

IBMO® – IngenieurBüro Manfred Opel
(Office for Technological Services IBMO®)



**List
of the Proposed
International
Modern and Ecological
Cooperative Projects
by IBMO, Germany**

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**List of the Proposed International
Modern and Ecological Cooperative HighTech Projects
for Technology Transfer and for Technology Application**

GENERAL:

We are an experienced and reputed engineering and technology management company successfully implementing the newest technology and management systems worldwide.

Our overriding company policy is **strict confidentiality**.

Therefore we will never disclose the identity of our partners.

We, by intention, do not – directly or indirectly – hold or serve any homepage.

We enjoy great international reputation and our cooperating partners are well known for outstanding performance worldwide.

In principal we cooperate with a German, European, and international network of leading **Small and Medium-sized Enterprises (SMEs)**.

This is because those SMEs are most flexible, extremely competent, and highly motivated. They offer by far the best and most profitable innovative ideas.

In Germany, for instance, their productivity is about twice the one of big businesses, they hold about 80% of all patents, and they train about 80% of all specialists and craftsmen.

In fact, Germany's industrial capability almost exclusively rests on SMEs' performance.

The capability of those SMEs is the "secret" of German economic success. Therefore the "Industry 4.0" concept (similar to "Made in China 2025") concentrates on SMEs.

We are a "Systems Company".

This mean: We are not just selling stand-alone equipment – and run away.

We offer a whole system including training, marketing, logistics, upgrading, and innovation.

The comprehensive transfer of technologies, including the production of complete systems on the basis of high-performance and robust technologies is our core business.


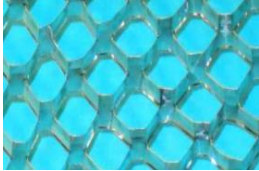
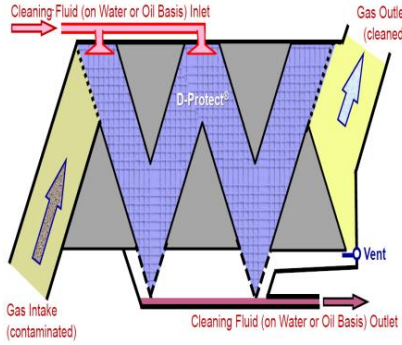
IBMO in general always offers to transfer 100% of any selected technology to the cooperating partner within a certain maximum period of timeframe.

This comprises, if requested, an exclusive long-term cooperation with IBMO.

PROPOSED PROJECTS:**CONTENTS:**

| | PAGE |
|---|-------------|
| GENERAL | 1 |
| CONTENTS | 2 |
| A) Metal Processing Projects | 3 |
| B) Other Metal Processing Mechanical Projects | 6 |
| C) Non-Metallic Innovative Projects | 11 |
| D) Ecological Projects (in the context of “METAL APPLICATION”) | 12 |
| E) Complex Modern Technological Systems | 14 |
| CONCEPTUAL CONSIDERATIONS: | 18 |
| FINAL REMARKS: | 18 |
| ANNEX | 19 |

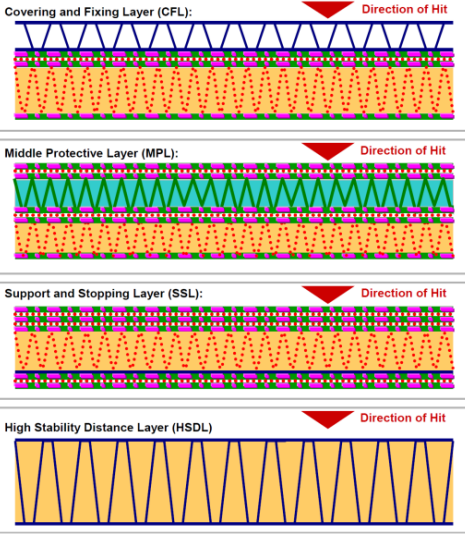
PROPOSED PROJECTS:

| A) Metal Processing Projects | | | |
|------------------------------|---|---|---|
| No. | Name | Description | Remarks |
| 1 | Stainless Steel for Trains and Metro Cars. | Modern bodies of train cars are made of special stainless steel. One train car holds 6 to 7 metric tonnes of stainless steel. To deliver sub-assemblies may be optimum. Modern stainless steel can also be pressed, torn, welded, or otherwise bend together. | In most big countries, like those in SEA (South East Asia), and Russia the production rate of train cars is at least 6,000 per year. The welding process must be an integral part of any production. |
| 2 | Stainless Steel Ship Propeller. | Pitch-controlled ship propellers offer numerous fortunes: 1. 17% less fuel consumption. 2. Life-cycle is at least 3-times longer than the one of traditional brass propellers. 3. Reverse movement without stopping and reversing the engines. 4. Ultra-low sound (urgently required in submarines and research vessels). 5. Very fast acceleration if required. This feature is urgently needed by naval ships and by modern fishing vessels. 6. Easy to repair. 7. Idling and zero-thrust is possible without stopping the engines. 8. We are even ready to sell German companies which design, cast and finish huge ship propellers up to a diameter of 11 metres and more. |  |
| 3 | Stainless Steel or Aluminium "Turbulence Filter" [or "Explosion Prevention Grid".  [Compare B)4.] | Our new and highly efficient "Turbulence Filter" cleans air from more than 99% of dust, liquids, and soluble gases by a very simple and efficient new, only physically working filter process. The applied adhesive or adaptive material is pure water (or in some cases other special liquid like special oil or non-vapouring liquids which can be cleaned easily). Dust may be fully recycled. For other purposes, like explosion prevention, a special Aluminium or Beryllium alloy is applied. |  |

