Leading Smart Card Manufacturers Announce Formation of Java Card Forum - Industry initiative endorsed by Sun, creator of the Java™ Card API standard

LONDON (12 February, 1997) -- The two largest smart card manufacturing companies, Gemplus and Schlumberger, today announced the formation of the JavaTM Card Forum. The objectives of the group are to promote the Java Card API as an industry standard platform for smart cards and allow the exchange of technical information between participants.

The Forum will be comprised of members from the community of Java Card licensees. It will immediately establish bridges with Java Card users in various vertical markets addressed by the technology. As Java Card end users, representatives from banking, retail, telecommunications, network access, government, health care and other markets will be considered for participation in Java Card users ad hoc groups.

"Schlumberger and Gemplus are to be congratulated for taking the lead in using the Java Card API and for their efforts in building industry momentum around smart card applications based on Java technology," said Jon Kannegaard, vice president of software products at JavaSoft, a business unit of Sun Microsystems, Inc. "We believe that Java's 'Write Once, Run Anywhere'TM feature is ideal for the development of smart card applications."

"As a key player in the development of Java Card API, Schlumberger is excited to see the industry move toward meaningful standardization for smart cards," said Jean-Paul Bize, vice president of Schlumberger Electronic Transactions. "After a decade of anticipation, the Java Card Forum signals the maturation of the smart card industry and, beyond that, the universe of smart card-based business. The Java Card standard will help smart cards gain critical mass through the growth of applications. The Java Card Forum will assure the marketability of these applications."

"This piece of technology is a small step for the Java universe but it will have a major impact on the broader world of consumer- and business-related electronic commerce," said Marc Lassus, Chairman and CEO of Gemplus. "It will give each individual consumer equal access to the cyber-economy. Gemplus is very committed to this standardization effort. We believe that the creation of this Java Card Forum along with Schlumberger will strongly enhance and promote the Java Card standard. It will be the premier forum for channeling recommendations from the smart card industry to JavaSoft." The charter of the Java Card Forum is to promote Java-based standards for smart cards. Its main goal is to ensure that the "Write Once, Run Anywhere" capabilities that Java provides to smart cards will continue to evolve in order to meet the needs of all types of smart card applications.

The objectives of the Java Card Forum are to:

- promote the Java Card API and associated standards to the smart card market and to specification developers;
- prepare technical documents (application notes and so forth) in support of the Java Card API;
- exchange technical information among members about the Java Card API and its implementation;
- provide technical input to chip suppliers for chips embedded with Java Card implementations; and
- foster dialogue among software suppliers regarding the Java Card API.

The Java Card Forum will invite applications for membership from Java Card API licensees who commit to using the Java Card API in their products and promote it as the preferred solution for dynamic multiple application smart cards. In addition, Java Card users, who are committed to the use and promotion of Java Card in their markets, will be invited to join end user ad hoc groups.
Java, developed by Sun Microsystems, Inc., is the first open, object-oriented software platform. In 1996, a collaboration by JavaSoft with smart card manufacturers resulted in the Java Card API, extending the range of Java applications to the smart card. Smart card companies had been looking for an open, standard and secure programming environment to meet market needs for multiple application cards, and the Java Card API fit these requirements. JavaSoft unveiled the Java Card API in October, and Schlumberger announced their smart card based on the Java Card API, Cyberflex, shortly after.

Gemplus has been integrating open standards into smart cards for information systems since 1993 when it released its first card with an interpreter and query language. In 1995, Gemplus spun off a Silicon Valley software startup company, Integrity Arts, to further the integration of smart cards with the world of new information systems through advanced card runtime software and tools. Gemplus enthusiastically supported JavaSoft's announcement of the Java Card API last October which now brings the benefits of Java to smart cards. The Java initiative for cards appears extremely well suited for deployment of dynamic secure multi-applications schemes, such as electronic commerce or network access.

**ADDENDUM: Quotes from Java Card Forum Endorsers**

**IBM:**
IBM Smart Card Solutions business unit today announces its full support to the Java Card Forum creation. In applying a broad range of experience in multifunctional smart card solutions, IBM are pleased to help establish a system-wide JAVA standard for smart cards. IBM Corporation support Java technology on a variety of computing platforms.

The Smart Card Solutions business unit of IBM Corporation have been designing and supplying smart card solutions for over 5 years. Recent successes in the travel, banking and campus sectors have enabled IBM to further develop its offerings in line with Network Computing, Java and other groundbreaking initiatives. said John Noakes, Smart Card Marketing.

