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Briefing
KNOWLEDGE STREAM
Building Russia's Creative Capital

**JUNE 17, 2011 — 13:20–13:50, Pavilion 8, Conference Hall 8.2 Innovation
Hall**

St. Petersburg, Russia
2011

A new scheme which has been launched in the Russian educational system, offering students from all over Russia the opportunity to take distance learning courses from leading world experts, using modern video conferencing technology.

Moderator:

Sergei Guriev, Rector, New Economic School

Panelists:

Igor Agamirzyan, Chief Executive Officer and Chairman of Executive Committee, Russian Venture Company OJSC

Arkady Dvorkovich, Aide to the President of the Russian Federation

Alexander Provotorov, President, Chairman of the Board, Rostelecom

Dmitry Repin, General Director, Digital October

Igor Shchegolev, Minister of Communications and Mass Media of the Russian Federation

S. Guriev:

This session is devoted to the Knowledge Stream project. We are going to get started despite the fact that Minister Shchegolev is running late. We are under tight time constraints—we need to finish up by 13:15.

I apologize, but this session will be conducted in Russian. Dmitry Repin is going to tell us about Knowledge Stream, and about what the project entails. But before I turn things over to him, I would like to mention some of the new developments in global higher education today.

In the previous session, Eric Schmidt had much to say about how global education is changing and becoming an industry of superstars. The fact is that the cost of content delivery via the Internet is coming down rapidly, and, naturally, in this business, as in many others, the one generating content is the professor who performs just better than the rest and, as a result, he gains the whole world all at once—or, as they say in English, “winner takes all”. Actually, this transformation is well underway.

One of the pioneers in this field, Massachusetts Institute of Technology (MIT) arranged for an open exchange of educational programmes almost 10 years ago now. Many professors the world over are teaching at local universities using material made readily available on the websites of leading American universities. This trend is catching on fast, thanks, I might add, to Google’s support of YouTube channels dedicated specifically to content provided by educational institutions. As rector, of course, I am very pleased that our Russian Economic School has a well visited channel offering our lectures and public addresses.

Why is this happening? It’s really a matter of our world becoming global—and once the language barrier is removed, it will be totally global, where education is concerned. And, truly, the slightest variations in quality will have tremendous significance for the market share, which can then be seized by one university or another, or by one professor or another. Quality makes a difference. We see, for example, that nearly every high school graduate in Russia goes on to study at an

institution of higher learning. Paradoxical though it may seem, the current reality is that the number of students now entering colleges and universities is actually higher than the number graduating from high school, but this quantity does not necessarily translate into quality.

We recognize that there are many poor quality universities in Russia. This problem is not unique to Russia. Actually, many countries of the world have begun to discuss education largely in numerical terms. This is particularly the case in developing countries, where despite a dramatic rise in education level per capita over the past 50 years, the quality of education remains mediocre, contributing little—from an economic growth and development standpoint—to the growth of productive labour and human capital. It is for this reason that access to the best quality education is becoming a serious issue. This, as a matter of fact, along with the creation of a level playing field for students in many countries of the world, as Eric Schmidt put it, is the subject of much discussion in academia today. It is no longer necessary to study in Cambridge, Massachusetts or Palo Alto, California in order to have access to lectures given by the best of professors. Moreover, the playing field is levelling out for entrepreneurs in the field of education. If you want to establish a small school with a computer science or economics emphasis, and you know how to put together such a school or department but don't know how to teach, let's say, psychology, then you can appeal to a teacher of the discipline in question from among your colleagues across the ocean. You can tell your students, "Because we are unable to offer you the course here, we have an arrangement whereby you can take this course from Massachusetts." This creates the opportunity for smaller institutions of quality to move into the education market. They won't necessarily be universities—they may be small enterprises which, in some cases, lack university status. Nonetheless, they might render superior educational services for which there is market demand. That's why the very thing which Eric Schmidt only touched on in the previous session is actually taking place. Over the next few

years we will see radical changes in academia. But now we will hear from Dmitry Repin, General Director of Digital October, who will tell us about the Knowledge Stream Project.

