

Working Paper

Eco-Technology Joint Venture: A German-Czech Case Study

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Editor's Preface

International cooperative models of inter-industry and inter-firm synergy result in a remarkable potential which could contribute to advanced forms of East–West economic integration.

The development of eco-industry figures is among the present priorities of international collaboration in manufacturing. After several years of building up mutual knowledge and credibility, German and Czech or Slovak firms have adopted an increasingly cooperative form of behavior. From industrial agreements to joint ventures, various forms of business cooperation are becoming widespread.

Not without problems: Cooperative business models are a most demanding part of East–West integration. The following case study aims to support the assertion that despite obstacles, business cooperation brings with it a number of unique advantages.

International business alliances and partnerships can simultaneously facilitate the transfer of technologies and of management skills. The importance of well defined goals and personal initiative becomes evident.

One case study cannot offer more than a certain insight into an individual approach. However, it could encourage many who are about to enter into East–West cooperative agreement to take action.

Acknowledgments

This case study was made possible through the spontaneous collaboration of the Hölter Fertigungssystem & Co., GmbH., Gladbeck, and in particular Dr. J. Štěpán, the head of the Prague Office. In addition, advice stemming from direct experience by the Uran Ore Mines in Příbram and the Přerovské strojírný was most valuable.

From the earlier stages of cooperation, Academician B. Rosický, then Deputy Chairman of the Czech National Council, other members of the Council's Committee for Environment, and Dipl. Ing. J. Smekalová, deputy department head of the Czech Ministry for the Building Industry, were instrumental in providing basic information.

Let me express my gratitude also to Dr. A. Zender, former Chairman of the North Rhineland-Westphalian Senate, for indirect assistance in formulating the cooperative policy.

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Eastern Europe is now a wholly different business scene from what it was some two years or only one year ago. A sequence of political upheavals through 1989 anticipated a legalization and administrative alleviation of joint business in all CMEA countries.

It was the “new thinking” in international affairs, Soviet *perestroika* (with *glasnost*), and a series of international high level negotiations that deeply shattered the fundamentals of the blocked pattern of European relations and created conditions for the reintegration of the European East into the all-European and global context.

The story of East–West economic and, in particular, business endeavors has to be divided into a pre-1989 and a short, so far, post-1989 period. Lessons from the past have been rendered partly contentious when they are observed from the point of view of profoundly changed up-to-date opportunities.

The paramount improvement in East–West relations is being credited almost exclusively to political leaders, statesmen, democratic dissent. However, many years ago, several determined businessmen also contributed to breaking the barriers among countries. Foreign trade relations were gradually expanded into a variety of cooperative schemes.

Unlike simple sales, cooperative arrangements involve more mutuality, credibility, and confidence. They introduce a degree of interdependence among partners. There are many implications for the socio-economic environment in the partners’ countries. The following text would exemplify some of these assertions.

1 International Cooperation Between North-Rhineland-Westphalia and the Czech Republic

As an initial contribution to the promotion of mutual understanding and rapprochement in Europe, the parliaments and governments of North Rhineland-Westphalia and the Czech Republic signed an agreement of cooperation in 1977.

At the beginning, the cooperative scheme predominantly covered reciprocal visits and exchange of experience between parliamentary and governmental representatives. After more than five years, mutual knowledge and trust encouraged both partners to more goal-oriented collaborative arrangements.

1.1 General Framework and Priorities

The departing point for the working out of cooperative options was the similarity of economic interests and priorities. North-Rhineland-Westphalia and Czechoslovakia are areas of almost the same size (17 million and 15.5 million inhabitants, respectively); they are highly industrialized, with a large share of mechanical and electrical engineering branches.

On the territory of North-Rhineland-Westphalia and the Czech republic, a large agglomeration of heavy industries (coal mining, power generation, metallurgy, machine building) are located, the Ruhrland (Ruhrgebiet) and North Bohemian industrial revier, entailing considerable hazards to the environment.

Therefore both partners unanimously concluded that their collaboration should be focused primarily on industrial reconstruction from the point of view of environmental improvement, which encompassed several interconnected issues, such as

- technology assessment and modernization,
- air, water and soil pollution monitoring, modeling, and regulation,
- pollution abatement planning and action programs (a set of practical measures to be taken),
- manufacture of eco-technology (technical means for environmental protection and improvement purposes),
- environmentally friendly agriculture (technology and farming),
- regionalization, urban and rural planning,¹
- downtown historical core conservations, etc.

