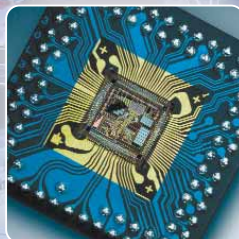
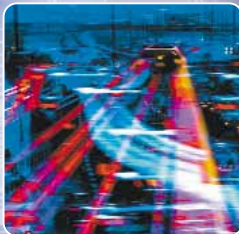


THE COURAGE TO CHANGE IS WORTH IT!

Strengthen the ability to innovate,
grow and be competitive



The ZVEI political messages
and growth initiatives

IMPRESSUM

The courage to change is worth it!

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grow and be competitive**

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and growth initiatives**

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The courage to change is worth it!

Strengthen the ability to innovate, grow and be competitive

The ZVEI political messages and growth initiatives

Introduction: We work in a world of lightening-speed political, economic and technical changes. People's desire for work, wealth, quality of life and safety, the finiteness of many resources and the challenges of globalisation all require new answers.

The electrical engineering and electronics industry contribute to the fact that necessary changes lead to new opportunities for the people of Germany, Europe and the world and their environment. We are the most innovative sector in Germany and frontrunners in Europe. Our companies are the pacemakers of technological advance. The innovation and growth of nearly every sector is determined by the key technologies developed by our industries. Our products, systems and solutions provide a basis for everyone's quality of life.

In order to be able to guarantee this contribution to growth, employment and wealth with international competition in Germany and throughout the world in the future as well, our companies need framework conditions, that sustainably develop the ability to innovate, grow and be competitive in Germany by themselves.

That is why, together with all sectors united under the ZVEI umbrella, we have determined seven main themes, that will give common strength and direction to the technical work and the political communication of ZVEI, its sector associations, regional desks and working committees. The perspectives shown in the vision for the ZVEI are thus made concrete and converted into specific areas of development for the electrical engineering and electronics industry.

For us, strengthening the ability to innovate, grow and be competitive means:

- Consistently converting innovation into growth
- Strengthening entrepreneurship in a lean and efficient state
- Ensuring excellence in vocational training and higher education as the basis for innovations
- Creating flexibility and mobility on the labour market
- Advancing further liberalisation of the European internal market
- Implementing less and better regulation in Germany and Europe
- Using standardization as a strategic instrument to create more market

"Strengthening the ability to innovate, grow and be competitive" is not only a requirement for politics but also for us: With "the courage to change" we want to lead the way in the shape of concrete initiatives and by setting a good example. Let's use and give shape to change – and thus our common future!

Frankfurt am Main, March 2005



Prof. Dr. Edward G. Krubasik
President



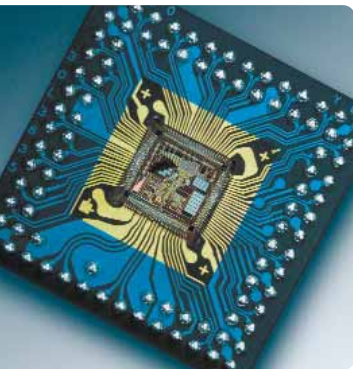
Gotthard Graß
General Executive Manager

1 Consistently converting innovation into growth

Innovations are the decisive conditions for the international competitiveness and growth of our economy. Companies in the electrical engineering and electronics industry are the motor of advance in practically all areas of the economy and life. Especially our sector profits decisively from a strong network of user industries in Germany. At the same time it gives this network decisive innovation and growth impulses. Demanding clients in leading markets and more intensive competition, as well as the prospects of economic success, drive the quest for new solutions for tomorrow's problems. Internal innovation motors are technical talents rich in ideas and venturesome entrepreneurs. These powers that strengthen innovation should be promoted, obstacles to innovation and change must be removed at all levels.

