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COOPERATION AS A SUCCESS FACTOR IN BUSINESS - INTERNATIONAL PRODUCT AND PROJECT DEVELOPMENT IN THE CONCRETE PRODUCTS INDUSTRY

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Note: The following is the notation used in this paper: (.) for decimals and (   ) for thousands.

Currencies are expressed as $€ for European Euros.

Summary

This paper outlines the corporate cooperation and other associative bodies currently in place in the concrete products industry, illustrated by a number of examples, examines their respective advantages and potential disadvantages, and explores possibilities of structuring such cooperation bodies for sustained medium- and long-term business success.

1. INTRODUCTION

The German version of the well-known open web-based knowledge platform, Wikipedia, defines cooperation as follows:

***"Cooperation (lat. cooperatio)** is the process of working or acting together, which can be accomplished by both intentional and non-intentional agents. ... Cooperation frequently leads to benefits for all parties involved; but cases of enforced and deceptively secured cooperation also exist where most or all of the advantages accruing from such cooperation benefit one party only.*

In economic theory, cooperation means the voluntary working or acting together of companies, which nevertheless retain their legal independence. By agreeing to cooperate, these cooperating companies relinquish part of their economic sovereignty".

So, a voluntary working or acting together by companies which remain legally independent and relinquish as little of their economic sovereignty as possible – this part of the Wikipedia definition clearly has to be the best description of the ideal of effective cooperation.

2. COOPERATION IN GENERAL

Conventionally, a distinction is made between different cooperation formats based on two fundamental principles:

- Additive cooperation. Processes which would normally be engaged in singly by the cooperation partners are engaged in collectively in order to optimize their effect (e.g. procurement groups, which, in trading, often take the form of cooperatives or other special-purpose associations not subject to cooperative law).

- Synergetic cooperation. Something new is created by means of cooperation which would not have been achievable by the cooperating parties working independently (e.g. particularly challenging new developments and often also R&D projects).

Below this level, economic theory acknowledges various other forms of cooperation:

- Special-purpose association (project group/consortium).
- Special-interest association.
- Cartel.
- Joint venture.
- Intersectoral cooperation (e.g. sustainability networks).
- In biology, cooperation is often referred to as "symbiosis".

To turn to cooperation in the construction products industry, which can offer examples of almost all the above-mentioned means whereby companies work or act together, three classical fields of cooperation tend to spring to mind:

- Marketing.
- Procurement.
- Sales.

According to a relatively recent study, 90% of Germany's approximately two million companies across the entire economy are classified as small or medium companies, i.e. with a turnover not exceeding $€ 5 million per annum. A similar structure is likewise to be found in many other regions of the world. These small and medium companies are facing ever fiercer competition, not least because of the ongoing process of concentration to be found in all market segments, including in the manufacturing and trading of concrete products.

But many such companies have limited resources in terms of capital and manpower. Even if they are sufficiently well resourced to cope with their regular manufacturing and sales operations – albeit not in the optimized sense referred to above -, many lack additional resources to invest in product development, marketing and, most important of all, the expansion and development of the regional and national market for concrete products.

3. COOPERATION BODY VS. INDUSTRY FEDERATION – A BRIEF COMPARISON

Expanding and developing the national concrete products market and thereby assuring its predominantly regional companies a sound and reliable basis for business is a major part of the remit of any national industry federation, e.g.

- AABH, die Asociación Argentina del Bloque de Hormigón, in Argentina.
- BlocoBrasil in Brazil.
- ICPI in the USA.
- SLG in Germany.

However wide-ranging the activities of these industry federations may be, and indeed they sometimes extend to commissioning research projects on a supra-federation scale, e.g. on the durability of paving methods or the structural stability of small-block retaining wall systems, their activities ultimately remain largely focused on marketing and promoting the use of pavers.

For example, ICPI lists its first two "goals" as being the following:

- Improve paver market awareness for product and system.
- Improve paver installation through education.

The goals and activities of other national industry federations and international confederations, e.g. EUPVE, are not unlike those of ICPI.

