

e u r o p e a n CONNEXTION

THE NEWSLETTER FOR MEMBERS OF THE HITACHI SCIENCE & TECHNOLOGY FORUM

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Editorial note



Within the Hitachi Science & Technology Forum, all selected themes have been addressing the societal impact of new technologies on European society.

Information technology forecasted impact is such that it has become a top priority issue for EU Member States governments under the leadership of the European Institutions. Information technology will bring benefits to every European citizen, as we have seen during the second and

the third edition of your Forum.

Benefits from other new technologies may be less visible or obvious, and some technologies are even seen as bringing more risks than benefits. At COP6 in The Hague, experts have just been assessing measures to fight climate change but little or nothing was said about nuclear energy positive contribution in this field. It is a clear demonstration that Chernobyl is still very much alive in most citizens' mind.

During your next Forum in May 2001, issues related to life sciences will be debated. Your working group is now doing an excellent preparatory work to launch the debate. Using biotechnology for the development of new pharmaceutical drugs is most welcome by the public at large. However, the same people might strongly object to the use of biotechnology on animals and/or plants. The GMO debate is still very much on in Europe and may probably start soon in the United States.

European governments are very concerned as a decision to be taken today may be questioned or, even more, put to Court tomorrow. This is mainly why they came up with the so-called Precautionary Principle. The European Commission outlined its views on the use of the Precautionary Principle through a communication adopted in February 2000 and is working on guidelines for its application.

A better and more positive understanding of benefits brought to everybody by science and technology has to be achieved. I guess this is one of the major goals we should assign to the Forum and I hope you will actively support it.

In entering into a new century I wish you and your families my best wishes for a Merry Christmas and a happy New Year.

See you all in Brussels in May 2001!

Norikiyo Koide
General Manager,
Hitachi Corporate Office, Europe

FORUM MEMBERS VOICE "Biotechnology & Its Impact on European Society"

Working Group Meeting,
Brussels, Nov.17-18, 2000

In the year 1999, the European Patent Office granted a patent covering techniques to create 'chimaeric' (mixed-species) animals. Creatures half human, half animal like the Minotaurus of ancient Greek mythology may be the 'state-of-the-art' within a few years time, being used – or abused? – to provide spare parts of our human body. These astonishing developments are taking place amidst the BSE crisis and at a time when genetically engineered crop is pervading our food chain. It comes thus as no surprise that the working group decided in unison to select "Biotechnology & Its Impact on European Society" as the topic of the 4th Hitachi Science & Technology Forum to be held May 18-20, 2001 in Brussels.

The objectives of the working group towards this Forum are mainly twofold. Firstly, we intend to inform the audience about ongoing and anticipated biotechnological developments in the areas of food, health, environment, and related information technologies. Emphasis will be put on social implications such as legislation or the promotion of science. Our second aim is to actively participate in the ethical debate currently fought out between industrial, governmental, societal, and religious

organisations. In order to achieve this objective the form of the Forum has been modified to include parallel working sessions. Under the guidance of the working group members and selected experts, these sessions will cover a number of issues ranging from human and animal rights to confidentiality and IPR matters.

When defining the scope of the 4th Forum, the working group was concerned to select a topic that is well balanced in the sense that it should cover a future technology, it should have great relevance with respect to its social implications, and it should enable controversial discussions. The decision on the final topic evolved after having carefully discussed and evaluated alternative topics and possible extensions of the selected topic. As we intend to approach the discussion from a consumer point of view, and as we worked out a modified, more interactive form of the Forum (as requested by many Forum members) we are confident that the Forum will



From left to right: Norikiyo Koide, Philippe Robert, Pierre Longin, Hans H. Angermann, Laure Van Schendel, Jim Greer, Grégoire Poisson, Laurent Cadet, Etienne Dancer, Volker Braun and Kazuyuki Miyanaga.

be greatly enriching for every participant, irrespective of professional background.

We, the working group members, would like to encourage you, the recipient of this newsletter, to attend the 4th Forum. In particular, we would

be pleased to welcome those of you who never attended a previous Forum. We are looking forward to meeting you in Brussels.