A) Metal Processing Projects (ctd.)

| No. | Name | Description | Remarks |
|-----|---|--|---|
| 4 | Production of super-alloys.  <i>Some countries look for the production of high temperature turbine blades. The know-how on super-alloys and on their production is required.</i> | <p>Modern jet engines use second-generation super-alloys. Nickel and Rhenium -based super-alloys are applied in combustion chambers, turbine blades, and exhaust nozzles of jet engines.</p>  | <p>Super-alloys contain up to 6% of rhenium.</p> <p>Rhenium is added to high-temperature super-alloys that are used to make jet engine parts, using 70% of the worldwide rhenium production.</p> <p>A major application is also in platinum-rhenium catalysts, which are primarily used in making lead-free, high-octane (aviation) gasoline.</p> <p>Another focus of alloy design is to reduce the cost of super alloys.</p> |
| 5 | 3D-Printing: <p>Decisive advantages by applying our special 3D-Printing machines:</p> <ul style="list-style-type: none"> ► Huge freedom of design; ► Homogeneous material of the product; ► Superior post-polishing surface qualities; ► Low wall thickness; ► Lower weight and corresponding material savings. <p>Far less energy is consumed and no waste is generated.</p> <p>Fast and precise method of structuring the layers.</p> <p>Can work with any metal, plastic material or certain ceramics and is supporting the industry trend to small lots and individual parts production in many market segments.</p> |  Individual Hip Implant; Material: Titanium Alloy.  Aerospace: Swirler; Material: Cobalt-Chrome MP1  Medicine: Crowns, Bridges; Material: Cobalt-Chrome | <p>We concentrate on the metal 3D-Printing Process.</p> <p>CAD (Computer Aided Design) makes it very easy and fast to create any form, and to change it quickly at any time.</p> <p>Layer thickness is from 0,02 mm up. Tolerance is 0,01 mm. Surface roughness is less than 20 µm.</p> <p>Excess powder will be recycled.</p> <p>3D-Printing products basically feature the same material properties as conventionally (e.g. by casting) produced components and can be processed the same way.</p> <p>Jewelry is manufactured directly from 3D data, from any jewelry alloy (gold, silver, palladium, platinum).</p> <p>Even small quantities (customization) and individual pieces can be manufactured at similar prices as large series.</p> <p>Designers and engineers enjoy a better design freedom; many design ideas can now be implemented technically.</p> <p>Hollow parts and thin walls of 0.10 mm can be produced. This saves material and allows for big parts at a low weight. Examples are the perfect copies of historical jewelry.</p> |


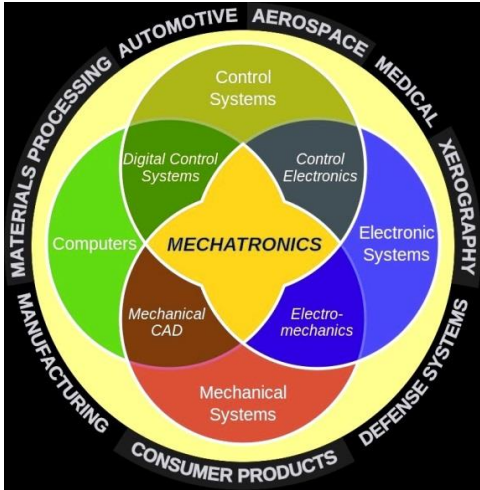

A) Metal Processing Projects (ctd.)