Clarifying fundamental policy issues at national level and then often defending these on the international stage, e.g. in standardization bodies – this in addition to their day-to-day responsibility for promoting the concrete paver market in general - represents a burden of a magnitude which no individual company or group of cooperating companies or any other small-scale interest group could possibly shoulder with the same degree of effort and perseverance as an official industry federation. Nonetheless, as will be illustrated by some examples below, such industry federations can themselves also benefit from input fed to them by strong, cooperating bodies.

4. COOPERATING BODIES - SOME EXAMPLES

The following is a structured analysis of different types of cooperating body. It examines their main features, advantages and supposed disadvantages and provides, where possible, indications on how such disadvantages can be avoided.

4.1 Purpose, structure and market position

4.1.1 Stein & Design (Metten/Germany; Birkenmeier/Germany, Marshalls/UK; Semmelrock/Austria; Unilock/U.S.A.)

A very active group of independent companies, each of which with a claim to be a leader in their respective markets in matters of technology and design. These high aesthetic standards combined with generally very good product quality qualify these companies for classification as being primarily engaged in the higher-priced and more discerning premium construction segment inasmuch as their products and services are not likely to be sought in municipal construction work, standard-class commercial and industrial construction projects or in “normal” single-dwelling construction. This distinctive position on the market, however, also entails a number of risks insofar as the market volume there is relatively small compared with the extensive investment required for high product quality and appropriate marketing. Moreover, such an already small market volume is far from immune to price pressure when the market as a whole is contracting. A risk which is not always worth taking – as illustrated by the fact that two companies from this group have recently sold out to national mass producers.

4.1.2 Steinwerk (hansebeton, F.C. Nüdling, Kann; all Germany)

A small group of German medium-sized companies which joined forces in order to be able to offer architects and planners identical products beyond the territories of their respective regional markets. To be better assured of achieving its goal, the basis for the group’s cooperation was deliberately restricted to a relatively small, joint product portfolio to be carried alongside each company’s specific offering, for which largely identical raw materials were required. This restriction, however, ultimately hindered the group somewhat in terms of its innovation capability. Since one of the larger, national partners left the group a few years ago, speculation has been rife about the group’s dissolution.

4.1.3 UNI-International (diverse international licensees)

Fritz von Langsdorff, one of the modern pioneers of the use of interlocking blocks in paving, established the forerunner of this group in 1964 under the name of F. v. Langsdorff Bauverfahren GmbH. The current name was adopted when the shares were sold to a group of renowned German paver manufacturers in 1993. As a parallel development, F. von Langsdorff Licensing Limited became established in North America as a business virtually independent of the group but still linked with it to a certain degree via contractual arrangements covering the marketing of new products.

The group's very successful marketing of the licensed products already in the portfolio in 1993 by sometimes as many as 140 concrete works worldwide, backed up by a global marketing budget of up to € 500 000/year , however, ultimately proved inadequate to secure profits on the scale required to ensure the group's survival.

With hindsight, it can be argued that the main reasons for this were essentially structural: a lack of innovative capability owing to inadequate integration of the licensees and third parties into idea-generating activities and decision-making processes during product development.

Because of the persistently unsatisfactory profit situation, the shareholders of UNI-International decided to entrust their business to SF-Kooperation from June 2004 on. With product development henceforth restricted to optimizing existing block systems and with a significantly smaller marketing budget, it has since been possible to turn the revenue situation around. Current activities are the provision of support for existing licensees and the acquisition of new partners, and these activities are being successfully pursued.

4.1.4 SF-Kooperation (diverse international shareholders and associated partners)

SF-Kooperation, named after a shaped block first produced in 1956 known in German as the "S-Formstein", was set up in 1970 on the basis of the group which originally licensed this block. The main reason for establishing SF-Kooperation was the then partners' concern to create a jointly usable platform for small and medium companies in the concrete block industry which would be required, in particular, to deliver technological competence in the form of innovative products and process technologies (see Figures 1 and 2).