Volker Braun,
Chairman of the Working Group

Let's get information on Biotechnology

Some European information sources:

European Institutions

- European Commission – Directorate-General Research – The Quality of Life Programme (1998-2002) – Fifth Framework Programme in the area of Life Science
<http://www.cordis.lu/life/home.html>
- European Commission – Directorate-General Environment
http://europa.eu.int/comm/dgs/environment/index_en.htm
- European Commission – Directorate-General Health and Consumer protection
http://europa.eu.int/comm/dgs/health_consumer/index_en.htm
- European Group on Ethics in Science and New technologies (EGE)
http://europa.eu.int/comm/secretariat_general/sgc/ethics/en/index.htm
- Eurobarometer – European public opinion surveys and research instruments
<http://europa.eu.int/comm/dg10/epo>
- Institute for Propective Technological Studies - IPTS
<http://www.jrc.es/pages/areas/f-life.html>
- Scientific and Technological Options Assessment – STOA (European Parliament Official Organ)
<http://www.europarl.eu.int/dg4/stoa/en>

European Organizations

- European Patent Office (EPO)
<http://www.epo.co.at/index.htm>
- European Consumer's organization (BEUC)
<http://www.beuc.org>
- EMBL (European Molecular Biology Laboratory) Forum on Science and Society
<http://www.embl-heidelberg.de/ExternalInfo/stefanss>
- Europa Bio (The European Association for Bioindustries)
<http://www.europa-bio.be>
- European Science Foundation
<http://www.esf.org/index.htm>

Let's meet...

...at the fourth Hitachi Science & Technology Forum in Brussels
18, 19 & 20 May, 2001.

"Biotechnology and its impact on European society"

Forum Members from all over Europe will join us.
More information soon !

Let's visit...

**Forum Members:
Visit the EU Institutions
with Hitachi!**

On Friday May 18, 2001, Hitachi Corporate Office, Europe is planning to organise a special tour for Forum Members to visit the European Institutions (Commission, Parliament, Council). The visit will start from 11:00 am through to app. 5:00 pm. Condition: a minimum of 15 participants is required.

If you are interested, please contact Grégoire Poisson
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Hitachi co-organizer of symposium “Mobility & Security: Power to the Person”

Accessing Internet from a mobile phone is certainly a technical progress but also represents a risk for the individual's freedom. This topical subject was addressed by international experts on November 21st, 2000, during a symposium organized by Institut EURECOM in collaboration with Hitachi Europe Ltd. and Motorola in Sophia Antipolis, France.

Quick development of mobile communications together with their increasing connection with the Internet are causing huge changes to available ser-

vices. Indeed, the user can now access a multitude of services, wherever he is located.

International specialists, from the academic and industrial worlds gathered in order to discuss the major evolutionary trends in mobile communications and their resulting security problems. In particular, they brought some answers to the following questions: how can providers and supporting systems protect themselves against fraudulent access to services they offer while guaranteeing that the protecting

systems do not jeopardize the individual's freedom? Accessing the Internet from the mobile makes it possible to determine the user's profile, his daily activities and know exactly his location. What technical solutions are available to solve those issues?

This symposium was organized for the 4th consecutive time by Institut EURECOM and Hitachi Europe Ltd, but also joined this year by Motorola. More than 100 persons attended : representatives from research, academia, industry and media.

More information regarding this symposium and the program, can be found on Eurecom website: <http://www.eurecom.fr/Symposium2000>



This new corporate statement was created to sum up Hitachi's intention for the coming age, as well as to increase the value of the Hitachi brand.



HITACHI AND BSH SIGN BROAD-BASED HOME APPLIANCES COOPERATION AGREEMENT

Joint venture for production of front-loading washing machines to be established in Thailand

On October 30, 2000, Hitachi, Ltd. and BSH Bosch und Siemens Hausgeräte GmbH, of Munich, reached an agreement entering into a broad-based cooperation in the home appliances market. As the first step of this cooperation, a joint venture to manufacture front-loading washing machines for Southeast Asia will be established in Thailand. The companies also expect to jointly develop a washer-dryer, which will mainly be marketed under the Hitachi brand in Japan. The two companies intend to enlarge their areas of cooperation in the Asian home appliances markets, such as room air-conditioners.

The agreement will get under way with the founding of the joint venture and the setting up of a washing machine factory in Thailand. The new company, BHST Washing Appliances Ltd., will be established by April 2001.

"BSH's aim with this cooperation is to increase its laundry care activities in Asia by using European technology in the production of front-loading washing machines, for which there is increasing demand among the consumers in this region," said Dr. Herbert Wörner, President and CEO of BSH. "In Japan, Hitachi has the largest share of the washing machine market, helped by the high reputation of its "Ion" series of high-washing-power models. Based on ecological and related considerations, and in anticipation of the expansion of the global market, Hitachi is moving to strengthen its international operations in the area of drum type fully automatic washing machines. Therefore, on the basis of our agreement, Hitachi and BSH decided to establish a new company," said Yoshihisa Uneyama, President & CEO of Hitachi's Consumer Products Group. The products will be marketed

in the ASEAN countries, in Taiwan and in Oceania, under the brands BOSCH, SIEMENS and HITACHI. Hitachi will also market the products in Japan.