Our goal is to promote growth in strong innovative forces and, at the same time, remove barriers which restrict change and innovation:

- A successful innovation policy must above all promote the use of new technologies. Innovation is not only inventing and developing, but above all the successful application and marketing of technologies. Instead of deploying too much for "old" branches of industry, considerably more investments must be directed at the construction of growth industries and the use of new technologies to create new jobs.
- High-tech infrastructures in Germany can make a decisive contribution to the rapid opening up of new markets and the development of new companies. We must develop and reinforce high-tech infrastructures as a locational advantage for Germany. We need the most modern power supply infrastructures, a more efficient health service due to electronic networking and the latest medicine technology, extensive digitalisation of radio and television, security infrastructures as well as high-performance traffic systems. Telematics infrastructures, in particular in the congested areas, the further development of the railway network and the automation of the railway offer new opportunities. Transeuropean networks to transport people, information, power and goods, Industrial IT enable new forms of cooperation between companies and clients and the optimisation of development, production and logistics processes.
- Even more efficient cooperation between industry and science within the framework of joint projects would increase the effectiveness of public research financed by taxpayers' money. Under the motto "Promote projects (and fewer) rather than institutions" we want to achieve more joint projects of industry and science and less promotion of institutions on the principle of giving everyone a slice of the cake. Research premiums can have a stimulating impact and focus the research financed by taxpayers' money more on future needs, market opportunities and areas of application.
- In as far as the state intervenes in market processes by promoting business, it should be concentrated on growth poles or regional clusters. Helping self-strengthening clusters to convert ideas from research into practice. In addition, efficient cooperation between large companies, SMEs, universities, public sector and the financial industry will yield the best results.



Concrete ZVEI initiatives

- ZVEI umbrella campaign: "High-tech infrastructures" – leading markets and growth engines for Germany and Europe!
- ZVEI telematics initiative: Enabling intelligent mobility – German Telematics forum
- ZVEI digitalisation initiative for television and radio in Germany
- ZVEI initiative: Modern power supply infrastructures for Germany
- Community initiative: "Intelligent living" – Making life safer, more comfortable and better through technology!
- ZVEI key theme "Automation and Industrial IT": Keys to the industrial value chain of the future in Europe!
- Competence network Microsystem technology and electronics in the automobile

2 Strengthening entrepreneurship in a lean and efficient state



Innovations and thus the successful development of our national economy are only possible with a courageous spirit of enterprise. The electrical engineering and electronics industry driven by innovation depends on innovative, venturesome entrepreneurs and their investments more than other industries. They require an organised environment, in which the state restricts itself to its core tasks, issues economic guidelines and provides an appropriate infrastructure. Despite a high tax burden, the state's investment rate is currently at an all-time low. With consistent consolidation of the public budgets with simultaneous restoration of the state's tasks, falling taxes and contributions are possible. The privatisation of government tasks at the same time leads to more efficient performance, more innovations, higher growth and – if the framework conditions are right – sustainable modernisation investments. Companies can also take on tasks that an overloaded state can only look after with limited success.

From the viewpoint of the electrical engineering and electronics industry, the following steps are urgent to strengthen enterprise in a slim and efficient state:

- Tasks that are not part of the core area of the government's performance, should be excluded and entrusted to trade and industry, that assumes them on its own responsibility. With its solutions, our industry offers the opportunity to reduce the state quota if regulations that promote investment are found.
- More concrete projects should be privatised or achieved in so-called Public Private Partnerships. The necessary framework conditions that promote investment must be found for these privatised areas. Considerable potential exists here in the areas of transport/infrastructure, health care, training and management infrastructures, security and defence.
- The acquisition of personal capital, in particular in SMEs, can be improved: by reducing the tax burden and contributions and by improving the access to private equity and venture capital. If the tax rates are compared internationally, then the total tax of German companies is significantly higher than in the most important competing countries.
- For young companies, the taxes should be kept as low as possible during the construction phase, for example through less extravagant and cost-driving approval procedures. Approval requirements must be reduced, periods shortened and the access to capital improved.
- Effective protection of innovation and investment is necessary by uniform simple patents and copyright regulations throughout Europe, in particular also for software or computer-based inventions. Effective market monitoring as well as international agreements to protect intellectual property and private investments must guarantee that companies' rights are secured.
- The importance of entrepreneurs and entrepreneurial thinking and acting must be strengthened in our society. Entrepreneurship should be a subject of education.
- New growth potential for companies in the electrical engineering and electronics industry can currently be developed in Eastern Europe, Russia, South-East Asia and China. It is precisely SMEs that the ZVEI wants to offer concrete support and functioning networks.
- Great growth potential must be mobilised for the branches in the area of service companies, from engineering via maintenance and service and enterprise to finance and the further development of plants and systems.