| No. | Name | Description | Remarks |
|-----|---|--|---|
| 6 | Stainless Steel Grid (SSG) in very light armour . The yellow material in the layers is the SSG. The red dotted material is special steel. |  | <p>The creation of very light and efficient armour is one of the central tasks for any kind of protection. IBMO invented the</p> <p style="background-color: #e0ffff; padding: 5px; text-align: center;">Innovative and Extremely Light Modular Armour (IELMA)</p> <p>which can be applied either integrated or as a modular add on to any vehicle on land or sea. The protective level of this armour can be improved simply by adding various layers in a modular way. Even existing vehicles may be protected by adding those layers.</p> |
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B) Other Metal Processing Mechanical Projects

| No. | Name | Description | Remarks |
|-----|---|--|---|
| 1 | Small, quiet, and highly efficient super-light Natural Gas and Diesel engines.  | Those quiet and extra-light (EL) engines can be applied in various systems: 1. Light Aircraft / Light Helicopters. 2. UAS / RPAS, 3. Hybrid Cars & Trucks, 4. Mobile UPS and CHP-Systems. 5. Remote Houses, 6. Auxiliary Systems for trains & trucks; 7. Rescue systems etc. |  |
| 2 | Modern mobile and modular all-energy providing “Uninterruptible Power Supply” (UPS) and “Combined Heat and Power” (CHP) Systems. [REMARK: It generally makes not much sense to apply CHPs without integrating them in an UPS-System. It is not much more expensive and it offers much better efficiency. An automatic cooling system can be integrated in addition.] | By applying our light and quiet high specific power and long-living EL-engines [compare section B)1.] we are able to produce extremely compact, modular and multi-purpose “Uninterruptible Power Supply (UPS)” and “all-energy CHP-Systems” of various sizes and power. They use any common fuel. Those “Universal CHPs” come in various sizes from “Household CHP” of about 3 kW _{el} (electrical power) to “Small Company” sizes of about 250 kW _{el} . Our CHPs are designed to deliver all the needed energies from one source: 1. Mechanical Energy; 2. Electrical Energy; 3. Thermal Energy (up to 500 °C) 4. Cooling Energy, and 5. De-Humidification from a single source and in any required mix of those energies. The top design quality, however, is their mobility and the capability to attach them to any consumer literally within seconds. Their energy is used in an optimised mix. Heat can be transformed into cooling energy. | This is a compact mobile CHP.  Our modern UPS and CHPs can be combined with the electrical grid, other CHPs and “Green Energies”, like Photo-Voltaic. Our systems can be applied in an unbelievable high flexibility: 1. They save up to 97% of the Diesel fuel of any engine operating in extremely cold environment. 2. They jump to maximum power within a few seconds. So they are the ideal emergency systems. 3. They serve as backup systems in any hybrid operation. 4. They serve all requirements in any environment, climate, or humidity. 5. They run with all available fuels. |
| 3 | Modern Car and Electrical Car Design: SINOTEC engineering S.A. is an efficient “Design and Construction Company”, working in and for the most advanced car-makers in the world. |  The Core Business of SINOTEC Inc. is: PRODUCT & PROCESS Engineering, Design & Services of Cars, Automotive and Truck Production. SINOTEC Engineering offers the potential and ability to design and to provide professional engineering for any (AEV) All-Electric Vehicle. |  ■ SINOTEC Engineering offers the potential and ability to design and provide the engineering for any (AEV) all-electric vehicle. SINOTEC offers broad experience by working with and for the most renowned European car and truck manufacturers and by realising a broad spectrum of tasks. SINOTEC is specialised on modern light weight and crash-proof designs as well as on automatic manufacturing. |


B) Other Metal Processing Mechanical Projects (ctd.)

| No. | Name | Description | Remarks |
|-----|---|--|---|
| 4 | Explosion Prevention and Fire Suppression System D-Protect . | <p>D-Protect is a precision engineered proprietary aluminium alloy mesh, designed to provide extraordinary protection against explosive combustion or fast growing fires in fuel tanks, ships, vehicles, aeroplanes, helicopters, containers, tunnels or pipelines holding flammable liquids, gases or exothermic dust.</p> <p>D-Protect offers a great number of additional features like swash suppression and the support of self-sealing inner layers.</p> | <p>D-Protect comes in free formable mesh, in rolls and in balls.</p>  <p>The GOLD version is for application in any very aggressive chemical environment. The SILVER standard version is for any other application.</p> |
| 5 | <p>Robotics and Mechatronics.</p> <p>Both are simply the core of any future production technology.</p> | <p>Robotics is the branch of technology that deals with the design, construction, operation, and application of robots, as well as computer systems for their control, sensory feedback, and information processing.</p> <p>Mechatronics is a design process that includes a combination of mechanical engineering, electrical engineering, telecommunications engineering, control engineering and computer engineering.</p>  | <p>Industrial Robot:</p>  <p>Mechatronics is the basis for any modern technology. This fact in particular applies to modern production, unmanned missions (as there are UAS, Self-driving Cars, Space Stations, actions in any dangerous environment, Production Robots, Service Robots etc.), Aircraft, Land Vehicles, and Ships. We will provide all this technology on the basis of a respective contract. No modern complex production works without Mechatronics and Robotic. This applies in particular to ecology and related fields of application.</p> |