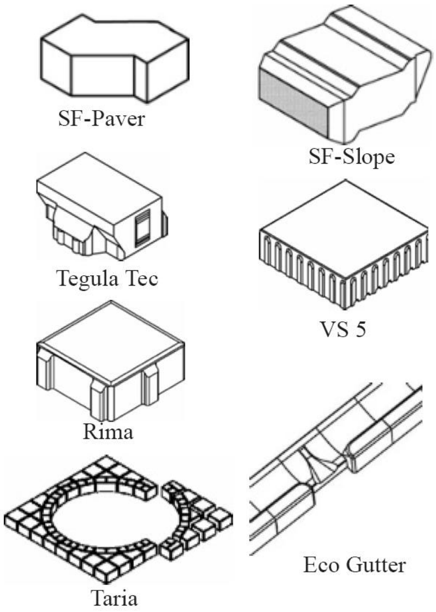

Figure 1. Selection of Products.

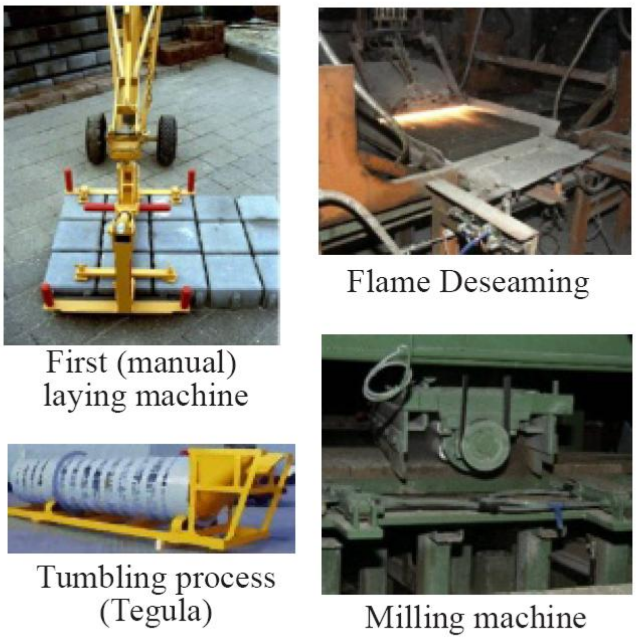

Figure 2. Selection of Process Technologies.

The structures of SF-Kooperation reflect that concern. An Advisory Board convenes with the Management three or four times each year to support the latter in strategic and other policy matters, e.g. the admission of new partners. The views of the Advisory Board, whose members are elected by the shareholders and come from various countries, are also taken into account in decision-making on product developments. A Marketing & Technology Committee working in association with SF-Kooperation head office and, where appropriate, external research institutes (e.g. university institutes) bears primary responsibility for all marketing and technology matters, from identifying ideas to the on-site prototype testing of both products and process technologies. The Marketing & Technology Committee likewise convenes three or four times each year for working meetings always with a full agenda. The Committee is composed of specialists from SF-Kooperation's international group of shareholders and is thus well positioned to ensure very effective management and control of the group's development activities.

It is self-evident that such a complex structure offering extensive areas of flexibility between its load-bearing elements – SF-Kooperation currently has 27 shareholders representing over 100 sites worldwide and three so-called "privileged partners" – has to be sufficiently robust to cope with conflicts and differences of opinion. The problems and challenges faced in this respect are described in greater detail below. Generally speaking, however, it is fair to say that shareholder fluctuation within the group has remained relatively low since its inception and that the overall tendency has been for the group to attract new partners. However, the concentration processes which have taken place within the industry in Europe over the past decade or so have ushered in major changes which have not left SF-Kooperation untouched. Again, more detail is provided below.

Alongside the groups listed above, there is an unknown number of licensing groups in existence all over the world which are primarily concerned with marketing one or more licensed products. Such cooperating groups' main platform generally offers joint marketing concepts - sometimes extending to marketing joint ventures -, work to further enhance an existing group of licensed products, and opportunities for exchanging experience, e.g. on production technology. Generally, however, their activities do not extend beyond matters relating to their licensed products and committee work does not form part of their remit.