Concrete ZVEI initiatives

- ZVEI Taskforce "PPP": conditions for success for Public Private Partnership Projects in Germany
- ZVEI initiative: "Young companies in the electrical engineering and electronics industry"
- Russia Year of the German electrical engineering and electronics industry

3 Ensuring excellence in vocational training and higher education as the basis for innovations

Innovations are not possible without creative heads. Education and knowledge are the preliminary stages of the adding value in countries poor in natural resources. Germany and the EU therefore need more excellently educated people. The lack of engineers is already hindering innovation and growth and the global competitiveness of our companies today. In important developing areas, the companies cannot find enough well-educated workers in Germany. We must enhance again the number of engineers and ensure education and further education for growth sectors.

Excellence in vocational training and higher education now requires a concrete course to be set:

- The introduction of Bachelor and Masters courses for electrical engineers at universities and polytechnics in Germany will enable better international networking, faster training and better permeability between professional and academic learning.
- To provide more engineers with the necessary qualifications for entrepreneurial activity, broader education must be offered that provides not only scientific and technical but also commercial content and skills and those aimed at practical enterprise.
- The dual system of vocational training must be further strengthened by means of intensifying workflow embedded education and further education as well as closer connecting learning in the company and at vocational schools. For the new electrical professions further education offers must be developed.
- Excellence in education and training is obtained only by national and global competition between universities for students, professors and resources, but not by state regulation. Tuition fees, scholarship systems and better selection procedures must be supplemented to promote quality and a broad mobilisation of talents.
- Education expenditure must be seen as an investment into the future. An improvement in quality and intensity of education in our schools must be achieved by modernising the school management, increasing the public educational expenditure, improved training and further education for teachers, a more modern infrastructure of schools, extensive availability of modern media and generally compulsory education standards.
- The demographic development in Germany must be combated by increasing the number of women in technical professions, longer working life and life-long learning. At the same time, we must promote the immigration of talents and get expatriot scientists to come back to our country.
- The ZVEI promotes more receptiveness to and greater interest in natural sciences and technology by young people. At the same time, we need to strengthen the tuition in mathematical sciences in schools.



Concrete ZVEI initiatives

- ZVEI initiative: Bachelor and Masters courses in Electrical Engineering and Information Technology
- ZVEI initiative: "New electrical professions"

4 Creating flexibility and mobility on the labour market



To keep employment and innovation sustainably in Germany, we need more mobility and flexibility on the labour market. Innovation in the electrical engineering and electronics industry requires of our companies that new areas of business are built up and old businesses are restructured, new technologies are introduced and old technologies are phased out, new productions and more global value-creation networks are set up and discontinued production installations restructured. Jobs move within and between companies, between locations and countries. It is easier to transfer production capacities in the electrical engineering and electronics industry to countries with more favourable framework conditions than those in other branches of industry. At the same time, it is precisely in the electrical engineering and electronics industry that new fields of jobs occur due to the growing weight of software, solution and service companies.

To guarantee more job opportunities in Germany and facilitate sustainable innovation in this change in structure, we clearly need more dynamism on the labour market. However, labour and wage laws are regulated so strongly in Germany that they greatly curb the flexibility and mobility of work. That is why sixty percent of the ZVEI members are already no longer bound to tariffs and the number of effective regulations is increasing every year.

Adjustments both in individual labour law and in tariff law are a subject that ZVEI will drive in close dialogue with member companies, the, BDI/BDA and above all Gesamtmetall and its regional associations for the next 2 years.

More flexibility and mobility in the labour market will be achieved through:

- In labour law, not only the protection against wrongful dismissal but also a multitude of detailed regulations that are no longer comprehensible from the Working Hours regulation to the Part-Time Work Restriction Act must be thinned out and simplified.
- In tariff law, our industry needs more differentiation: regulations that are geared to the automotive industry is less and less applicable to the branches of our industry that are increasingly concerned with engineering, business services and software services. The ZVEI must together with Gesamtmetall settle how tariff agreements that are more suitable for the electrical engineering and electronics industry can be reached with the trade unions.
- The advantage of highly computerised production installations must be supported with international competitive agreements that facilitate the maximum utilization of the stock of capital in Germany.
- And finally we need more shaping scope at operational level through opening clauses for further tariff-bound business and simultaneous legal certainty for operational regulations that are agreed on with work councils.