B) Other Metal Processing Mechanical Projects (ctd.)

| No. | Name | Description | Remarks |
|-----|---|---|---|
| 6 | Recycling and modernisation of cars and other products | <p>To recycle cars – in particular oldtimers – is big business today.</p>  <p>Who can do cars can also do other equipment.</p> | <p>It is not commonly known that logistics takes up to 70% of any all-over systems price. The economic success of recycling is directly linked to optimum logistic procedures.</p> <p>For instance by applying a de-centralised and inter-linked real-time system of management and administration existing old-timers can be transferred in modern cars.</p> |
| 7 | Heavy-Duty Tools and Automatic Production Machines are the future field of high profit metal business. | <p>Quality Tools</p>  <p>Special Tools,</p>  <p>Heavy-Duty Tools,</p>  <p>Dry Drilling Hard</p>  <p>All those tools enjoy a highly profitable market worldwide.</p>  <p>Tool Machines are good business.</p> | <p>Tools are classified according to their basic functions:</p> <p>Cutting tools, such as knives, scythe or sickle, are wedge-shaped implements that produce a shearing force along a narrow face. Other cutting tools include gouges and drill bits.</p> <p>Moving tools move large and tiny items. Many are levers which give the user a mechanical advantage.</p> <p>Examples of force-concentrating tools include the hammer which moves a nail, the maul which moves a stake, or a whip which moves flesh on a horse.</p> <p>Tools that enact chemical changes, including temperature and ignition, such as lighters and blowtorches.</p> <p>Guiding, measuring and perception tools include the ruler, glasses, set square, sensors, straightedge, theodolite, microscope, monitor, clock, phone, printer.</p> <p>Shaping tools, such as molds, jigs, trowels.</p> <p>Fastening tools, such as welders, rivet guns, nail guns, or glue guns.</p> <p>Information and data manipulation tools, such as computers, middleware, IDE, spreadsheets.</p> <p>Non-Spark Producing Tools, like tools made of beryllium bronze.</p> <p>Some tools may be combinations of other tools. An alarm-clock is for example a combination of a measuring tool (the clock) and a perception tool (the alarm).</p> <p>Personal protective equipment includes such items as gloves, safety glasses, ear defenders and biohazard suits.</p> |





B) Other Metal Processing Mechanical Projects (ctd.)

| No. | Name | Description | Remarks |
|-----|--|--|--|
| 8 | <p>Screws, Nuts, Rivets, and Tie Rods.</p> <p>Stainless and High-Tension Steel as well as Aluminium are the standard materials for screws, nuts, washers, and tie rods in aerospace applications. Titanium, however, by the high requirements in the aircraft and space industry is used more often now and also finds application within other areas, like increasingly in the automotive industry, medical technology and in the mechanical industry. The advantages are its corrosion resistance, a very high tensile strength and low weight. Today most screws are manufactured by CNC machines. The screws are of an outstanding quality and show a perfect finish.</p> | <p>Bonded AeroSpace qualified Screws.</p>  <p>Screws and Washers made of Aluminium.</p>  <p>Special Nuts and Rivets in aerospace.</p>  <p>Screws in Aerospace made of Titanium</p>  | <p>The surface treatment causes an effective protection against any climate and other environmental influences as well as the corrosion-promoting sea-climate. Anodized screws offer a perfect corrosion resistance even if in a chemical aggressive environment. Titanium screws in particular through their low friction coefficient offer an extremely smooth and even tightening torque requirement which adds to their longevity.</p>  <p>Tie Rods with rolled on heavy duty thread.</p> <p>Tie Rods come in various designs and in a vast variety of materials. They are applied in engine, turbine, gearbox, and similar applications. If a manufacturer is able to guarantee a high and steady quality, meeting international aviation and engine / turbine / gearbox standards he will make a fortune. In particular all screws, nuts, rivets and tie rods made of first class titanium alloy will guarantee top profit internationally. Rolling on the thread and applying optimum thread design will massively add to success in business.</p> |

B) Other Metal Processing Mechanical Projects (ctd.)

| No. | Name | Description | Remarks |
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C) Non-Metallic Innovative Projects