4.2 Product and project development, marketing and internal funding – a comparison between UNI-International and SF-Kooperation

Drawing on data on the cooperating bodies and groups examined above, the following examines the respective structures of SF-Kooperation and UNI-International in greater detail with a view to shedding light on possible future developments.

As indicated in the foregoing, these two organizations are fundamentally different – with differences which, in the final analysis, affect both the vitality of their formal structures and, demonstrably, their longer-term sustainability. One organization is concerned with the conventional business of licensing, i.e. the provision of clearly restricted information on and usage rights for nationally patented products in exchange for a volume-related license fee. The other is concerned with making available all product-specific rights and the associated background information on a product or business field exclusively to as many of its partners as are attracted, through the impact of committee work and a general exchange of views, to take an interest therein (see Figure 3).

Successful marketing is undeniably an important factor in ensuring the success of any product, brand or company. But must marketing inevitably be an important factor in ensuring the success of a cooperating body? In today's capricious consumerist environment, successful marketing sustained over a long period of time, especially on a large market, is a costly, very costly business. As, however, small and medium concrete product manufacturers tend to operate only on their respective regional market, large-scale marketing activities by a cooperating body are unquestionably justifiable only if done for a limited offering on a limited territory. An example here is that of the Stein & Design group. By contrast, experience has shown that excessive spending to promote the international marketing of mass products, as UNI-International once indulged in, is only seldom justifiable. Such massive spending has admittedly been considered justifiable if the group's intention is to promote not only the product and its regional partner companies but also the group's brand image. But that opinions can change on this argument is clear from the fact that UNI-International has recently drastically cut its marketing budget to under € 100 000.

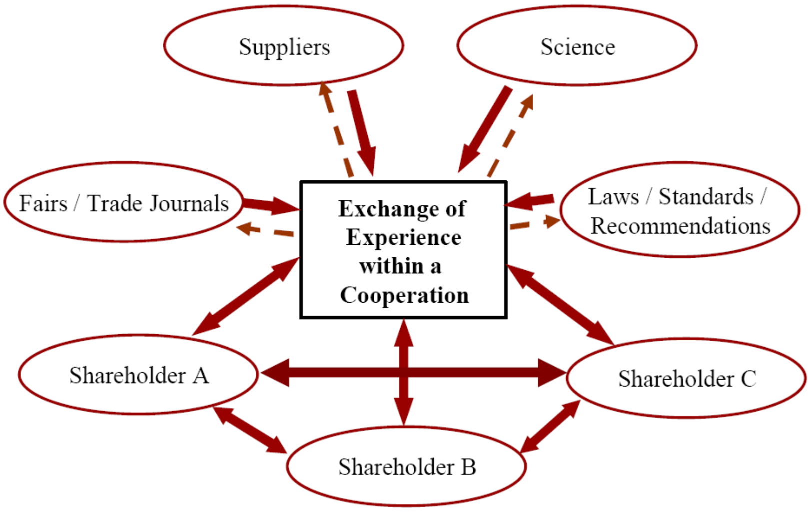

Figure 3. Exchange of Experience within a Cooperation which works R&D orientated.

A certain investment in self-promotion alongside promoting the group's partners, however, is inevitably necessary for any cooperating body wanting to be taken seriously by important outside institutions. Experience shows, for example, that a collectively funded advertising campaign to demonstrate the group's competence both nationally and internationally does guarantee a certain amount of interest.

The main structural features of the budget of SF-Kooperation is illustrated below (see Figures 4 and 5); both sets of figures date back to 2007. The most pronounced differences between UNI-International and SF-Kooperation on the assets side are the already-mentioned licensing revenue item of UNI-International, i.e. a figure dependent on product-specific turnover ex-works, and the contributions structure of the SF-Kooperation – composed of a fixed cooperation contribution, variable product fees and a fixed contribution towards advertising competence in general. Thus, whereas a critical market-related element which could jeopardize the funding of new developments and even the entire undertaking always poses a potential risk, provision is also made for funding medium- to long-term development activities from reliable revenue streams guaranteed by the existence of strict membership termination conditions.