D. Repin:

Thank you, Sergei. Briefly, I would like to tell you about the new project backed by the Russian Venture Company which we are launching together with Rostelecom at the Digital October Centre for New Technologies and Technological Entrepreneurship.

Interestingly, the leading world universities and technology companies function as sources of knowledge with the potential to change the world, and based on which, new companies like Google are arising out of Stanford, MIT, Harvard and other universities. These companies have not only achieved financial success—they have altered the socio-economic fabric of our society. Our project will offer the most cutting-edge content to the Russian audience – the most current knowledge – in the form of lectures given by leading practitioners and leading representatives of academia.

Who makes up our audience? These are not your average students, or perhaps even your ordinary individuals. They are more likely the future champions, those who will become innovative entrepreneurs, operating at the forefront of their fields. Joi Ito, for example, who was recently appointed Director of the MIT Media Lab, attended two different universities, but never completed either academic programme. Without a formal education, Ito is going to manage leading professors with all the regalia. And they embrace him because he has achieved astonishing success without the benefit of a formal education. Ito was the first to register in an online course in Japan back in the 80s.

How will the programme be run? Our plan for this year is to host more than 100 educational programmes on site at the Digital October Centre in Moscow. These will be high quality video conferences adapted for the Russian audience. It may

be individual lectures; it may be lecture series or even workshops. The most important thing is that the content we bring in will allow our entrepreneurs and academics to catch on to these ideas and develop them to their advantage. Although the programme officially starts in September, we will run the pilot workshops this June. On the 30th of June Mr Kawasaki of California will give a presentation on technological entrepreneurship via teleconference. We have already lined up programmes with a number of interesting academics and companies. The MIT Media Lab recently agreed to participate by contributing interesting accounts of venture companies in the field of social and urban environment or in computer graphics. I think it is also important that we adapt this knowledge for the Russian audience because not all instances and cultural associations are readily understood. So, naturally, we are arranging for interpreting during the videoconferences to allow for live interaction, i.e., a question and answer session. Some individuals will be on site in the classrooms of Digital October so that afterwards there will be opportunity to meet and discuss things that might have been missed—and of course we will make these programmes available online throughout Russia, even in the regions. We are hopeful that many regions will benefit. For our part, we are open to partnering with anyone who might be interested. Thank you very much to Rostelecom and the Russian Venture Company. By the way, it was RVC who more or less gave us the idea for the project. We have adapted it just a bit. We are open to collaboration with other organizations and, as far as content goes, we are interested in the most current global content. This, perhaps, is where international companies can be of help. We are also interested in conducting joint lecture series and joint programmes. Thank you.

S. Guriev:

Thank you very much, Mr. Repin. Well, as always, the question arises as to how sustainable the project will be from the point of view of business. You said that

Rostelecom and Russian Venture Company are supporting the project at this point. Do you have a project business model?

D. Repin:

For now—for the first year, at least—it is more like an education project. Our thinking is that it may become the basis for a new system of online education in the future—a dramatically new system. Perhaps it won't be officially associated with any particular university, but for a certain group of people it will be the primary—or at least a very important—source of knowledge. That's when a business model might surface.

S. Guriev:

In other words, you think there may be a subscription or advertising revenue involved?

D. Repin:

A subscription, advertising, maybe some materials that will be worth something from the point of view of authors' rights, case studies, and so on. Maybe that goes beyond the scope of education, but it will allow for making money in some way.

S. Guriev:

Thank you very much. I would like to invite Igor Shchegolev, Minister of Communications and Mass Media of the Russian Federation, to comment on the project. Go ahead.

I. Shchegolev:

We talk a lot about the development of technology. We compare projects, bits, seconds, and metres, often forgetting that none of this in and of itself is the goal.

The goal is to convey specific content. The nature of development in this field is such that you often end up discovering some intriguing things right in the middle of that content—there is money to be made from them. They are voluminous, and it's understandable that they get shifted to the forefront. But in the grand scheme of things, the network—including the Internet—was designed to be a research network, an educational network. Here, to a significant extent, we are seeing a return to basics. This is a new technological twist which makes it possible to take full advantage of the educational opportunities afforded by modern information and communication technologies. In our world, which is becoming progressively smaller, it's very important to have these points of support. In many ways, they can serve as lighthouses for young people or seasoned specialists who opt to participate in the project as learners. They can determine for themselves which professors and experts they would find interesting to interact with personally and which projects they would prefer to participate in directly rather than remotely. And certainly it's important that this geography not be limited to two points, but also be on a global scale in order to attract lecturers from various universities. In time I think we will be able to use the international and Russian students now participating in projects along the lines of those initiated by Skolkovo and Digital October as lecturers and hands-on participants in this project.