| No. | Name | Description | Remarks |
|-----|--|--|--|
| 1 | International logistics. Primarily based on air transport.  <p><i>This is a rice corn on the right. On the left there is a modern multi-purpose RFID². It has a storage capability of more than 64 GB. RFIDs are the central element of modern logistics.</i></p> | <p>The international business trend in logistics is clearly moving towards fast and reliable air transport.</p> <p>Some countries have a huge lack of a <u>National</u> and even more of an <u>International Air Logistics System</u> even though they are relying on their export capabilities.</p> <p>We strongly recommend to start this business and to combine it with an own international airport initiative.</p>  | <p>Any industrial product sold has an average cost factor share of up to 70% caused by logistics. One therefore can say that logistics is the “Money-Making Machine” of any business.</p> <p>Logistics is based on the following central factors: Transport, Storage, MRO¹, Administration, and Identification.</p> <p>Logistics is a complex business. RFID² is the core of logistic success.</p> <p>Logistic is software-oriented.</p> <p>As seen in the picture (left) of world air traffic: Some regions of the world still show a very moderate international air traffic and Europe is the world hub of air logistics.</p> |
| 2 | Carbon Fibre (CF) production and Application . | <p>The global market for carbon fibre (CF) is currently bigger than 20 bn US\$ annually and grows rapidly by about 7% per year. Each carbon filament thread (= CF) is a bundle of many thousands of carbon filaments. A single such filament is a thin tube with a diameter of 5–8 micrometres and consists almost exclusively (>97%) of carbon.</p> <p>In particular in emerging economies the manufacturing of CF composite structures is highly profitable for various reasons.</p> <p>The production of high quality CF is still a well-kept secret.</p> <p>In most countries the production of such high quality CF filaments is still not implemented. We are willing, able, and ready to transfer the most modern CF technology to any country.</p> |  <p>CF is produced (above) and woven (below)</p> |
| 3 | Potable Water Production Unit. Water Cleaning Unit. | <p>In remote areas of the world and in emergencies it is still important to provide enough Drinking Water for the population. Our cost-efficient swimmable robust “Systems Pack” is operated by solar energy and can produce 3,000 litres of drinking water a day.</p> <p><i>Picture on the Right: Complete Cleaning Machine Set (including photovoltaic electricity collector and battery).</i></p> |  |






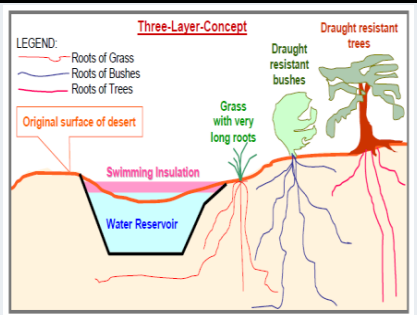
¹ MRO = Maintenance, Repair and Overhaul.

² RFID = Radio Frequency Identification

D) Ecological Projects (in the context of “METAL APPLICATION”)

| No. | Name | Description | Remarks |
|-----|--|--|---|
| 1 | Technological Innovation for establishing a “ECOLOGICAL MODERN CITY” (EMC) . It is designed to become the “Show-Case of a Modern Country”. | <p>There should be a real “Modern Concept” of an “Innovative Structure” for a “ECOLOGICAL MODERN CITY” (EMC).</p> <p>Currently it seems to be that there are only studies for the implementation of already existing “Classical Structures”. No real innovation is to be implemented.</p>  <p>We propose to grant IBMO the task to do a “Confidential Study and Proposal on the Concept for the EMC”. The task is to create and implement concepts for a prospering future.</p> | <p>Most Governments select environmental protection as one of the major national goals.</p> <p>Mature environmental protection technologies, such as cleaning of polluted water, waste water treatment, soil renovation, heavy metal excerpt from soil and ashes as well as in particular anti-smog technologies are major topics.</p> <p>By implementing such technologies one has to apply for the respective patent and procedures.</p> <p>All of this can be done by “innovative environmental protection and production processes” instead of the repetition of already existing foreign technologies.</p> <p>Each country must define and create its own “Role in the World”.</p> |
| 2 | Electromobility and “Driverless Mobility” . This is a whole set of interrelated technologies. | <p>MERCEDES driverless truck at test on a German freeway.</p>  <p>We have the partners to provide this future technology (including robotics) on the broadest basis to any country.</p> | <p>Various modern government plans calls for initial electro-motion driverless cars or other vehicles.</p> <p>This is a huge project, including car and truck manufacturing, electric charging systems, accessories, special traffic organisations, control systems, etc.</p> <p>There are such mature technologies in Germany, developed by one of our partners.</p> <p>Such technologies would perfectly fit in the EMC concept.</p> |
| 3 | Recycling of Tyres and Electronic Equipment . Is linked to “B)6.” | <p>Recycling of Tyres and Electronic Equipment are the most profitable environmental protection processes known worldwide.</p> <p>Our partners have developed particularly cost-efficient processes for the production of metal- and fabric-free tyre-rubber granulates.</p> <p>Surplus of electronic waste is fast-growing. Technical solutions are available, but in most cases logistics and other services need to be implemented before a cost-efficient technical solution can be applied.</p> <p>At some places there are already huge electronic waste processing entities. But the methods used there are neither modern nor efficient.</p> |  <p>Tyres (above) and Electronics (down)</p>  |