Concrete ZVEI initiatives

- ZVEI initiative: Tariff policy for the electrical engineering and electronics industry – More flexibility and mobility on the labour market for innovation and service

5 Advancing further liberalisation of the European internal market

Further liberalisation of the EU internal market is one of the core tasks of the European Union. Many markets of the electrical engineering and electronics industry will develop more lively due to liberalisation and more competition that promotes more innovation. Excessive regulations, great state influence and – as a result of the two – limited competition reduce the incentives to innovate and thus prevent growth.

In particular fast liberalisation of the internal market for services and the reduction of the remaining barriers to the free movement of goods will strengthen the competitiveness of the EU and its companies. That is why these efforts should not flag. Practically speaking, companies in the electrical engineering and electronics industry are still being disadvantaged on many markets due to their national affiliation.

That is why it is one of the ZVEI's most pressing demands on the European and national politicians, above all to consistently further open the EU markets of transport/infrastructure, postal services and power that are difficult to access for German companies. In addition we need better regulation that strengthens competition also for sectors that support our industry – such as transport and financial services for example.

That is why for us liberalisation above all means:

- In public tenders by consistently doing without above all production, environmental and social political demands on the respective suppliers that have nothing to do with the offer, facilitate international, transparent competition!
- In rail transport further open the markets to international suppliers or find regulations that increase the modernisation investments in network extension and rolling stock! Reduce location requirements, develop common European railway networks, facilitate European railways and European leasing markets for rolling stock. Joint tasks for producers, operators and supervisory authorities is the harmonisation of the technical standards which is necessary for this.
- In the power supply sector further drive the liberalisation of the power markets, to increase innovation and modernisation investments! Here, in a number of member states the preference for national procurements should be ended, lengthy and long-winded approval procedures should be simplified and a slim and powerful competition authority with the task of regulating should be set up, whose task is to extend the network, modernise the power stations and competition of the technologies on a functioning market.
- On the postal infrastructure markets in a series of countries, remove public access barriers for producers from other countries.
- Create a European internal market for financial services! It is precisely SMEs that need better access to international capital through the creation of a common European market for financial services and removal of the limitations for international credit institutions and insurance companies. More efficient service providers are helpful for the competitiveness of the electrical engineering and electronics industry.

- In support sectors that are important for our industry such as logistics, postal, lawyer, civil-law notary and other services, reduce the hindrances to efficient competition, free trade and free movement!
- Help the World Trade Organisation to reduce the agricultural protectionism to relieve the strain on consumers in Europe and through better access to the market provide purchasing power for countries in the Third World.
- Facilitate the European consolidation of our industry, to build strong positions on the basis of this in competition with the USA and Asia.

Concrete ZVEI initiatives

- ZVEI initiative: "Coalition for Competitiveness" as a common European industrial platform to promote the Lisbon Agenda
- BDI/ZVEI initiative: Opening of the service market in the EU on the basis of mutual recognition
- ZVEI initiative: further opening of the infrastructure procuring markets
- ZVEI initiatives: Reduction of duties and trade impediments for electrical engineering products



6 Implementing less and better regulation in Germany and Europe



Even in the electrical engineering and electronics industry overregulation and unnecessary rules hinder the growth of our companies and establishment of new businesses. Detailed regulations far away from practice prevent solutions achieved by the market and competition, quick reactions to market opportunities and competent people working on innovations. The current quickly growing flood of new taxing, inconsistent and restricting regulations are particularly critical, for example in the area of the protection of the environment and consumers. Detailed regulations at national and European level slow down innovation competition. Instead of this, politics should put forward acceptable goals that can be reached with the aid of market mechanisms.

