

**Minutes of the plenary meeting of the Strategic Advisory Board on
Information Technologies
28 October 2004**

The Prime Minister, Mr Jean-Pierre Raffarin, called this meeting of the Strategic Advisory Board on Information Technologies (CSTI) at Hôtel Matignon

The purpose of these minutes is not to give the complete text of the proceedings but to describe the discussions sparked by this debate and their conclusions.

The following members attended the Board meeting:

Mr Jean-François Abramatic; Mr Thierry Breton; Mr Patrick Cocquet; Mr Jean-Pierre Corniou;
Mr Michel Dahan; Mr Michel Didier; Mr Claude Guéguen; Mr Yves Guillemot;
Mrs Simone Halberstadt Harari; Mr Jean-Charles Hourcade; Mr Gilles Kahn; Mr Patrick Le Lay;
Mr André Lévy-Lang; Mr Philippe Lemoine; Mr Jean-Bernard Lévy; Mrs Colette Lewiner;
Mr Joël Monnier; Mr Jean Mounet; Mrs Isabelle Parize; Mr Gilles Pélisson; Mr François-Henri Pinault;
Mr Denis Ranque; Mr Gérard Roucairol; Mr Claude Satinet.

The following members were excused:

Mr Alain Bravo; Mr Daniel Kaplan; Mr Arnaud Lagardère; Mr Grégoire Olivier; Mr Jacques Stern;
Mr Serge Tchuruk.

Welcome by the Prime Minister, Mr Jean-Pierre Raffarin

The CSTI has been given a new life and a new momentum, and needs to be a forum for the identification of new growth paths, nourished, supported and forwarded by the ICTs.

The ICTs are a decisive engine of economic growth and competitiveness. The idea is not just to improve the performance of the French ICT sector but also to use ICTs to boost the performance of our entire economy and our entire business community.

We need to rediscover which resources will allow our country to make the most of its strengths in the international arena and to use growth better and faster than others. These resources include dissemination of ICTs in the French business community and French society in general and increased research and innovation in this area.

In today's knowledge society, today's intelligence economy, it is our responsibility to make the most of information technologies.

The CSTI needs to present the government with proposals reflecting analysis of the coherence of the government's general efforts in favour of the information society, the challenges facing the information society, the quality of its architecture, its strengths and weaknesses and the relevance of its priorities.

The CSTI must also evaluate the French ICT position in the global economy. Special attention should be paid to the conditions on which French businesses and public institutions apply information technologies to improve productivity and competitiveness, compared with the initiatives taken by their chief rivals in the international arena.

Lastly, the CSTI needs to look closely into the situation of IT manufacturers, including their economic performance, and examine the need to continue developing high value-added technologies in France, which are and will remain of critical importance for our economic efficiency.

The Prime Minister assigned the CSTI the following five priority themes for analysis:

- the contribution of ICTs to competitiveness;***
- access to new usages for private citizens;***
- research and innovation in the area of ICTs;***
- international competitiveness of ICT businesses;***
- development of ICT related training programmes.***

Address by Mr Jean-Michel Hubert, Deputy Chairman
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Our work needs to be organised in such a way as to:

- ensure that the RESO 2007 plan continues to be implemented and comes onstream efficiently;
- factor known and potential ICT issues into the concerted actions taken by the authorities and the economic players.

1 - A FORUM FOR DISCUSSION BETWEEN THE GOVERNMENT AND THE MARKET:

The CSTI needs to be:

Able to respond rapidly because, while the actual time needed to implement new technologies is sometimes longer than expected, the competitive environment may nevertheless demand the rapid adoption of positions to create or preserve a future market.

Open because the diversity of competencies - and therefore most likely of positions - gathered around this table is a source of exceptional value added which will be enriched by sharing.

The foremost task of the CSTI is not to draft sophisticated reports aimed at impossible and even unnecessary unanimity but to send out simple and strong signals about France's position in Europe and the rest of the world, particularly as regards the pace of economic modernisation and the penetration of the information society and therefore the place of ICTs in growth and employment. In short, what is required is a clear analysis of ways to reduce weaknesses and to build strengths.

