textile floor coverings and within this group 57% were tufted floor coverings. The success of tufted floor coverings is based on the fact that tufting machines have a higher production rate than other textile machineries. Due to mechanical wear the tufting tools (needle, hooks and knives) of such machines have to be replaced in regular intervals. During this set-up time, the machine is out of operation. For a machine with a working width of more than 5 m the set-up could last up to three shifts with 2-3 persons. For small and medium carpet manufacturers with a small machine pool the downtime of one machine means a dramatic loss of capacity overall.

The technical goals of this project are a decrease of the downtimes due to a quick exchange of tufting tools and an increase in the precision of the alignment. This should be achieved by a new technology, where the set-up of the tufting tools is shifted from "onsite" at the machine to "offsite".

The machine can be still under operation while the next set-up is prepared. The basic element of this technology is a new measurement technique for the determination of the single tufting tool's position.

The economic impact is an increased productivity by dividing the machine's downtime from the time which is needed for the set-up itself. The new set-up technology offers the opportunity to transfer the exchange and alignment procedure directly to the tufting tool supplier. "Ready-to-use" elements are sent to the end-user instead of shipping single tufting tools, which is a new way of distributing the products. Additionally by this technology particularly SMEs can benefit from the knowledge of the supplier regarding to highly precise adjusted tufting tools for the production of high quality products without having trained experts employed onsite.

Organisation Type: Altro

Partner Sought: Profiles of Partner Sought:

SME - End user of tufting tools

SME - Logistics in a reusable transport system

SME - tools producer for textile machines

Reference n.: **PMI7-EU-BSGSME-21**

Deadline: **04/09/2007**

Programme: Research for SME

Project Title: UGOTEX - Unsold and obsolete goods in the textile and

Financial Scheme:

Description: - Strategic objectives addressed

1/ Develop a technological platform dedicated to the optimization and management of unsold products and obsolescent textiles, accessible to firms from the Textile-Clothing-Distribution (TCD) sector and show its utility and validity

2/ Develop a professional software and innovative methodologies dedicated to give value to the unsold goods and obsolescent textiles.

3/ Generate new knowledges on supply chain and inventory management, usable in the entire European space of research and technology, and participate in the application to other fields.

Proposal abstract, Stockpiles of unsold goods (surplus and obsolescent stock) are currently a significant problem, particularly for SMEs and EU participants from the New Member States coming into the global economy. This situation derives particularly from the marketing policy pursued in consumer markets, based on sales of short-life products in order to match the requirements of European consumers seeking innovation and customised supplies. This circumstance, which generates significant costs, has not previously been studied because of political rather than technical reasons; indeed for many people (financiers, managers...), stocks of unsold and obsolescent goods are primarily the consequence of poor management by the company.

Currently, the increasing economic crisis and the pursuit of optimal competitiveness combine to limit the options available to companies for management of such stockpiles.

In the absence of a best-practice strategy for managing unsold goods and obsolescents, some industrial sectors repeatedly institute 'red-letter' sales, marking down prices to sell off these stocks. As an example, such sales account for an average of 30% of the sales turnover of the clothing sector, whilst 70% of textile retailing comprises balanced-tariff trading.

The UGOTEX project combines five institutions which, amongst other things, specialise in demand forecasting and supply chain planning.

UGOTEX is dedicated to the implementation of a software platform which will append to the usual control mechanisms, one management feature (universally omitted until now), which makes possible forecasting and sequencing beyond the (traditional) season of regular sales. The end-users (Chantelle, Kindy...), specialists in the textile-clothing business, will specify the needs of the Textile-Clothing-Distribution sector and will provide the statistical data necessary for the validation of the new methodology. Two IAEs will disseminate these results initially dedicated to the textile issues, but which are transposable into other sectors discomfited by unsold goods (electronics...).

According to experts, such a tool will meet the needs of the European TCD sector and will facilitate a reduction of 50% in the rates of unsold goods in that sector; they currently represent between 20% and 50% of the provisioning.