Less and better regulation in Germany means for us:

- That is why within the framework of the Lisbon Agenda we are working to reduce unnecessary regulations and better regulation by consistently carrying out business impact assessments and determining the costs for companies that accompany the intended regulation, for example in the areas of European contract law, tender law, consumer protection and maintenance of industrial health and safety standards.
- More market mechanisms and fewer detailed regulations: The state must wherever possible avoid detailed regulations and instead set objectives which give the leeway that technical change with innovative problem-solving needs. The efficient elaboration is transferred to the respective interest groups (stakeholders).
- A good example of EU legislation consistently grafted onto market forces is the EU directive on the waste of electrical and electronic equipment (WEEE) and its expected conversion into German law, in whose development the ZVEI has been actively involved in for 13 years. In accordance with the principle "As much market as possible, as much regulation as really necessary", this directive leads to a high degree of costs- and quality-competition for the waste management but also for a clear legal framework for all the competitors. Also on the agenda in any case remains the most uniform possible conversion of this directive in all 25 member states of the European Union.
- We also need for faith in the market forces for the current topics of ecodesign and energy efficiency. That is why politics should rethink the current draft directive on energy-using products (EuP) and together with the industry hold a discussion about how market forces could provide even better energy efficiency more quickly.
- And in the so-called EU substance policy too, there should be coherent and universal, comprehensible regulations instead of sector or branch-specific ones. A risk-based approach is necessary instead of the random exclusion of individual substances, regardless of their actual risk potential to man and the environment connected with their current use ("hazardous substance of the week").
- An interesting new political approach to CO₂ reduction from the viewpoint of the electrical engineering and electronics industry is so-called emissions trading. The necessary and intensive discussion about the risks during the implementation should not make us lose sight of the opportunities. As a market economic instrument, emissions trading, subsidies and directly steering technology by means of taxes and levies should be considered. Direct market interventions such as fixed-price guarantees for renewable energy or the ordered departure from nuclear energy are not compatible with the market mechanisms promoted by the ZVEI.

Concrete ZVEI initiatives

- Community initiative by UNICE, ORGALIME and ZVEI: "Less and Better Regulation"
- Achieve electronics waste management as a successful example of the concept "As much competition as possible, as much regulation as really necessary"
- ZVEI initiatives: More market for energy-efficient products – convert the proposed EuP-Directive in a market-oriented way

7 Using standardization as a strategic instrument to create more market

Standards and norms are an important instrument in international competition for market access and future markets. They can provide access to markets, but may also prevent it. Successful standardisation provides technical rules for success on the market of innovative products and services. It occurs in a national, European and international network. With their requirements, standards and norms define quality criteria and guarantee compatibility and interoperability. Thus they facilitate cost degression due to high numbers of items and reduce the transaction costs. Norms are in addition applied for the technical concretisation of laws. Standards are the definitive building blocks for the export success of the electrical engineering and electronics industry.

Standards are gaining in significance due to the global value chain based on the division of labour that are developing increasingly strongly. Standards given shape by the industry guarantee the fields of activity of the companies, facilitate a successful conversion of research and development results into products and promote their market success. Thus inventions can become innovations.

A strategically arranged standardization policy means:

- On the basis of technology and market roadmaps we help to develop markets through standardization.
- The ZVEI wants to help give shape to market access conditions worldwide and thus help to simplify the exchange of goods and guarantee international competitiveness through globally accepted international standards. We are committed to: "One Product – One Standard – One Test – Accepted Everywhere" as the leitmotiv for work in the IEC.
- Through international networks we strengthen the representation of the interests of the electrical engineering and electronics industry in technical regulations and recognise trends in the standardization and legislation in time.
- The ZVEI speaks up for the efficient creation of standardization structures. The market's and industry's need is the standard. Standardization must not be an end in itself. Norms and standards must be market driven.
- We speak up for a balance between economy, quality requirements and protection objectives as the prerequisite for standardization projects in line with market requirements.
- We are committed to fast market access at competitive costs. We want to avoid administrative obstacles and reduce them by proving conformity on the basis of the manufacturer's self-declaration of conformity as preferred tool.

Concrete ZVEI initiatives

- ZVEI technology and market roadmaps as the basis for the standardization
- ZVEI initiative: Gear the IEC master plan to the industry's expectations
- ZVEI NEMA initiative: Harmonisation of the US American and European regulation and standardization in medicine technology
- ZVEI standardization initiative China





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