S. Guriev:

Thank you very much. I would like to give Alexander Provotorov, CEO of Rostelecom, which is sponsoring the project, opportunity to speak about it.

A. Provotorov:

Thank you. This project was of interest to us for several reasons. Actually, you might say the idea was in the air, in the sense that a year ago already we began making a practice of inviting interesting entrepreneurs from the largest

technology companies to give lectures and conduct seminars that were open not only to Rostelecom employees, but also to our partners, Russia's largest IT companies. The next logical step, of course, would be to translate this into an interactive format since, naturally, it's no small thing for such busy people from, let's say, America or Japan, to fly in to give a few lectures. By doing this in an Internet-lecture format, these events become much easier and much more accessible. People are far more willing to participate in this type of event.

So the project was of interest to us from several standpoints. As a prospective buyer of similar lectures, we would be interested in organizing events like this for our specialists so that representatives of top Western technology companies can share their experience, answer questions, tell us in what direction information and telecommunication technologies are moving, and so on. And I would think that this might be of interest not only to Rostelecom, but likely to all large companies. And if you talk about business (which makes for an interesting question), then I saw the development of the project as including some type of corporate lecture courses selected with the largest companies in mind, the idea being to bring the experience of the West to employees in Russia, in Moscow—and not only in Moscow, but in the regions, too.

I would also like to say that Rostelecom operates throughout all of Russia. We are probably the most extensive Russian company. We are active in all regions—even in places other telecommunications company do not yet consider worthwhile in terms of potential return on investment. We recognize that even in the seemingly depressed and remote regions of Russia there is a high demand for the Internet, Internet-related products, television—and I think there is also a high demand for education projects. This, in my opinion, is where it is appropriate to speak of eliminating the educational inequality that Mr. Guriev spoke of, so that students living in outlying regions will be able to participate in the educational process of the best universities. The emergence of online courses, online universities and online departments made accessible not just to people living in

Moscow is totally conceivable. This would save a colossal amount of money for people who would no longer have to move to Moscow to study. They could study at home without having to leave their jobs. In the long run, this would benefit the economy as a whole and stimulate development of education in the regions.

S. Guriev:

The way you talk about this, it sounds like corporate social responsibility and philanthropy. Is this business for you at this point, or is it marketing? Why did you get involved in the project?

A. Provotorov:

For the time being, I would say that it is more the intersection of marketing and philanthropy, and here I agree with Mr. Repin that the project is unlikely to give anything back the first year. But we are following the trends in the telecommunications field and we realize that electronic education, Internet-based education—that's the direction the information and telecommunications industry is taking in our world. E-learning projects are cropping up for many network operators. Some are delving more deeply into this while others continue to pursue traditional telecommunications, but we are seeing new clients and more traffic all the while, not to mention marketing opportunities. That's why we think that this project will undoubtedly be profitable for us—from a marketing perspective at the very least. As for the future, we believe we have a grasp of what type of model can be created down the line based on the results of the initial experiments—the initial joint experiments with Digital October.

It's important to point out that Rostelecom is the pioneer in Russia of cloud computing, where the processing and storage of client information is maintained by a remote server. Together with the Ministry of Communications and Mass Media we are carrying out an e-government project that was built in its entirety on this model. We are thus inclined to think that we are saving large amounts of

public funds, as the regions will no longer need to create their own segments of e-government. We are doing all of this ourselves. At this point, we are interested in any future developments in this field because we have involved a significant number of experts in the project. We now have something in the order of 30 developers working on the creation of this cloud computing model. We need to move forward and seek additional ways to put this process, as well as the fruit of our experts' labour, to good use. And from my point of view, distance learning, including that involving the use of the Internet, fits this model perfectly.