Organisation Type: PMI

Partner Sought: Seek

Textile-Clothing-Apparel SME,

Retailer SME,

Consulting SME (Marketing-Distribution, Supply chain management)

- Training and dissemination activities. (conferences, publications, workshops, web-based initiatives,)

- Research and technological development activities (testing and validation of project results, and preparatory stages for applied use)

- Demonstration activities. (e.g. testing of product-like prototypes).

Reference n.: **PMI7-EU-BSGSME-22**

Deadline: **29/08/2007**

Programme:

Project Title: PACMAN

Financial Scheme:

Description: Abstract:

The lack of cross-platform support for mobile content leads to suboptimal use of the mobile media substrate and hence to reduced competitiveness of businesses in the mobile content space, especially when compared to content-providers that are mainly Internet-based. It is also likely that these problems can at least partially explain the simplistic nature of the majority of mobile content compared to that of content for fixed platforms. The objective of the project is to develop and prototype an approach to general-purpose middleware support that will allow media content on mobile devices to become significantly more portable and interoperable than the current generation of content. The consortium consists of three media partners (SMEs) and three technology partners (universities) for this purpose.

Main Objectives and Research Results Sought:

The PACMAN project will produce know-how and prototype for a general-purpose middleware and toolkit solution that allows mobile content (graphics, audio, video and code) to be adapted automatically across three of the four main platforms currently used by mobile handsets. The solution will also allow adaptation within each platform to support intra-platform fragmentation. The PACMAN platform will also allow better interoperability between applications running on different handsets, for example to allow viral distribution of content and support multi-user content. In this fashion, the proposed work improves portability as well as interoperability.

Innovative Aspects:

A comprehensive approach to addressing the platform fragmentation problem on mobile handsets.

Main Advantages (Impact):

Dramatically reduced development cost for multi-platform mobile content.

Organisation Type: Università>

Partner Sought: SME: The required skills and facilities are technical expertise in the relation to development of content for mobile platforms (one or more of Java ME, BREW, Symbian and Windows Mobile) and desire to increase the availability of contents across platforms as well as the interoperability of such content. The intended role for this partner is to help drive the drive the research and development by offering technical expertise about the problem, such that it can be solved with the technical expertise of the researchers. The partner will also be expected to help evaluate the technology produced and, if successful, integrate it into their own product lines.

Reference n.: **PMI7-EU-BSGSME-23**

Deadline: **04/09/2007**

Programme:

Project Title: CAP-SCHED - Competitive Advantage for Process-intensive Industries by Scheduling with Heuristics-enhanced Simulation and Optimisation

Financial Scheme:

Description: Problem being addressed:

For processes which require flow scheduling (that is, planning of operations in the short term), very often, the human scheduler is overwhelmed by the sheer combinatorial complexity of the problem.

By using artificial intelligence methods linked to mixed-integer linear programming, the solution to be developed by CAP-SCHED aims to drastically reduce the need for the human operator to engage in multiple planning/scheduling loops in order to get to a consistently optimised solution. The aim is to improve the profitability of continuous and semi-continuous processes (e.g. in speciality chemical production, agro-food processing, high volume processes, batch Processes.....)

Innovation:

The project involves developing a new intelligent scheduling system applicable for companies operating in continuous and semi-continuous process industries.

The solution will involve developing a multi-agent framework, in which simulation and algorithmic approaches can be combined.

Organisation Type: PMI>

Partner Sought: Partners sought:

SME 1: SOFTWARE ENGINEERING COMPANY, with experience in (distributed) decision support applications and GUI design. Partner located in any country of the EU except France Responsibilities in the project: Responsible for overall software architecture of the CAPSCHED solution - with particular emphasis on the graphical user interface.

SME 2 : INFORMATION SYSTEMS SERVICE COMPANY.

Of particular interest is any company with activities in the AGRO-FOOD INDUSTRY. Partner located in any country of the EU except France

Responsibilities in the project: Provision of knowledge on flow-process problems and current solutions to planning and scheduling in the agro-food industry.