Coordinated action to promote ambitious international strategies - primarily with and for Europe - requires a common vision on the part of the public authorities and economic players. Many institutions are conducting in-depth high-quality studies of particular aspects. Because of its position and membership, the CSTI should not be an "additional structure" commissioning reports about isolated aspects but propose terms of reference for coordinated overall action. Direct discussion will be the key to sharing viewpoints and to providing an efficient, confidence-inspiring approach.

2 - BUT ALSO A PLACE FOR SHARED STRATEGIC REFLECTION

The Board members need to be personally involved, not just because the texts say so but because this is the only way to get to grips with the body of ideas, expectations and structuring choices which will

ensure the growth of your companies and the competitiveness of the economy. Thus, we could focus on measurement of the degree in which businesses and private citizens assume ownership of technologies and services and on the position of innovation, its role as an engine of growth, its level, its effectiveness. In fact, in the area of ICTs, innovation is the key to economic effectiveness since innovation embraces industrial research and development activities and future market needs.

The CSTI cannot reasonably be expected to work only at plenary meetings. The purpose of plenary meetings is to adopt positions expressed by the members. Reflection and analysis will mostly have to take place at smaller meetings on predetermined issues. Discussion can be freer and more direct at such encounters, which should probably be organised as part of government response to the CSTI's proposals - i.e. as part of an interactive dialogue.

Theme A - The international competitiveness of businesses in the ICT sector

The participants stressed the following points:

- *Volume:* Sales in the ICT sector consists for 70% of services and for 30% of hardware. This sector accounts for 5% of French GDP, compared with 8% for the United States. In this total, French manufacturing output is half that of the United States. Its weight continues to drop in France and to increase in the United States;

- *Exports and international trade:*

World trade in ICT hardware has increased three-fold in ten years. The US and the EU hold stable shares in trade while the Japanese share is declining. Within the European Union, the shares of Sweden and Finland have increased while those of the United Kingdom, Germany and France have decreased. The share of the French export market is half that of Great Britain or Germany.

- *Competitiveness:*

The "*double risk of losing twice*" has been mentioned, i.e. the risk of losing competitiveness due to high costs (labour and indirect costs) and the risk of losing ground through lack of innovation and slow response.

In France, ICT R&D accounts for 6% of the value added of ICTs, which is slightly above the EU average but 30% below the US figure.

Some countries and regions, such as the United States, Scandinavia, Asia and Ireland, have managed to improve productivity, albeit in different ways. While the United States and Scandinavia have adopted a differentiative positioning, Asia has opted for low costs and inexpensive labour and Ireland has chosen tax incentives.

Recently, productivity gains have surged in France. This improvement is not only driven by costs.

- The concept of economic competitiveness needs to be made an integral part of the strategic objective: mastery of ICTs goes well beyond commercial issues. It affects Europe's independence.

ICTs are a strategic national resource. They have invaded the defence sector as well as the civilian world. Nevertheless, few people are sufficiently aware of this. Today, civilian ICT applications are driving the market for military ICTs and civilian security ICTs. ICTs are making businesses more vulnerable and boosting opportunities to siphon off information.

The defence sector is not yet sufficiently aware of the importance of networking the available capacities. Defence-oriented ICTs are organised at State level. However, the *two* strategic aspects of ICTs (competitiveness and defence) are *not* organised. The State needs to improve the coordination between these two complementary aspects.

Theme B - Research and innovation

- This theme raises such questions as the organisation, protection and structuring of the information sphere. In this respect, the specialisation ("pure players") of companies at the end of the 20th century was a failure. Today, we must be able to backtrack and to use the available tools:

- a) The idea is not to specialise but to have large broadline groups;
- b) All major innovations are driven by and born in the shadow of large corporations. We therefore need sound, global companies, European champions, which will strengthen the fabric of SMEs;
- c) The reference for engineers and scientists is the system used in the United States. Asia gets trained in the United States and there are fewer students in France's *Classes préparatoires* (preparatory courses) and *Grandes Ecoles*, especially of engineering;
- d) Standards: the internet, Minitel and GSM were born in France. We need the capacity to create "the right standards";
- e) The digital divide needs to be tackled head-on.