The field of cooperative development schemes was adjusted to physical geography, national economy, and public concerns.

Parliaments and governments assumed responsibility for asserting topics of mutual interest. Business communities, scientific and educational bodies, and professional associations of both countries participated.

Leaders of parliaments and governments and of political parties² exemplified a great deal of the “new thinking” approach, a firm adherence to the European identity (“Helsinki process”), good will to cooperate, and tolerance. The spirit of political and ethical commitment to the common cause protected the procedures of cooperation against various odds and backed the cooperative behavior.³

1.2 Looking for a Joint Business Model

As a first step toward an effective partnership, two professional meetings were agreed upon, the first in Prague (1984), followed by another in Düsseldorf (1986). Both followed one common scheme: oral and written presentations (symposiums) accompanied by business information and exhibition.

On the Czech side, the meeting was organized by the former Czech Commission for Science and Technology and Capital Investment.⁴ It invited other governmental bodies to cooperate, embracing issues of environment, health care and agriculture. On the German side, the responsible body was the Provincial Ministry for Small and Middle Enterprising, Labor and Social Affairs, since 1986 abolished and replaced by the Ministry for Environmental Regional Planning

¹In German “Raumgestaltung,” i.e. social and natural space accommodation.

²The leading political party in North-Rhineland-Westphalia was and remains the German Social Democratic Party (SPD); in Czechoslovakia it was the autocratic Communist Party, toppled in the fall of 1989 and replaced by a pluralistic democracy predominantly led by the Civic Forum (a conglomerate of personalities, movements, and parties).

³During this time, several events with political impact spoiled the image of friendly cooperation. For instance, one week before a joint meeting on German territory, a border incident had occurred and was heavily questioned in the German media. The chairman of the meeting carefully avoided any dramatization and turned all attention to cooperation issues.

⁴One of the three cooperating state bodies for promotion, planning, and sponsoring of research and development (experimentation), large capital projects, expertise of capital investment, and environmental protection: the central (federal), Czech and Slovakian Commissions, the chairman of which was appointed Deputy Prime Minister of the respective governments. Since 1988, the national bodies have ceased to exist and their responsibilities have been redistributed among other governmental bodies.

and Agriculture.⁵ The responsibility for German participation was placed with the Alliance of German Engineers,⁶ a public association with a long-standing professional credibility and networking experience.

The first symposium and exhibition in Prague (March 13–15, 1990) contained:

	North-Rhineland-Westphalia	Czech Republic
Presentations	15	15
Firms represented	26	15

From the German part, oral and written presentations were instructive and supported by a variety of facts and figures, inviting a number of collaborative opportunities. From the Czech part, the written articles were conceived only in general, and had to be specified in the oral presentations.⁷

Offers to Czech partners were well-argued, providing an up-to-date engineering design, short implementation deadlines, and advanced operations control. Also the cost-benefit analysis offered a satisfactory return on investment and operation cost.

Following was a similar symposium with exhibition in Düsseldorf (October 1–3, 1986). The agenda was similar to the proceedings in Prague. Mostly the same participating firms were invited; however the interest on the German side soared. The exhibition was extended to 130 stands and panels:

	North-Rhineland-Westphalia	Czech Republic
Presentations	15	15
Firms represented	115	15

It was conceived as business-like offerings of research findings, products, and services. On both sides, again leading industrial companies involved in eco-technology were represented.

Two rounds of symposiums associated with exhibitions contributed to a consensus on cooperation opportunities. Each partner appreciated the other one's approach. In particular, business communities were encouraged to take active part in further German-Czech initiatives.

2 The Höpra Case Study

Let us follow up with a selected case of entrepreneurial initiative that can throw light on more specific features of international cooperative negotiations: the Höpra case.⁸

Mr. Hölter, who is among the seven leading German industrialists committed to the German-Czech cooperative plans, proved an exclusive initiative and developed a multi-sided cooperative business with Czech companies.

The Hölter Group (die Hölter Gruppe) embraces 16 industries.⁹ The group is located in 7 German towns¹⁰ and runs affiliations in Italy, Switzerland, Austria, Poland, and Czechoslovakia. The number of employees exceeds 5000.