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For more information on IBM in smart cards, visit their web site.

**Informix:**
"The combination of Java's flexibility, security and portability, the smart card technology and the Informix's Java-anywhere strategy provides developers with a fast, platform-independent and easy solution for developing new intelligent secure web applications, and companies with a foundation on which to build a next-generation of client/server applications. Informix is welcoming this users' group as it is a first step to converge integration of enterprise data management into card systems," said Jeff Hudson, VP Product Marketing and Business Development, Informix Software Inc.

For more information: PR contact - Jeff Lettes. Tel 1(415) 926-6326.

**Integrity Arts:**
"Java is a powerful tool for the creation of software in cards, but its use must be harmonized with the experience of the card industry," said Patrice Peyret, President and CEO of Integrity Arts, Inc. "This group will provide an excellent forum to coordinate this experience with the work at JavaSoft."

For more information: Contact Peter Cattaneo, Integrity Arts, Inc. Tel 1(415) 655-7690.

**Motorola:**
Commenting on behalf of Motorola, the leading supplier of computer chips for smart cards, Mike Inglis, worldwide smart card operations manager, said, "The move away from proprietary, single application operating systems will revolutionize the smart card market. Offering a common API
which utilizes one of the most popular and dynamic programming languages, Java, will give
developers the freedom to create a myriad of new smart card applications."
For more information: Contact Kathleen Reid, Motorola Ltd, East Kilbride, Scotland. Tel +44 1355
565447.

Oracle:
"Oracle is excited about the idea of using Java technology to further smart card capabilities. It has
great potential for use in Oracle's Network Computing Architecture and our electronic commerce
efforts," said Beatriz Infante, Senior VP of Internet and Media Products at Oracle. "Oracle is
committed to using Java throughout NCA, and its application to smart cards presents excellent
opportunities for network computing."
For more information: Contact K. Paige O'Neill, Oracle Corporation, Redwood Shores, CA. Tel 1
(415) 506-3429.

Racom:
"Racom Systems Inc. endorses the Java Card Forum as a positive step in speeding the adoption of
smart card systems. The Java Card Forum's efforts can help to bring smart card software into
harmony with the computer industry, thereby accelerating the use of contact and contactless smart
cards in financial and information management systems."
For more information: Contact Bill Jacobs, Racom Systems Inc., Greenwood Village, CO. Tel 1
(303) 771-2077.

VISA International:
"Visa actively promotes open industry standards for chip cards, including the initiative that JavaSoft
has underway with its Java Card," said Francois Dutray, group executive vice president, Visa
International. "We plan to be a catalyst and active participant in the Java Card Forum facilitating the
integration of requirements from our member financial institutions for flexible and cost-effective
multiple function cards. Open standards will allow our members to move quickly to develop and
deliver innovative solutions, thus enabling their differentiation in the marketplace."
For more information: Contact Roseann Clavelli, Visa International. Tel 1 (415) 432-3439.

Background Information
Gemplus is the world leader in both plastic and smart card products with a yearly production capacity
of 900 million cards and an international presence in 23 countries. With substantial capacities in
production of smart PVC cards, APS smart cards, contactless cards, electronic tags, chip design,
development of operating systems and application software, card printing and assembly, extended
personalization services, card reader design and manufacturing, and interface design, Gemplus' key
factor of success is its ability to keep turning out new products and applications for every imaginable
customer demand.
Gemplus already supplies to more than 80 countries worldwide in applications such as financial
transactions, loyalty, telecommunications (public and mobile), transport, education, healthcare,
gaming, identity, access control, pay TV, computer network security and electronic commerce.
For more information: Contact the Gemplus Web site.

The Schlumberger Electronic Transactions group of Schlumberger, Ltd. (NYSE:SLB), supplies
cards, terminals and management systems across the entire range of magnetic and chip card
applications. As the transaction industry's leading single-source supplier, the company provides cards
and systems for telecommunications, retail and banking, retail petroleum, parking and mass transit
ticketing, health care and for communities such as college campuses. The company produces
hundreds of millions of cards annually as both private and government sectors move toward cashless,
paperless transactions.

Drawing upon Schlumberger's presence in more than 100 countries, and with design and manufacturing in Europe, North America and Asia, Electronic Transactions has products and services for secure, convenient financial and data transactions for its clients and their customers.

For more information: Contact the Schlumberger Electronic Transactions Web site.

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Cyberflex is a trademark of Schlumberger.