In order to ensure itself a sustainable funding base however, a successful cooperation body is also dependent on its being appreciated by its partners, such partner appreciation being securable mainly by a continuous output in terms of new product developments.

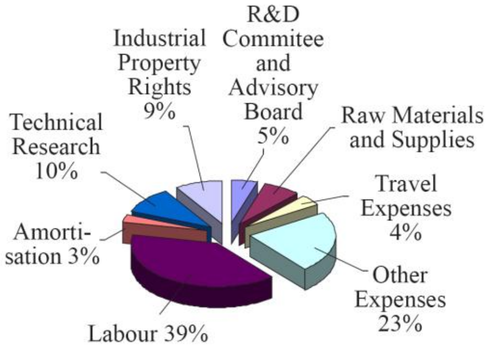

Figure 4. Cost Structure of SF-Kooperation.

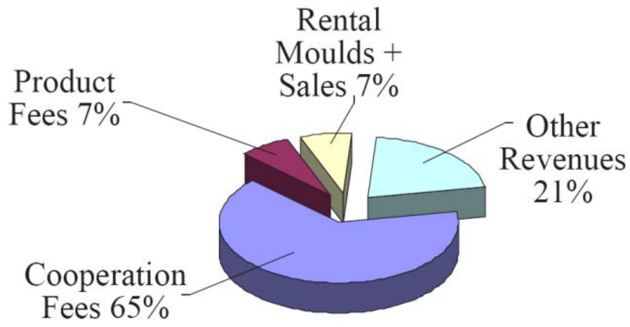

Figure 5. Structure of the Revenues of SF-Kooperation.

4.3 Customer benefit and market grooming

As in any relationship between customer and supplier, the cost-benefit ratio predominates in every judgement concerning membership of any cooperation body. In the case of licensing groups, the criterion is undoubtedly the market potential, i.e. the relationship between product sales potential and the cost of license fees plus obligatory advertising dues. Groups concerned mainly with marketing are likely to measure the success of their investments mainly on the basis of the product sales they thereby generate. Creating an awareness for the advertised brand among consumers and positive image-building for the companies concerned, they argue, will ultimately result in a more positive positioning of the company on the market and that will also help secure the long term success of the group as a whole.

A cooperation body focusing on R&D finds itself in a much more difficult position regarding this cost-benefit ratio, especially when there is a shortage of instantly marketable new developments. Classical product development to produce really innovative product shapes or colours is only seldom sufficient for success in an already saturated market. According to SF-Kooperation's draft budget for 2009, the percentage of such successful developments had almost halved compared with the figure for 2003. Currently, ca. 50% of the group's budget is spent on projects classified under the item bearing the working title "Added value 2010/2015". This item includes a number of projects which are briefly referred to below (see Figure 6). The aim of this extraordinarily interdisciplinary research programme is to generate functions for concrete pavers which extend well beyond their conventional purpose of merely providing a hard surface.

In contrast to mere design innovation, this gearing of R&D activities towards new technical challenges calls for procedures with a potentially strong engineering component. Demonstrably replicable facts and figures are of the essence in this serious approach to product development. That genuinely marketable products will always be the outcome is refuted by the entire body of experience gained by innovation research – the result is often "merely" a minor addition to the existing body of knowledge. The customer benefit hereby generated, therefore, is less likely to be a new product than an incremental increase in expertise. The fact that work on futuristic projects needs to be accompanied by basic research is self-evident. Elements of these core activities are illustrated in (see Figure 7).