⁵The Landesministerium für Mittelstand, Arbeit, and Soziales; later the Landesministerium für Umwelt, Raumordnung und Landwirtschaft.

⁶Verein deutscher Ingenieure (VDI), Düsseldorf.

⁷The host organizers yielded priority in presentation to the guests after the Germans had turned the negotiations into a very frank, factual and result-minded shape; the Czech partners, virtually overnight, overhauled their underlying papers in order to match the German factuality.

⁸Dipl. Ing. Heinz Hölter is owner of the Fertigungsunternehmen Hölter & Co., GmbH, which represents a capital group with an accent on comprehensive improvement of the environment.

He established an office in Prague and used the trade name of Hötra. At that time, the business representation was operated through the Czechoslovak foreign trade company Tradex. (Hölter + Tradex = "Hötra.") Later, when direct presentation had been made feasible, he began to use the name of "Höpra" (Hölter + Prague = Höpra).

⁹Included in the Hölter Group's diversified production program are mining, coke manufacture, water cleaning, air hygiene, turnkey concrete manufacturing, electronics, steel construction, industrial waste deployment, conveyor transportation, whirl burning equipment, hospital waste disinfection and deployment, engineering studies and expertise, and coal ooze (dredge) reprocessing.

¹⁰Berlin, Essen, Dortmund, Saarbrücken, Bad Homburg, Bottrop, with headquarters in Gladbeck.

The firm's philosophy is expressed in the logo "competence in environmental protection" (Kompetenz im Umweltschutz).

2.1 The "Great Bid"

For years the Hölter Group operated an industrial coproduction of mine fans and filters with the Uranove doly (Uranium Mines) at Pribram, 40 km from Prague. The joint manufacturing had proved to be highly satisfactory and was run without major problems.

Several business negotiations were ensued by the establishment of a joint venture firm Höpra in 1989. Soon, the firm had prepared three bids for the Czech partner:

Modernization of the power plants	150 mio DM
SO ₂ separation	80 mio DM
Coal ooze reprocessing	40 mio DM
Total	270 mio DM

Höpra was able in a rather short time to draft several industrial projects accounting for more than one-half of the credit funding foreseen for the whole business cooperation program.

The new offer to modernize power generating technology and to sort out emissions was abundantly supported by the achievements in more than 20 North-Rhineland-Westphalian coal power plants. Improvements introduced by the Hölter Group were marked by an advanced degree of productive efficiency and at the same time of cost-benefit ratio.

The Hölter Group authoritatively insisted on modernization of power generating technology prior to the mounting of any emission-separating equipment, the capital investment being more expensive, but the total effect obtained unproportionately higher. Increased energy output correlates with a lower fuel input with lower emissions.

Another offer to reprocess the coal ooze (partly sedimented dredge) had also been tested on 10 units in the USSR and two units in Poland. The Hölter Group suggested a tentative buy-back arrangement: the coal substrate could be exported to Germany and used as a countertrade value (of some 10–20 mio DM).

As a whole, a sizable improvement in the power generating efficiency and waste abatement ensued the Hölter Group draft. The firm guaranteed some 15% lower coal input, 15% lower SO₂ emission, and up to 50% lower NO_x emission.

2.2 Procedures of Negotiation

2.2.1 Before 1989

The antipollution measures designed by the Hölter Group, if put together with the extension of nuclear power generation and the closing of several coal power plants, could ensure the obligations of emission abatement signed by the Czechoslovak government in London in 1987.

The prospective Czechoslovak engagement was relaid on a new German-Czechoslovak joint venture under the business name OTEŠ, consisting of Prerovske strojirny (Mechanical Engineering, Prerov, 50% share) and Hölter Fertigbausystem with 2 other German partners (together a 50% share). On June 5, 1989, the agreement was signed.

The negotiations lasted a long time. Several impediments coincided. For instance, the governmental program of SO₂ separation was subject to a controversial discussion. It was twice refused by the governments as an unreliable argument lacking scientific background. Also, departmental changes in the governmental bodies involved, with changes of several responsible officials, led to repeated delays and backlogs.

Mr. Hölter showed unusual endurance, constantly seeking the authority or person who could overcome the stalemate, assume responsibility, and provide funding. He did not cease before he had negotiated with the topmost officials in order to get his cause supported and pushed ahead.