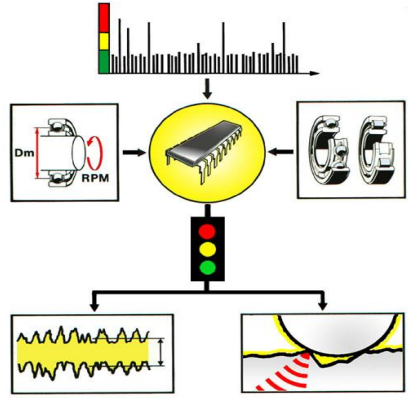



D) Ecological Projects (in the context of “METAL APPLICATION”) (ctd.)





| No. | Name | Description | Remarks |
|-----|---|---|---|
| 4 | Special Recycling of confidential papers and material. | <p>Governments, military, courts, parties, police, organisations, banks, and many other entities store confidential data on paper, modern data storages, and on other material.</p> <p>Used banknotes and certain documents also need to be destroyed in a way that they cannot be restored or used in any way again.</p> <p>This is the problem of “Secure Destruction”. Normally this material is collected, stored, and destroyed in a special, but separate process.</p> <p>There are many potential leaks in this common conventional process, where such data could be stolen and used by a non-friendly party.</p> <p>We therefore have developed a process where sensitive data are destroyed directly and securely at the pick-up-station.</p> |  <p>Secure destruction of paper and CDs</p>  |
| 5 | <p>Processing of Coal Ashes.</p> <p>[In addition there are most modern methods of extracting poison and heavy metals from the soil by growing special plants. This in particular would apply to existing or future coal ash fields.]</p> <p>The only certified application of a material made of Coal Ashes is our ECCOMENT.</p> | <p>All efforts to find environmentally neutral procedures to add Coal Ashes efficiently to soil (e.g. by carbonisation) or to cement failed. This approach is not permitted at all in the EU.</p> <p>Spilling of Coal Ashes in Big Floating Fields is also not recommendable since almost all the soluble heavy metal salts as well as the sulphur and alkaline chemical compounds are transported in the big rivers by those spilling procedures and will be poisoning a very wide area of any country for many years.</p> <p>We can offer a special process, however, to make Coal Ashes completely inert.</p>  <p><i>This is the test production line.</i></p> |  <p>Coal Ash Field in China.</p>  <p>ECCOMENT made of 100% coal ashes.</p> |
| 6 | Green Desert Concept. | <p>Life is linked to the access to water.</p> <p>We will collect rain water in a very simple and effective way, store it permanently in a new procedure, and influence the micro climate to become more moderate.</p> <p>"Green Desert" will bring water by applying this concept and make the earth more habitable and bring a "new future" to the people.</p> |  |

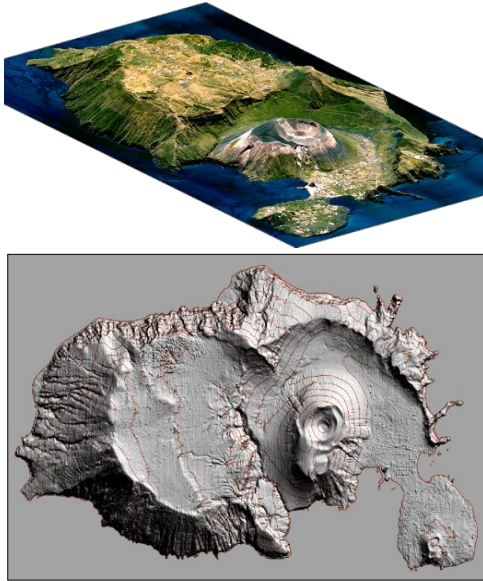
D) Ecological Projects (in the context of “TECHNOLOGY APPLICATION”) (ctd.)

| No. | Name | Description | Remarks |
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E) Complex Modern Technological Systems

