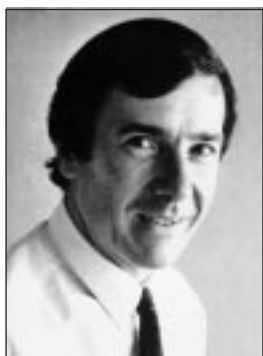


The International Publication for DECT Markets, Applications, and Technology



**EDITORIAL** BY **NICOLAS HOUÉRY, DECT FORUM CHAIRMAN**

### A Welcome From the Chairman

It is a pleasure to welcome you to this first issue of the DECT Forum News Letter. Our News Letter will give you every quarter the latest news concerning this very exciting technology and prove each time again the power DECT can bring to its users. Whatever the organisation you are working for: operator, manufacturer, official body, user, or others: We will provide you with information about the latest developments made around DECT from first hand sources: about applications, networks, or standardisation, to name just a few. Our objective is to give you the information you need to exploit the potential of DECT for building economical infrastructure, innovative services, efficient products. This News Letter, our Web Pages,

and of course our Permanent Secretariat are at your service for providing that information.

We established the DECT Forum to join forces of the leading manufacturers and operators. We aim at developing common views within the DECT community on standardisation, technical and regulatory issues, and to assist our members in making appropriate economical or technical analysis. There were 19 founding members in January. We are now 26 members and I am absolutely confident that the DECT Forum would also prove very valuable for your organisation if you decide to join the DECT Forum.

Join the DECT Forum and we will be able to discuss our common topics with you at our next General Assembly!

### The DECT Forum Mission

*DECT Forum is an international organisation formed by leading telecom operators and manufacturers. DECT Forum has representatives in all the major geographical regions.*

*DECT Forum provides a unique platform for the exchange of experience between users, operators, regulation and standardisation bodies to ensure the sustained growth and acceptance of DECT world-wide.*

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## LEADING MANUFACTURERS AND OPERATORS JOIN FORCES IN FAVOUR TO DECT

### Common Forum for DECT World-Wide

Given the major worldwide success of DECT (Digital Enhanced Cordless Telecommunications), the two DECT bodies, namely the DECT Manufacturers' Forum (DECT Forum) and the DECT Operators Group (DOG) decided to coordinate their activities and to merge their organisations to create a common world-wide "DECT Forum". The inaugural meeting took place on the 9<sup>th</sup> January 1997 in Paris. The meeting brought together 19 organisations, operators, and manufacturers from the very beginning. This new Forum made its first appearance before an international audience at the "DECT'97" conference on 27<sup>th</sup> January 1997 in London. The DECT Forum defined its main objective to sustain and to even further raise the success of the world-wide leading digital cordless technology DECT. Since the inaugural meeting 7 additional member organisations joined the DECT Forum as of end of May 1997.

The main objective of the DECT Forum is to sustain the momentum with which DECT is spreading and to raise even further the acceptance level of DECT as the global cordless communication standard. The DECT Forum, an association registered in Geneva (Switzerland), will promote the exchange of information and experience world-wide among all regulatory and standardisation bodies concerned, the network operators,

manufacturers and the millions of DECT users. Managing the evolution of DECT in a way that protects legitimate investments and permitting smooth service migration and expansion towards UMTS and IMT 2000 has been recognised as the common goal of all DECT Forum members.

The DECT Forum organisation comprises the General Assembly of all the DECT Forum members, the DECT Forum Board as the decision making body, and the Permanent Secretariat as the DECT Forum contact in Solothurn (Switzerland). Furthermore, 4 Working Groups (WG) share the Forum's operational work items, notably:

- Applications WG
- Local DECT Fora coordination WG
- Marketing WG
- Technical WG

The Working Groups prime objectives are as follows:

**Applications WG** prepares scenarios and business cases for DECT applications like wireless local loop, cordless terminal mobility, dual mode GSM/DECT and a variety of data applications.

**Local DECT fora coordination WG** supports the global introduction of this innovative digital cordless standard through Local DECT forums, which are based in different countries around the world.

**Marketing WG** promotes DECT as the global

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**News Bits**

More than 700 participate at the "DECT'97 World Conference" in London. Large success also at "DECT Asia'97 Conference" in Hong Kong.