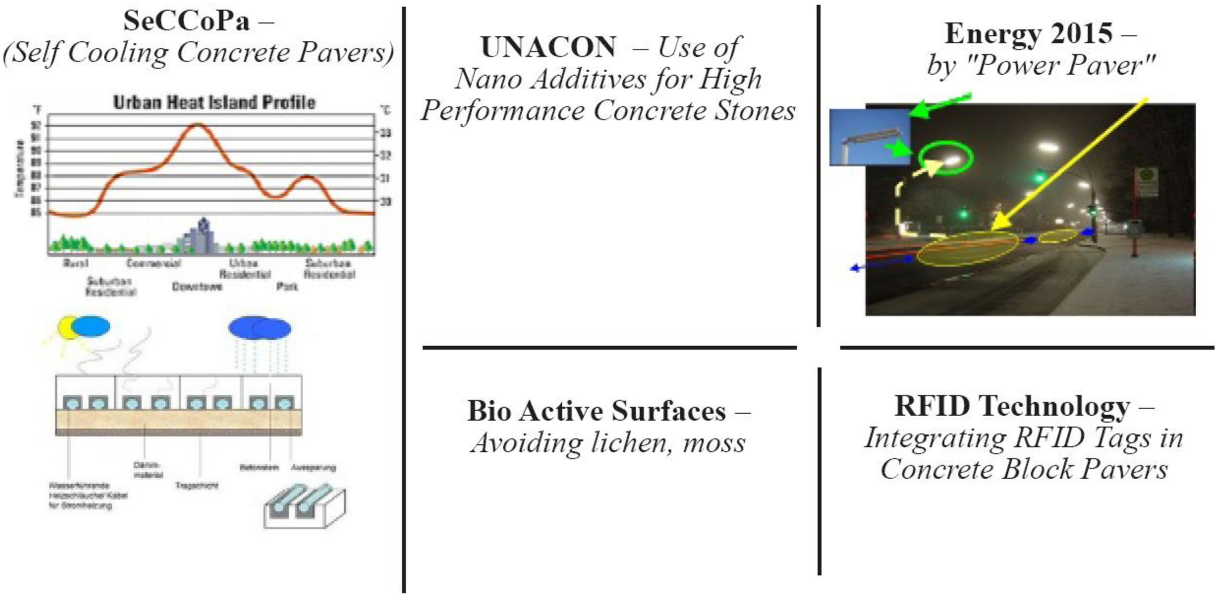

Figure 6. Examples of Long Term Projects in the SF-Kooperation.

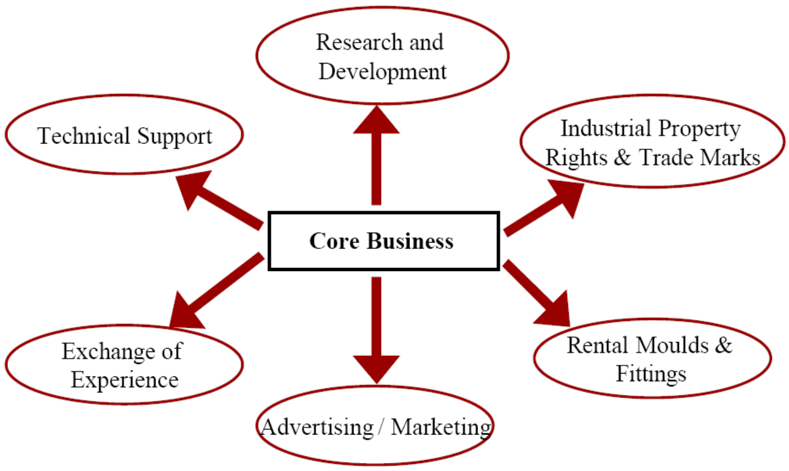

Figure 7. Core Business.

The vast range of new ideas examined every year by SF-Kooperation, for example, is illustrated for the period of 2008-2009 (see Figure 8). Moreover, these are only those ideas which have passed scrutiny by the relevant SF Committee. The outcome of this scrutiny process is generally four or five new products or projects per year which are then presented to the partners with an invitation to express a commercial interest. Each partner then decides whether, and if so, when he is prepared to pursue the offer.

Grooming the market to make it amenable to the industry’s interests is an activity which normally takes place by means of serving on the committees of national federations and international institutions. Many cooperation bodies, moreover, actively feed these organizations with information, e.g. their own research findings or quality management data concerning their own member companies.