| No. | Name | Description | Remarks |
|-----|---|--|---|
| 1 | Remote (Technical) Diagnosis and Maintenance (RDM) of various natural, technical, and economic systems. | <p>“Remote Technical Diagnostics and Maintenance” (RDM) refers to both diagnoses of upcoming faults or already happened faults and to taking remote corrective actions. RDM leads to better analyses, can react in advance of a fault and can react extremely quick – either automatically or by an operator. It can replace manpower at far out locations by experts on a central location. RDM provides early and fast reactions to prevent hazardous situations (for instance in space or in complex machines). Increasing globalisation and more and more complicated machinery and software, also creates a demand for RDM. Travel over distances of expensive engineering personnel is limited by RDM. RDM is spreading more and more. If for instance connected to a wide range of</p> <ul style="list-style-type: none"> ↳ Logistics Systems, ↳ Sensitive and expensive systems, ↳ Important systems and ↳ Life Support Systems <p>It will provide dominant knowledge which in the end will lead to big business by information dependencies. Those who govern RDM technologies will get insight to any other complex technology.</p> |  <p>Shock pulse pattern hidden in a normal vibration pattern.</p> <p>Some Applications (amongst others):</p> <ul style="list-style-type: none"> ■ Medical Applications. ■ Vehicles, Aircraft and Ships. ■ Autonomous research posts. ■ Oil drilling Platforms. ■ Windmills and Complex Machines. ■ Space and Aviation Projects. ■ Telecommunication Systems. ■ Traffic Regulation and Control. ■ Computers. <p>This Technology will be a dominant “Technology of the Future”.</p> <p>RDM will become a revolution like the Mobile Phone technologies.</p> |
| 2 | The Light Sports Aircraft FK-9ELA can be produced in many versions, with different technical features and various grades of comfort and performance. It is a typical “Point-to-Point-Aircraft” . The FK-9ELA takes off and lands on unpaved strips. Traveling speed is about 145 km/h. Max. speed is 200+ km/h. |  <p>The 2-seat FK-9ELA is easy to fly and, therefore, is used by many Pilot Schools.</p> <p>A FK-9ELA aircraft, equipped with a modern Diesel engine, offers a range of 2,000+ km; this range may be extended to 3,000 km.</p>  | <p>The FK-9ELA LSA aircraft enjoys unique security measures, such as a very robust landing gear, a secure seating system, a soft head-protection system, and a rocket initiated very fast parachute system for the whole aircraft.</p>  <p>The aircraft has a modern glass cockpit which can be adjusted to any comfort. We also offer foldable wings. The FK-9 ELA LSA offers almost the same performance on water.</p> |

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| <p>3</p> | <p>The Light General Aviation Aircraft FWH-100 can be produced in many versions. The “FWH-100” carries 1 pilot and 7 passengers (or 700 kg of freight). It offers a “Point-to-Point” service. An amphibious multi-purpose version will be designed later.</p> |  <p>The “FWH-100” aircraft is a robust, cheap and most flexible modern European aircraft. Its range exceeds 5,000 km and it costs (total cost) less than 300 EURO per one flight hour. It can take off and land on almost any flat and robust grass or gravel terrain. So, its service is not limited to long concrete runways.</p> | <p>Its rear door provides easy access for loading, and its floor is designed for a UDL (Uniform Distributed Load) of 700 kg/m².</p> <p>The potential markets of the aircraft are very promising:</p> <p>The FWH-100 will generate high profit. It can be flexibly equipped with a Mini-Kitchen and a Lavatory.</p> <p>Ambulance Versions, Logistic Versions, Agricultural Versions, Geographical Scientific Versions, RECCE and Signal Versions as well as any Relay Version may be specified and ordered.</p> <p>The next generation is already on the drawing board.</p> |
| <p>4</p> | <p>Face Recognition Technology: This technology can identify any person from a distance of 30m (Version 1) or 400m (Version 2) at day and at night as well as even in a driving car, in rain or behind a window with various cross-information (e.g. the licence plate) by 99% matching. Even the pictures in a used passport can be compared from the distance to the person claiming the document is his. By relating all faces to other faces or pictures and to objects the security forces are able to control any situation with a high rate of correctness.</p> | <div data-bbox="555 835 1043 1025"> <p>Live Face Detection</p>  <p>Suspect Identified</p>  </div> <p>Version-1 (Short Range; ≤30m)</p> <div data-bbox="555 1093 1043 1350">  </div> <p>Version-2 (Long Range; ≤400m)</p> <p>This Face Recognition System is used already with great success in Germany and in some European countries by the security forces. In particular wrong identification papers used by any suspect can be detected within a few seconds.</p> <p>By matching licence plates of used cars and the identity of the driver many stolen cars were detected and secured.</p> <p>Sensitive areas are not only controlled by the system in the sense of an unqualified alarm that there an intrusion is occurring. All intruders are immediately identified and the intrusion is documented in detail.</p> <p>Any important information of the system may be given by a secure line to a supervising unit immediately. This makes the automatic and integrated control of a huge area possible.</p> | <p>Most important, however, is the capability of the system to detect and identify any suspect at medium or long distances.</p> <p>This is most important to protect the security forces and to avoid any close contact of any suspect to sensitive areas like for instance aircraft sitting on an airport at night.</p> <p>The system is sensitive and it works in complete darkness.</p> <p>These extraordinary results are achieved by an innovative Laser illumination and camera technology.</p> <p>The system includes:</p> <ul style="list-style-type: none"> • Range finding • Tracking function; e.g. of vehicles. • Autofocus for detail image camera. • Extended laser safety measures. <p>Either Low Light Cameras (LLC) or Thermal Imagers (TI) might be applied. The right option will be identified by the customer.</p> <p>Discrete outdoor surveillance for mid and long range is possible by applying any of those technologies. The IR Laser flash can hardly be detected by any observed person.</p> <p>The camera can view behind light sources. Observation even through multi-layer windows is possible.</p> <p>There are stable light conditions even when external light conditions change</p> <p>Special light options for the observation of particular targets are available.</p> |