**Recent Frequency Allocations**

Review of the **Chinese** frequency allocation opens the band 1900 to 1920 MHz for DECT applications throughout China.

Frequency band 1880 to 1900 MHz for DECT usage also formally allocated in **Hong Kong** and **Malaysia**.

CITEL, the **Inter-American** Telecommunications Commission recommends the band 1910 to 1930 MHz for Fixed Wireless Access for technologies like DECT. Several countries such as **Argentina, Colombia, Uruguay, or Bolivia** already allocated this band.

cordless communication standard and ensures awareness of DECT advantages and benefits via provision of promotional material.

**Technical WG** provides specifications and proposals on how to improve the DECT standards.

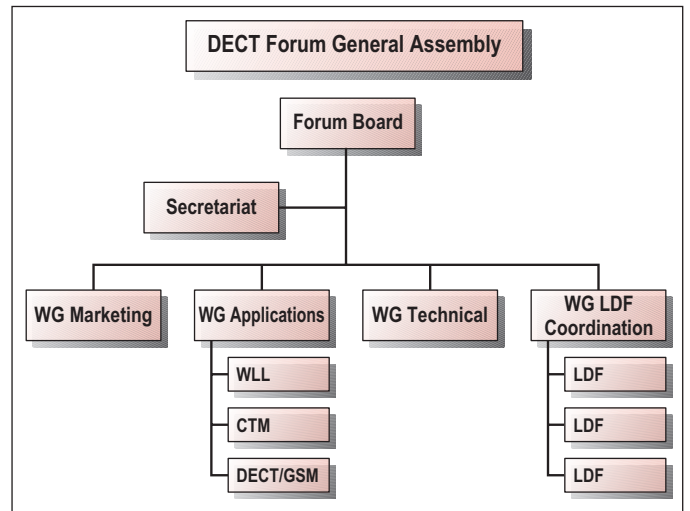
Membership in DECT Forum is open to all parties, who are interested to promote DECT. Enquires and applications for membership may be directed to the secretary of the DECT Forum Dr. Heinz Ochsner. For the address see page 1.

**DECT BEYOND EUROPE**

**Increasing Success for DECT In Asia**

The DECT Asia'97 Conference took place in Hong Kong, 4<sup>th</sup> to 6<sup>th</sup> March 1997, supported by the **DECT Forum** with great attendance of delegates from Asia, Australia, and Europe.

DECT Asia'97 underlined that frequencies have already been allocated for the use of DECT in most southern and eastern countries opening the market for a quick development of the different applications and making reality the world-wide success of DECT. Countries which already allocated frequency bands to DECT are: Brunei, Cambodia, China, Hong Kong, Indonesia, Malaysia, the Philippines, Singapore, Sri Lanka, Taiwan, while additional allocations are expected in the near future.



DECT Asia'97 also highlighted the success of the **Wireless Local Loop (WLL)** application in Asia where a number of significant contracts have been awarded to systems with DECT technology. At this moment, Indonesia and the Philippines are well ahead in deploying DECT, whereas significant markets such as China, India, Malaysia, and Thailand are in the starting phase.

DECT **Mobility** applications were presented at the DECT Asia'97 Conference by European operators from Switzerland, Norway, and Finland, emphasizing the great acceptance of the end user to the combination of DECT mobility in private and public places.

Finally, the evolution of the DECT standards were discussed, clearly defining DECT as one of the gateways towards IMT 2000.