- ITC R&D accounts for 0.3 point of GDP in France, compared with 0.7 for the United States and 0.6 for Japan. ICT R&D is USD 28 billion higher in the United States than in the European Union. The difference is smaller in other sectors, such as pharmaceuticals, chemicals and so on. In other words, sector-specific measures are required.

It is necessary to highlight the rising spiral sparked by R&D for the industry. As regards ICT R&D, such initiatives as Eureka - whose effectiveness is acknowledged by all industrial players - need to be strengthened.

It is essential to restore the situation. This issue needs to be analysed by the think tank constituted by the CSTI.

- France's scientific level is very high and recognised as such. We need to reflect on what our main economic activity will be in 30 years. R&D, which is underpinned by quality training and creativeness, will necessarily become increasingly important for such a small developed country as France, particularly in the light of China's development. It is legitimate to give the public research sector not only the mission to maintain a very high level of scientific competence but also to attract industrial R&D centres to our country.

Theme C - Contribution of ICTs to competitiveness

- The industrial sector is lagging far behind in the use of ICTs, especially as regards trade, of which there is least.

- The e-administration has a significant spillover effect. However, it is necessary to pay attention to the real cost of changes for the business community: the real focus is the market and adaptations to the market.

- *Financial aspects of ICT sector:*

The French financial sector has always been very active in the IT segment. The demand exists. We have a supply problem, not so much with large corporations as with SMEs. This is a genuinely weak area. France inter alia lacks two to five thousand business angels. While there are many venture capitalists and seed capital companies, there is problem with investments from € 1 million on up. We lack repeat

entrepreneurs, i.e. people or entities who reinvest in other ventures once their own company succeeds. This accounts for about half of the estimated lack of two to five thousand business angels.

Theme D - Private citizens: access to new usages

Some aspects of this multiform issue:

- Sales of plasma screens are soaring by 400 to 500% p.a. However, the interoperability of platforms remains an open question;
- Young people have learning possibilities but training efforts need to be maintained. This does not just concern the degree to which schools are equipped but also and especially the use of such equipment during courses.
- One of the objectives which has not yet been achieved is to arrange for the exchange of contents on separate, interoperable media;
- User friendliness is improving on the back of "convergence"; mobile technologies and roaming uses in particular will increase personal freedom;
- The consumer is destabilised vis-à-vis ICTs: proprietary purchases are dramatic since captive options keep the market limited;
- The abstract concept of "convergence" should permit easy mobility;
- Technologically, the 16/9th format is already available for television receivers but does not match the actual broadcasting format: the pictures on these new sets are shortened. The four major US channels are broadcast in high-definition format, as are the Japanese and Korean channels. Significant quality improvements remain to be made. There is an abundance of resources: many programmes and distribution networks, many different terminals. This makes it necessary to consider the order to be brought into the system. Mobility should not result in a loss of quality. The scope of possibilities is unprecedented.

Theme E - Development of training programmes

- ICTs have become part of basic education. Now we need to go beyond PCs and look at contents and software. Let's not say, "*use a computer*" but "*use a computer and software*";
- Vocational training: the first steps have been taken in the United States, but French software players can only gain user confidence if the available French software is taken into account.
- French engineering schools are excellent and exceptional. However, universities consider software a "demon". Universities need to train their professors to give software a positive image;
- Universities do not publish enough information on the internet. They need to put more information on line and their sites need to be better organised. The main shortcoming is lack of dissemination of information;
- To reconcile the three stakeholders (teachers, students and employers) in the business community, the following proposals were made:
 - a) conduct practical research during training, in collaboration with businesses and targeted at precise results;
 - b) conduct more applied research with a specific commercial purpose;
 - c) organise overall access to research;

d) develop sector-specific training geared to the companies in question.

Address by Mr Patrick Devedjian, Minister Delegate for Industry
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The ICTs are an integral part of the economy. They have ushered in a new industrial revolution. This is visible in productivity: increased use of ICTs equals improved productivity.

We need an industrial policy (a term which has been rehabilitated, also in Brussels) which factors in the particularities of ICTs.

Adaptation and government action:

- as regards training for engineers, we need to deal with the dispersal of training programmes, the lack of training possibilities, the unattractive image of industrial training;

- as regards the ICT industry, the CSTT's forecasting efforts will be important for marketing purposes: targeting technologies in the light of demand.