Reference n.: **PMI7-EU-BSGSME-24**

Deadline: **04/09/2007**

Programme:

Project Title: PYRODE: a highly sensitive apparatus for the detection of sparks, flames, smoke,

Financial Scheme:

Description: Problem being addressed:

Fire prevention demands highly reliable, high sensitivity detectors as a means to assess and detect, at the earliest possible instant, incidents which lead to ignition of fires. Forest fires in particular are of growing concern. The "pyrode" device aims to provide the means for earliest possible detection, pinpoint location, and assessment of the threat from burning material.

Innovation:

Pyrode uses a highly innovative approach to spark/flame/corona detection based on Very UltraViolet technology (VUV), with extremely high sensitivity, very low power consumption, and with the potential for very low overall system cost. The functional performance has already been well proven in the laboratory, where such VUV detectors are used in particle physics experiments.

The overall system for the pyrode project requires development and integration of lens, electronic imaging and associated controller interface components, with attention to overall design-for-commercialisation to achieve optimised priceperformance.

Organisation Type: PMI

Partner Sought: SME 1: VERY ULTRA VIOLET (VUV) OPTICAL LENS MANUFACTURER

Company able to produce optical lenses working in the VUV segment of spectrum (known variously as "Very UltraViolet", "Vacuum UltraViolet", "Deep Ultra Violet" or "Extreme Ultra Violet"). The optical properties of the lenses must be stable and function effectively at wavelengths in the region 170 - 230 nm.

Responsibilities in the project: design-for-manufacture of VUV-capable lens system so as to enable an attractive price/performance ratio at different manufacturing volumes. Integration of the lens components within the overall Pyrode detection system.

SME 2 : Electronic imaging/embedded components

Company able to produce signal read-out electronics and interface that will be connected to the output of a pixel array imager (probably similar to that of a CCD camera). Work will include design-for-manufacture of discrete embedded components (possibly ASIC, FPGA, or SoC depending on targeted production volumes and eventual integrated functionality).

Responsibilities in the project: implementation of design-for-manufacture.

Interfacing and integration of the component within the overall Pyrode detection system.

Reference n.: **PMI7-EU-BSGSME-25**

Deadline: **04/09/2007**

Programme:

Project Title: Wearable fall detector device miniaturization (Mini'Fall)

Financial Scheme:

Description: Problem being addressed:

The Mini'Fall project proposes a new generation of fall detector device, itself integrated within a fall detection system (alarm and telecoms services). Trials on an existing version of this technology demonstrate that it has vastly superior fall detection performance than anything currently on the market. It represents a highly reliable means of minimizing the consequences of falls in the elderly and infirm - with minimisation of false alarms.

Mini'Fall will automatically detect and verify that a fall has occurred, and immediately contact health services - allowing earliest possible intervention.

Existing fall detectors have no significant social impact, and little market penetration: only around 4% of Europe's potential end users have any of the existing alarm devices.

The mini'fall project will address significant improvements to device ergonomics, and improvement of operational reliability, power consumption, robustness, and design for wearability, through miniaturisation.

Innovation:

Although highly performant, the existing fall detector device is oversized.

Mini'fall aims to achieve miniaturization to approx. the size of a one euro coin. In addition, an objective is to package the device in hypoallergenic material such that the device is held firmly in contact with the subject's skin.

Regarding reliability, the major reason for the negative market response to fall detectors in general is their high rate of false alarms. The Mini'Fall system solves this problem by using signals from both a wearable device and sensors placed in the living space. Reliability is enhanced via a specifically-developed algorithm that decides whether or not a fall has actually occurred.

Organisation Type: PMI>

Partner Sought:

SME 1: BATTERY MANUFACTURER COMPANY:

Energy sector company to produce a high performance long-life lightweight power cell.

Partner located in any country of the EU except France

Responsibilities in the project: Producing a coin cell with the following requirements:

- Shape: disc (button), - Size: 22 mm diameter, 1 mm height - Voltage: 3V,
- Capacity: of the order of 5000 mAh

SME 2 : ELECTROSENSITIVE PIGMENTS COMPANY:

Chemical sector company to produce electro-sensitive pigments, capable of showing the charge state of a coin cell.

Partner located in any country of the EU except France Responsibilities in the project: Developing an electro-sensitive element to be integrated into a small (380 mm³) electronic device to monitor battery state.