**DECT WORLD-WIDE**

**DECT Around the World**

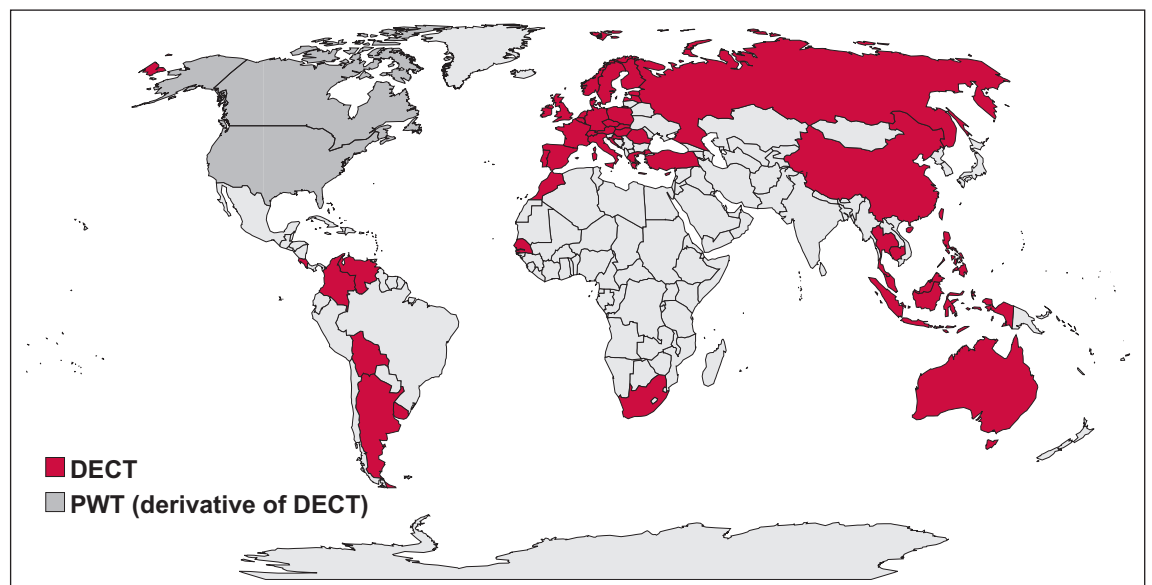
After its successful introduction in Europe, DECT has found big interest all around the world. As the map of frequency allocations shows, frequencies for DECT are available in all continents and many systems have been successfully deployed.

A few notes are necessary for this map:

- Allocations shown are for either private or public use. Some countries do not yet allow

both uses.

- The North American version of DECT (Personal Wireless Telecommunications PWT) has defined modifications to a few more radio parameters.
- Allocation of frequencies to DECT is in progress in many other countries throughout the world.



**NEW LOCAL DECT FORUM IN INDONESIA**

To promote DECT locally, a Local DECT Forum has been founded in many areas of the world; the newest one in Indonesia. The Local DECT Forum does local promotion activities such as conference organisation, building up relations with regulation authorities, or acts as a contact point for future DECT users.

A first meeting of the Indonesia DECT Forum took place in Jakarta on the 27th of March with the presence of Alcatel, Ericsson, Lucent, Philips and Siemens. The objectives of the new Local DECT Forum are to promote DECT as the preferred technology for local loop, mobile, residential and business applications. A number of operators have already expressed their interest in participating in it.

In Indonesia DECT has been already been selected in WLL deployments and has in hand, orders for more than 200'000 lines. DECT is presently targeting the cordless mobile licences for which CTM solutions are perfectly suited.

**AN EXCITING PAST AND A BRILLIANT FUTURE**

**DECT: An Overview**

Little did they expect, the few pioneers which started the DECT activities more than a decade ago, about the world-wide potential this technology eventually would develop. The technological objectives set at the beginning are now the basis for a variety of applications for which DECT will be the only available technology protecting long term investments.

**Versatile Technology for Unlimited Use**

The forerunners set the ultimate objective: to create a technology platform with the long-term potential to develop into many yet unknown applications and to be convenient in many generations of products. This mission has been maintained through all the development stages of DECT until today. And this ongoing mission will guarantee that DECT remains the world's only cordless technology platform which for its users

**FORUM CONSTITUTION**

**Founding Members**

- Alcatel, France
- Bosch, Germany
- Cégétel, France
- DeTeWe, Germany
- Deutsche Telekom/T-Mobil, Germany
- E-Plus, Germany
- Ericsson, The Netherlands
- Hagenuk, Germany
- Helsinki Telephone Company, Finland
- Italtel, Italy
- Lucent Technologies, France
- Panasonic (Matsushita) Ltd., United Kingdom
- Philips, The Netherlands
- Siemens, Germany
- Telecom Finland, Finland
- Telecom Italia, Italy
- Swiss Telecom PTT, Switzerland
- Telenor, Norway
- Telia, Sweden