In particular, this endurance, tireless repeated negotiations, and the bringing of well-structured proposals to the officials who matter assured the slow but steady advancement of the deal.

He was heard to say that in Czechoslovakia, he was forced to expend 10 times more effort and time than in the Soviet Union or Poland. However he appreciated the Czechoslovak manufacturing ability, quality, and performance.¹¹ Balancing all pros and cons, he continued his efforts.

Mr. Hölder proved to be publicity-friendly. During meetings with journalists and before television cameras, he informed the public of his points of view, offering critical comments and constructive possibilities. This helped to persuade the public that the cooperative effort might bring about a serious improvement.

He learned how to find out as soon as possible where is the power center, decisionmaking body, and responsible official. Otherwise one might get involved in a time-wasting chain of delays. He also exemplified the ability to interlink business negotiations with broader professional guidance.

Parallel cooperative business was developed in Poland (under the business name of "Pol-Hö"), in Katowice, where conditions are comparable with the Ostrava coal revier (northeast Moravia). Several joint ventures have been established in the USSR, mainly in the Donbass coal district and other coal mines. They serve as reference examples for business negotiations, too.

2.2.2 After 1989

Political upheaval in Czechoslovakia changed the political scene, increased interest in foreign capital assimilation, and suppressed many previous obstructions. However the bureaucratic practices are still overlapping and impeding the target-oriented negotiations. The process has become much smoother, but not without considerable problems. Some of these obstacles are of a new nature.

Because the power policy was subject to reassessments and new expertise,¹² the Hölder Group meanwhile turned its interest to reprocessing coal ooze around Ostrava.

The coal ooze was criticized as a blatant impairment of the environment and the suggestion to commercialize it and at the same time to remove it from the area was heartily welcome.

In order to facilitate the utilization of local resources, the Hölder Group signed an agreement with the Ostrava-Karviná Mins (Czech abbreviation OKD). A joint venture (50:50) was established under the logo "Höl-OK" (Hölder+OKD) with a focus on ooze reprocessing.

The Westdeutsche Landesbank provided a generous credit amounting to 39 mio DM.¹³

Then new intricate procedures suddenly emerged. The Westdeutsche Landesbank asked to get the credit guaranteed by a Czechoslovak institution. The credit was commissioned by the Czechoslovak Trade Bank. This bank relegated the guarantee to the Commercial Bank. However this was not the last resort. The Commercial Bank asked for the same guarantee the Ostrava-Karviná Mines Corp. (OKD), which was arranging the joint venture business with the Hölder Group.

After several months of negotiations, the OKD underwrote the guarantee and backed it with its property (despite the fact that its integrity was being endangered by the threat of one enterprise, which wished to step out of the corporate configuration). The credit coverage was finally sure and operational.

Sales of the reprocessed powder coal substrate (to Germany) were estimated to bring almost 12 mio DM of income. The return on invested capital was close to 30% and the payback period

¹¹In some cases, he conceded, performance and quality were "equal or better than that in Germany." If it were not for that, he "would discontinue any efforts."

¹²For instance Federal and Republican power system, their complementarity and cooperation, proportions of nuclear, oil, gas and coals resources, possible sales of energy to other countries, collaboration with Western power companies, and others.

¹³Around 10% of the total sum made available by the Westdeutsche Landesbank for the environment program.

near 3.5 years.

In the foreseeable future, there will be an Environment Fund administered by the Ministry for the Environment. State subsidies will be supplemented to the capital invested by both partners.

All at once, the local press began to doubt the deal from another point of view. The area inhabitants regretted the cheap fuel which they had been collecting, drying, and using for decades. This complaint, although not fairly grounded, provoked stress and setbacks.

Mr. H. Hölter asked the television to give him some air time, during which he explained and illustrated the goals of coal ooze reprocessing with its environmental and commercial advantages.

After that he invited 120 representatives from the Ostrava region, the Lord Mayor, local deputies, experts, etc. to visit similar industries in Germany and Austria.¹⁴

In the end, reprocessing was appreciated as an important contribution to the local area development. Among the advantages, the following were put to the fore:

- ooze will be converted to a marketable utility;
- cumbersome mud will be removed and recultivated;
- invested capital will be paid back not later than 3.5 years by deliveries of powder coal;
- local and state budgets will not be burdened with extra expenditures.

