FOR IMMEDIATE RELEASE
September 24, 2010

Dentsu, Nihon Unisys and MIT Media Lab Collaborate in a Project Aimed at Creating a “Context-reading Communication Computer”
—Use a crowd-sourced program to build a database of common sense and seek ways to make use of it for communication—

Dentsu Inc. (TSE: 4324; President & CEO: Tatsuyoshi Takashima; Head Office: Tokyo; Capital: 58,967.1 million yen; hereinafter “Dentsu”) announced today its collaboration with Nihon Unisys Ltd. (President & CEO: Katsuto Momii; Corporate Headquarters: Tokyo; hereinafter “Nihon Unisys”) and the MIT (Massachusetts Institute of Technology, USA) Media Lab (see Note 1) in a project aimed at creating a “context-reading communication computer.”

The aim of this project is to create a database of the shared common background knowledge and senses (hereinafter referred to as “common sense”) that we humans use when we converse with others, and then, by using this database in a computer system, create a computer that can understand implicit meanings and nuances of language in the same way as humans, and use the appropriate knowledge and words at the appropriate time.

Moreover, this project will be driven not only by special researchers and laboratories, but also through the user participation model of crowdsourcing (see Note 2), which will enable the database to be created by involving the general public who will have fun as they take part.

The project is divided into two sections: the building of a database of common sense (the "input project"), and communication that utilizes this database (the "output project").

As a first step, activity programs inviting the public to participate will be uploaded to the project website (URL: http://www.omcs.jp) on September 24, 2010. In the input project, an association game called "Play a Quiz Game with Nadya" will be used to gather common sense from the players. The output project will feature the "Poi bot" robot character which can imitate a person’s conversation by learning his/her distinctive communication style and way of thinking.
Dentsu and Nihon Unisys are collaborating with the MIT Media Lab, where Professor Emeritus Marvin Minsky (see Note 3), one of the world’s leading authorities on artificial intelligence, has made fundamental contributions to the fields of robotics and computer-aided learning technologies. At the Lab, they are working with Henry Lieberman (see Note 4), head of the Software Agents Research Group, whose research focuses on developing software that utilizes common-sense reasoning.

Through this project’s diverse research activities, Dentsu is seeking a solution that will contribute to the realization of enhanced customer-oriented services, namely a next-generation client-consumer marketing communication model employing artificial intelligence (AI) that has common sense.

Nihon Unisys is pursuing an interface that will provide a next-level experience to consumers at both online shopping sites and bricks-and-mortar stores.

◆ “Play a Quiz Game with Nadya” URL: http://nadya.jp (from September 24)

◆ “Poi bot” robot character URL: http://poibot.jp (from September 24)
Note 1: MIT Media Lab
The MIT Media Lab, founded by MIT Professor Nicholas Negroponte and former MIT President Jerome Wiesner, celebrates its 25th anniversary this year. Lab researchers focus on the impact of emerging technologies on everyday life—technologies that promise to fundamentally transform our most basic notions of human capabilities. Unconstrained by traditional disciplines, Lab designers, engineers, artists and scientists work atelier-style in some 25 research groups, conducting more than 300 projects that range from neuroengineering, to how children learn, to developing the city car of the future. The Lab is responsible for more than 80 spinoffs, and has developed the technology for numerous commercial products, including e-ink, LEGO Mindstorms and Guitar Hero.
URL: http://www.media.mit.edu/

Note 2: Crowdsourcing
Crowdsourcing, or collective intelligence, is the gathering of the wisdom of a group of people (a crowd) via the Internet or other means to solve problems. Wikipedia, a portmanteau of the words “wiki” (collaborative, editable website) and “encyclopedia,” is a representative example of crowdsourcing. This online encyclopedia is continually being updated by the “wisdom of crowds.”

Note 3: Marvin Minsky
Born in New York City in 1927, Marvin Minsky is an American mathematician, physicist and computer scientist. He is one of the great pioneers of artificial intelligence research, and is known for his frame theory. He is also referred to as the “father of artificial intelligence.” Raised in New York, he served in the US Navy during World War II. In 1946 he entered Harvard University, first specializing in physics but then later switching to mathematics. In 1951 he entered Princeton University’s Graduate School, and earned his doctorate in mathematics in 1954. In 1961, he transferred to the Massachusetts Institute of Technology (MIT) where he studied under Warren McCullough. Starting in 1963, he headed MIT’s AI Laboratory for a period of approximately ten years. Currently he is a professor at the MIT Media Lab, a member of the National Academy of Sciences and a member of the National Academy of Engineering in the United States. He won the Turing Award in 1969, the Japan Prize in 1990, the IJCAI Award for Research Excellence in 1991 and the Benjamin Franklin Medal from the Franklin Institute in 2001.
URL: http://web.media.mit.edu/~minsky/

Note 4: Henry Lieberman
Henry Lieberman is a research scientist at the MIT Media Lab, where he heads the Commonsense Computing Initiative. Inspired by fellow Media Lab Professor Marvin Minsky’s vision of artificial intelligence, Lieberman’s Open Mind Common Sense project is collecting statements of knowledge about people and everyday life. This will give computers background knowledge that will make it easier for them to understand,
communicate with, and act sensibly in their interaction with people.

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