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| 5 | <p>3D-Mapping: Production of high precision three-dimensional maps for geographically accurate and high-resolution interactive maps and views. The geographical space resolution and precision are better than 6cm. This is the ultimate mapping system. It is cheap and offers the by far most cost efficient results available.</p> |  <p><i>This is a 3D-picture of the "Aeolic Islands" in Italy and the automatic level lines created of it.</i></p> | <p>The cameras we use in our RECCE aircraft are an improved version of the 3D-Cameras the German Space Agency DLR used in her Space missions. Automatic level lines can be produced. This is important for predicting floods or landslide and for being able to optimise flood prevention. Volcanos may be supervised. There are very many applications of this 3D-Mapping System: Police and firefighters for instance can immediately identify the easiest access to any building, the location and characteristics of doors and windows. Any change in the infrastructure or landscape and its characteristics can be identified automatically. There are many valuable applications for the security forces.</p> |
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CONCEPTUAL CONSIDERATIONS:

The aims and the procedures inherent in any economic long-term decision making process must keep the potential of flexibility to be altered, improved, and expanded easily in response to any instantaneous market development. Therefore the capability for permanent improvements and evolutionary measures must be an integrated part of each and any major systems planning process.

Most complex systems in the market are non-linear in structure and cannot be determined fully by any analytical process. This fact makes mid-term planning difficult and long-term planning more or less an adventure. Now, what must be done to improve decision-making processes in the light of this governing reality?

There are at least seven basic procedures which in consequence must be followed:

- ★ Optimisation and clarification of the Systems Architecture.
- ★ Self-healing and mistake-tolerant element structure of the overall system.
- ★ Define the areas of maximum risk and try to reduce the risks by early sensing.
- ★ All people in any process tend to show not the reality; but rather their best side. Therefore try to exchange responsibilities without any logical background within any other year. This will show who is top in his/her capabilities.
- ★ Create at least three independent evaluation systems for each element of the system, for the sub-systems and for the system as a whole.
- ★ Complex systems cannot be led by a central leadership. Try to cut them in logical pieces and create competition amongst them.
- ★ Install an integrated system of permanent learning, create a steady will for improvement and change without losing face of or for anybody.

FINAL REMARKS:

The proposed projects are only some few examples of the many capabilities at hand for discussion and evaluation. For any successful cooperation we first of all we must learn more about the ideas and considerations of any potential partner.

Concerning any factual project it is highly recommendable to do a strategic discussion paper considering the particular intentions of any potential partner of IBMO asap and in this context to find out, how the body concerned (e.g. the enterprise) could do best in the framework of "Technology Application".

In other words: One has to find out how resources can be used best in the long term.

We request protection of all the new ideas developed and provided in this paper.



(Manfred Opel) Chairman

ANNEX:

Some of the following projects and technologies of procedures may also be implemented by IBMO on any partner's demand:

Fields of Activity:

- Technology & Know-How Transfer
- Innovation & Patents
- Research and Development
- Training and Education; Management
- Systems, Products, Procedures, Companies
- Decision Support; Quality Management
- Implementation of Strategies
- Contacts & Cooperation
- Profitable Investments & Marketing
- Sustainable & Successful Operation in any country, including Europe

PROPOSALS of Projects:

- Product and System Benchmarking; Quality Matching Strategy
- Online Bidder – Seller Forum
- Central Outlet for Products & Offers for Cooperation in Europe (Central Contact & Cooperation Platform – C3P)
- Central “Market of Opportunities” in Europe
- Academies for Higher Education; Workforce Professional Training Centres
- Practical Education Update for Universities, Colleges, Vocational Schools and Polytechnic Institutes
- Professional Know-How Transfer Systems
- Technology Academy, University and Management School
- Modern Traffic (Land, Sea and Air) Control Systems
- Heavy Duty Ball Bearings
- Swash Prevention System
- Pipeline Quick-Welding System
- Modern Fibre Technologies
- Energy Consumption Optimising Systems
- Delivery of High Quality Coatings, Adhesives & Sealants
- Innovative „Household” Wind Energy Supply
- Development of an Innovative New Generation E-Motion Car Family; including all Components.
- Modern “System-Wheels” for Cars and Trucks.
- Development and Production of Modern Security Vehicles & Buses.
- New Amphibious Strategies for Security Cars and Trucks.
- Development of modern Engines and Gear.
- Green City“ Technologies.
- Earthquake Resistant University Hospital; „Container Hospitals“.
- 100% Secure ID-Systems; Sophisticated RFID Technologies.
- Internationally highly reputed Small Arms Company.
- Sophisticated Safety for Small Arms.
- Legal, Business, Financial, Personal Management Services.
- Marketing Assistance.