The washing machines used in Asia and in Europe use different technologies: in Japan and other areas of Asia, use the pulsator system, in which a pulsator in the washing machine is rotated to set up currents that move the washing load and water around and cleanses by rubbing the washing together. The pulsator system allows short washing cycles. Europe uses mainly the front-loading drum type system, in which the drum is rotated perpendicularly, which provides a washing effect by the washing load constantly falling from the upper part of the drum. The drum system uses water and detergent economically."



HITACHI NEWS

HITACHI'S SYSTEM ARCHITECTURE SELECTED BY DELPHI DELCO ELECTRONICS & MANNESMANN VDO AG FOR NEXT GENERATION IN-CAR INFOTAINMENT

Systems Industry leaders endorse Hitachi's silicon as industry standard

On October 16, 2000, Hitachi, Ltd., Semiconductor and Integrated Circuits Group announced that two of the world's leading automotive suppliers, Mannesmann VDO AG of Germany and Delphi Delco Electronics Systems of the United States, will base their next generation car information systems (CIS) on Hitachi's system architecture. In addition, the companies are individually collaborating with Hitachi on research and development of a standards-based solution.

As a key supplier in the emerging CIS market, Hitachi will offer a standard hardware solution based around its SuperH™ microprocessor family and companion chip. This will be tai-

lored to suit individual applications at a software level to ensure the increasing consumer demand for integrated in-car systems is met in the most effective way. The resulting in-car multimedia solution will integrate audio, navigation, communication, video, entertainment, safety and security capabilities within vehicles. The innovative new systems will be incorporated in vehicles debuting around 2003. Commenting on the co-operation agreement, Robert W. Schumacher, director, Delphi Mobile Media group of Delphi Delco Electronics, said: "Hitachi's partnership approach to the development of an open platform and common chipset provides the performance versatility and functionality we

seek for our future mobile multimedia applications". "Our needs are defined by the customers," said Mr. Rolf-Juergen Bruess, Senior Executive Vice President, Technology, VDO Car Communication. "We require an open architecture that delivers high performance, cost efficiency and upgradability with a clear development roadmap. We are convinced that with Hitachi we have found an excellent partner to exploit advanced technology in order to master solutions for tomorrow's mobile world based on our Top Level Architecture TLA".
<http://global.hitachi.com>

HITACHI RELEASES 2-GBYTE PC-ATA CARD AND 128-MBYTE MULTIMEDIACARD™

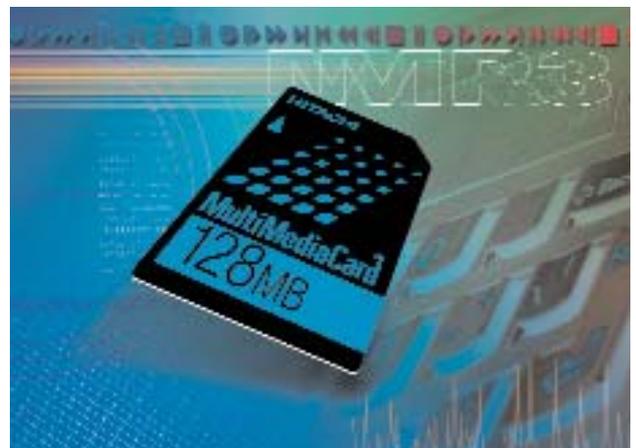
Industry's largest-capacity and low power consumption achieved using a new 512-Mbit AND-type flash memory

On October 2nd, Hitachi, Ltd. announced the industry's largest-capacity 2-Gbyte PC-ATA card, the HB28B2000A6, and 128-Mbyte MultiMediaCard™, the HB28B128MM1. Both products achieve large flash capacity and low power consumption through use of Hitachi's new 512-Mbit and 1-Gbit AND-type flash memories, HN29V51211T and HN29V102414T respectively. The new devices are ideally suited for use as a hard disk replacement in communication and industrial equipment and as flash cards in digital cameras, PDAs, hand-

held PCs, portable music players and games machines, mobile phones and pagers.

MultiMediaCard™ is a trademark of Infineon Technologies AG of Germany, and is licensed to the MMCA (MultiMediaCard Association). Hitachi is a board member of the MMCA.

<http://www.mmca.org>



In Brief

- Hitachi and The Fantastic Corporation (from Switzerland) announce Partnership to develop Direct-to-Home Multimedia Broadcasting Service
- Hitachi and NEC agree to jointly develop next-generation optical transport systems
- Hitachi and STMicroelectronics Announce Plans To Co-Develop the Next-Generation SuperH(R) Architectures, the SH-6 and SH-7
- Hitachi and LG Electronics agree to establish optical disk drive joint venture

More information on: <http://global.hitachi.com>

European Connexion is published by Norikiyo Koide and edited by Grégoire Poisson. The Hitachi Corporate Office, Europe welcomes and encourages your comments and ideas.

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