**Board Members**

- Nicolas Houéry, Cegetel (Chairman)
- Peter Berwing, Siemens AG (Vice Chairman)
- Ignacio Alvarez Castillo, Alcatel Telecom
- Guy Cayla, Lucent Technologies
- Sandro Dionisi, Telecom Italia
- Vladimir Durovic, Telia Mobilitel AB
- Suresh Kandiyoor, Ericsson
- Joar Løvsletten, Telenor AB
- Peter R. Martin, Swiss Telecom PTT
- Ruud van Bokhorst, Philips

**NEW MEMBERS SINCE CONSTITUTION**

**Full Members**

- Ascom, Switzerland
- Telefónica, Spain

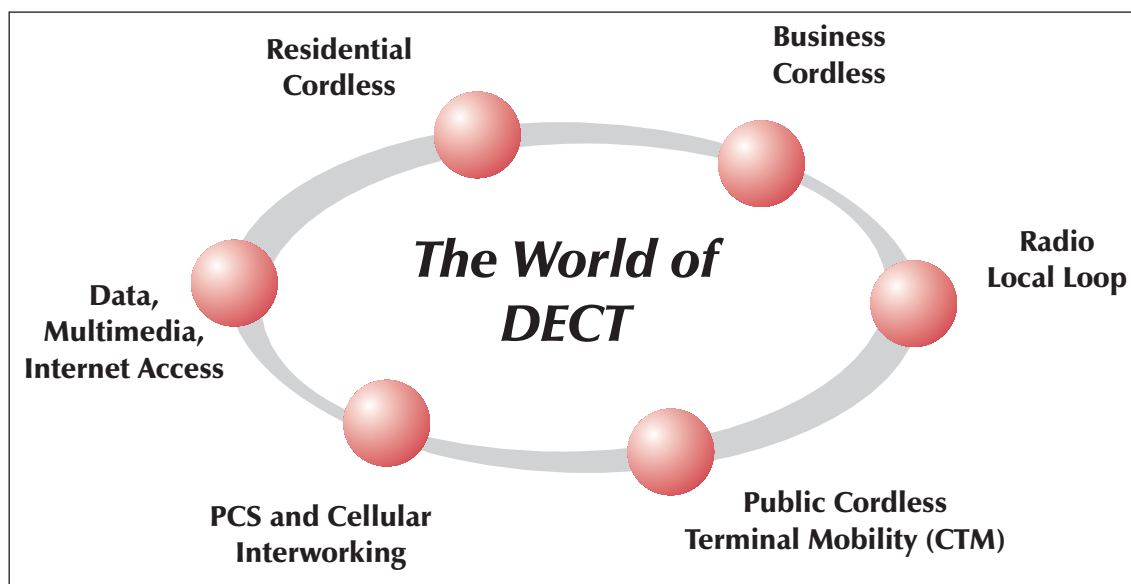
**Associated Members**

- Cetecom, Germany
- SDX, United Kingdom
- Crompton Greaves, India
- Shyam, India
- WS Systems, India

**Status of Standards**

CTR 22 (DECT GAP) is due to be published in the European Union's Official Journal. Within 6 months after publication any new DECT telephony terminal must comply with CTR 22.

CTR 6 (DECT Access) and CTR 10 (DECT Telephony) have been available officially since 1994. Their revised editions 2 have been published by ETSI in January 1997 and are expected to soon come into force through publication in the Official Journal.



## Forthcoming Issues

Forthcoming issues of the DECT Forum News Letter will address special topics such as CTM, DECT world-wide, DECT Data, WLL

ensures protection of investments well into the next century.

The versatility of the DECT standard would call for a large number of individual functions to be defined. To prevent that unnecessary many of these functions would be required to be implemented in each DECT product, DECT introduces yet another useful and well-proven concept: The "profiles". A profile defines a set of mandatory functions needed for a particular application. The best known profile is GAP (Generic Access Profile) needed for normal telephony. This concept at the same time guarantees best inter-operation between products of different suppliers, competitive products through a minimum of functions required to be implemented, while still leaving anything open for new innovative product features as well as new applications.