R&D ACTIVITIES 2008/5009

Corrento – Retaining wall system with interlocking function
Garden Wall - Split faces but no waste material
Konkavex – Konkav and konvex, a new appearance by Visual Illusion
3-Joint-System – One paver system, 3 different views
Palisade bed-plate for the save and quick installation of inclined walls
VS 5-Eco, the new generation of interlocking permeable paving stones
New Bituminous bedding sand for specific use
PCC - Polymeric cement face mix concrete for top quality pavers
SF-VIZ – Easy2use software for the visualisation of individual designed areas
Quadraloc – Special stone shape (+ mould) for interlocking cross bound
SeCCoPa – Self Cooling Concrete Paver
UNACON – Use of Nano Additives for High Performance Concrete Pavers
RFID-Technology integrated into concrete block pavers
Energy 2015 – Recovery of energy from the roadway
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Figure 8. Range of R&D.

5. CONTEMPORARY PROBLEMS AND CHALLENGES

There can be no doubt that the structural changes taking place within the global concrete pavers industry are not leaving the various cooperation bodies untouched. The ongoing concentration processes are changing the competitive position of every paver manufacturer on the market – and this permanently. In their role as service providers, cooperation bodies themselves must adapt to reflect these changes.

Saturated markets, especially in central Europe, and the confidently anticipated continued increase in demand for concrete pavers and associated services in other regions of the world likewise call for adaptation in many respects. One problem here is undoubtedly a general desire for well-rounded, complete-package product concepts. In this connection it should be realized that internationally organized cooperation in R&D is generally not capable of always taking account of regional, national and cultural preferences, e.g. colour, when producing prototypes or an initial production series. This is something which individual companies, possibly acting within a regional working group, have to be made responsible for ensuring. An internationally active group can merely develop and present the main features of a product, features which should moreover qualify the product for patent protection at the national level.

A further problem for broad-based internationally organized cooperation bodies which should not be underestimated is that of providing effective support for partners on site. Expectations in this respect can be unduly high, especially in the industry's "emerging markets". Operating additional branch offices is normally not a commercially viable prospect, nor is the associated frequent travel by and presence on site of office staff. The most promising approach identified to date seems to be the establishment of local subgroups of cooperating partners. A so-called anchor partner sets up a subgroup with other cooperation partners – at continental or other territorial level – and is then responsible for providing ongoing support for this subgroup on behalf of the main cooperation body.

But for a cooperation body to be successful in the longer term, more is required of the partners than reasonably moderate expectations. Also of major importance is their willingness to communicate and interact on an equal footing. Accordingly, the partners should be similar in terms of size and structure, should not be operating in outright competition with each other, and should also be interested in and willing to contribute to the work of the cooperation body in the medium and long term. The modern trend towards agile short-termism, in any case, has not yet been found to serve the interests of effective R&D activities within a corporate cooperation context. A further requirement in this connection is that the organization's funding be kept relatively stable, e.g. by means of a period of notice of termination on the part of a partner of at least one year.

Experience has shown than an imbalanced group of cooperating partners, especially if compounded by a fiercely competitive market, can often lead to critical situations – paralysis taking hold of the organization's core activities, series financial problems. The structures of a cooperation body therefore need to be carefully thought through – and adapted as soon as they are found to be no longer appropriate.

6. SUMMARY AND OUTLOOK

Development work on the classical concrete block products – pavers and retaining walls – has now seemingly reached an end. Only a very few really innovative products have been launched over the past few years in these fields. The real challenge ahead, therefore, must be develop new ideas which enhance the functionality of these existing concrete products. The keywords here have to include climatic effects, resource conservation and the integration of new technologies.

Providing support for the development of regional markets, especially in the form of training and specific on-site services, is a further concern claiming an ever more important role in the international activities of virtually all forms of corporate cooperation.

The still ongoing concentration processes within the industry, and also among its suppliers, suggests that the companies to be admitted as partners in a cooperation body need to be selected very carefully: active and genuinely sustainable cooperation is achievable only with committed, well-suited partners who are willing to interact on an equal footing.

For small and medium companies in the concrete products industry, cooperation is a business tool with a great future, especially in the field of R&D. Provided it meets the criteria set out above, cooperation as a modus operandi can be - no less - a factor in securing the future of every company which elects to engage in it.