On the other side, delay caused by ill-defined rules and bureaucratic obstructions deprived the joint firm of 1 mio DM every month.

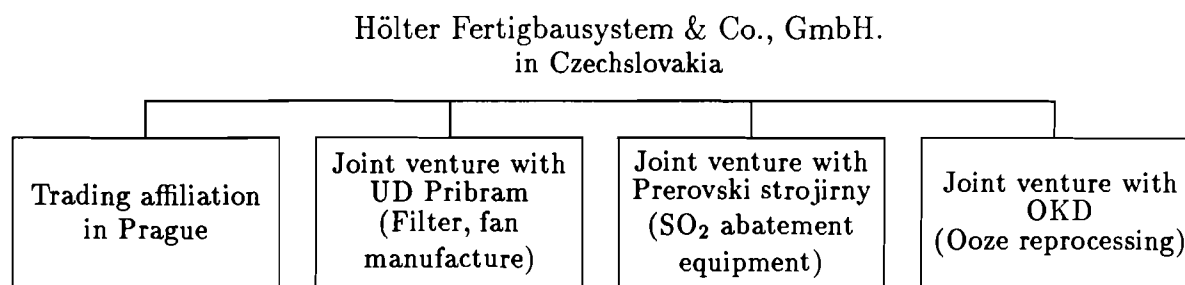
The last-but-not-least cause of annoyance are the still not yet defined economic rules for foreign capital operations.

Czechoslovak changes in politics, economy, social issues, and environment are profound. The new provisions frequently constitute the opposite of the existing rules.

It therefore takes time to become accustomed to the changed pattern of principles, institutions and procedures.¹⁵

2.3 The Institutionalization of the German company in Czechoslovakia

Despite many problematic issues, the Hölter Group continues its offensive drive in Czechoslovakia. The company's presence is expanding and involving more segments of the group:



The offices in Prague (Höpra) are the staff for the advancement of Hölter Group business strategy in the country.

The Höl-UD (Uran Ore Mines) joint venture in Pribram (40 km south of Prague) is a smoothly operating manufacturing concern delivering ventilation equipment for deep mining. Their four years of experience have been unanimously positive and suggest a long-range growth of the business.

¹⁴Linz, Ruhrland, Hannover, Düsseldorf and the Hölter Group headquarters in Gladbeck were visited in 5 days (with a guided explanation).

¹⁵The federal Parliament envisages to adopt more than 150 new legal provisions on economic matters between January 1990 and June 1991 (a pace of about one per week).

The OTES joint ventures in Prerov (a town in southern Moravia) is still a reluctant operation. Sharp changes within the Moravian heavy mechanical engineering company (due to a shift in demand) have prohibited a full evolution of collaborative business.

Among the first deliveries in progress is a set of SO₂ separators for the power plant in Počerady (northern Bohemia).

The Höl-OK is ready for assuming the reprocessing operation since the beginning of the next year. (Equipment deliveries are scheduled for 18 months.)

In the negotiations stage is a big project of coal power plants modernization, which is, however, impeded for the time being by the redrafting of the national energy program.

The rationale for cooperative business (as a rule, joint ventures with a capital participation of 50:50) is mostly the penetration into the Czechoslovak market (and a strengthening of the position in the East European markets in general). The return-on-capital ratio is promising, exceeding the habitual conditions by a factor of 2.0–2.5.

The Czechoslovak partners accepted the Hölter Group's bids after multiple comparative analysis. In most tenders, the Hölter Group proved to be either leading or comparable on the European industrial scene.

The Hölter Group ranks among steadfast developing foreign companies. The joint business arrangement has enabled the firm to upgrade the company's visibility and prospects for the future.

2.4 Conclusions

The Höpra case study ranks among the successful ones. However, the progress has been assured mostly through well-defined objectives and priorities and a tedious initiative by the German partner.

Turbulent times in Czechoslovakia did not stop the commitment of the partners on both sides to overcome or circumvent discouraging complications of the procedural setting.

What proved to be most important was the streamlined and offensive promotion of the deal, personal involvement on the part of the people with decision-making power, and an appeal to the public.

It has been proved that cooperative business in eco-technology makes a rational contribution to the solution of environmental problems.

With general conditions improved for cooperative business, this method may find a widespread application.