## A Full System Standard

At the beginning, DECT was seen and conceived as a pure radio access technology. But integration with other networks cannot be limited to the interface between the DECT fixed infrastructure and the partner network as the different network capabilities have to be transported over the air interface to the terminal. DECT standards are a set of fully open system specifications to allow seamless interworking of DECT terminals with their fixed network counterparts. Today, by virtue of appropriate profiles, DECT radio access can be integrated into (not just attached to) any type of system concepts: analogue PSTN, ISDN, mobile GSM networks, INAP based intelligent networks, data networks, to name the most relevant ones. The modular construction of the DECT standards will allow integration with other networks faster than any other radio technology.

## Success in Many Areas of Application

DECT products are on the market since 1994. Between 1994 and mid 1997, more than 50 suppliers shipped more than 8 million units. The real momentum however will be given to the technology in 1997: Market analysts expect another 6.5 million shipped just in this year.

Residential cordless telephones has been the most successful application of the DECT technology so far. More than 7 million units have been sold by now.

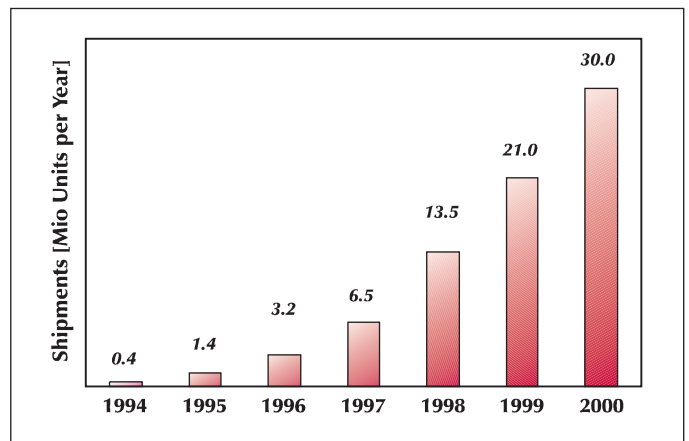
With the DECT technology, the concept of Wireless PBX, covering large business complexes very efficiently with a cellular structure using small cells, was introduced. Even the professional PBX market which is known to be very conservative could so far be delivered with 10'000 systems.

## Calendar

### DECT Forum Meetings

General Assembly, 14<sup>th</sup> October 1997, Madrid (Spain)

To access DECT Forum Meetings, Forum membership is obligatory. Membership is open to all parties being interested in promoting the DECT standard. Contact the Secretariat (see page 1) for further information or, alternatively, visit <http://www.dect.ch>.



More recently the general interest focused onto public applications. One of these is the use of DECT as an access technology in Radio Local Loops (RLL) systems. Public mobility and mobility in the fixed network is aimed at with the Cordless Terminal Mobility (CTM) concept. For RLL and CTM, about 1'000'000 terminal units (handsets and fixed installations) have been dispatched so far.

It might be interesting to note that DECT data application was actually the first DECT application to hit the market. Addressing mainly a professional market, that particular product has been installed only in a few cases but to the full satisfaction of their owners. With the data and ISDN profiles underway, products offering up to 64 kbit/s data rates compliant with protocols such as V.34, V.42bis, and V.120 will become available this year. In the near future DECT products will be capable of handling multimedia data with rates up to 552 kbit/s.

DECT will also open the way to real Personal Communication Services (PCS). In an optimal way, DECT complements GSM in high traffic density zones and pico-cellular indoor environments. Dual-Mode GSM/DECT terminals will allow use in both areas where as the ETSI profile for such dual-mode terminal will guarantee supplier independence.

Future issues of this News Letter will address these applications in more detail, both technically as well as from a user perspective.

## DECT in the Future

1997 will be the year of DECT: a large variety of new products has been introduced at CeBIT. 1997 will sell 7 million units, more than the years before. By the turn of the century yearly shipments will reach more than 30 million units with no signs that growth will slow down. The openness of the DECT concept will assure its evolution towards UMTS and IMT 2000 and hence the protection of the investments into this technology done by manufacturers and users for decades yet to come.