S. Guriev:

Thank you very much. Now we would like to hear from the CEO of Russian Venture Company, Igor Agamirzyan. Go ahead, Igor.

I. Agamirzyan:

Thank you very much. A lot of accurate information has been presented here that is hard to refute. I am in total agreement. It was stated rather explicitly, and I'm inclined to agree, that if in its initial phases it isn't a marketing project, then this is a business development project. That is to say we are in effect developing an environment, which, in fact, is what Russian Venture Company is doing all the time. But here, if you will, I would like to move to a slightly more philosophical plane.

The fact of the matter is that distance learning is not a new subject, to say the least. I remember, in about 1972, the first time I encountered a distance learning class with black and white televisions on the walls and large headphones plugged into each desk. That was here in Petersburg—at the St. Petersburg or Leningrad Polytechnic University. Nonetheless, there was a television channel in those years—which, by the way, was available throughout the country.

But up until the past few years, the concept of distance learning didn't really take off. And why is that? For a variety of reasons. First, technology hadn't yet

advanced to that point. Simply watching a television programme where even an outstanding lecturer is teaching something fascinating—showing and telling—is beneficial, but it's no substitute for lectures where there is visual contact. And the quality isn't up to par. Frankly, it's only within the past few years that the Internet advanced to a transmission capacity allowing for a real presence effect. You could have achieved that only in exceptional cases five to six years ago, but now you can create a window to New York in your kitchen at home and sustain a connection online with another point on the planet. This has become accessible, and that is true even in terms of cost. That's the first point.

The second is that there was no real demand for this in the 70s and 80s, but, in my opinion, there absolutely must be a demand for it now. That's because of globalization. It's time we stopped talking about globalization as a process. It's time to talk about it as the current reality we live in. That said, this is the first time in the history of mankind that globalization in this particular form has occurred. In the past, everything was dependent upon territorial proximity, upon direct contact. For the first time in history remote communication has become both accessible and of high quality—it's technologically possible to have almost the same quality of contact we would have if we were in the same building, in the same classroom. At the very beginning of this discussion, Mr. Guriev spoke of radical changes in education. Yes, and from my perspective, such changes are totally inevitable in connection with this. But thanks to this phenomenon, I think these changes will occur not only in education, but also in many other social and economic spheres of society. That is why a distance learning project in a globalized world using appropriate technology capable of delivering quality content in such a way that it can be assimilated—broadly speaking, interactively—takes on a value that was previously lacking in earlier projects.

For us, for instance, it's critical that there is virtually no one in Russia to teach about technological entrepreneurship. We simply lack people with sufficient experience. Those who have the experience are either too busy, too expensive,

or they value their time too much to become systematically involved. Generally speaking, it's always easier for a professional instructor or successful businessman to find time to give and record one lecture. Then that can be duplicated, and he will need only to answer questions.

The next point: it's a matter of scale and information delivery to a vastly larger audience. When we first began to talk about this with Digital October, it was technology entrepreneurship-related themes that were uppermost in our minds. While there are 'gurus' and entire universities specializing in this (the Haas School of Business at the University of California Berkeley in the US, for example) that are inaccessible to us here, I am convinced that at the same time there are essentially no instructors in our Russian universities who are capable of teaching anything related to entrepreneurship, let alone technology entrepreneurship. The level of understanding demonstrated by our innovators regarding how global markets work is likewise unimpressive. And that is specifically because there is no place for them to learn such things. Many quite successful entrepreneurs either go through a large transnational business school or build their own organizations or enterprises from the ground up over a long period of time while learning from their partners. But this type of experience cannot be put to use on a grand scale. An ambitious approach is required to accomplish that. It's with this in mind that this project was initiated, but I'm absolutely certain that a business model will gradually emerge because, as I see it, this is the way of the future.

S. Guriev:

Thank you very much. We are out of time. I would like to summarize.

It seems to me that many people present here today came with a somewhat sceptical attitude, talking about how these lectures are available on YouTube. But, on the other hand, the aim of the project, as we have heard today, is not simply to bring these lectures here or to translate them into Russian, but to select

the entrepreneurs, practitioners or researchers that the Russian audience needs and create a medium for feedback, for Q & A, for contact—since this, of course, is precisely what makes education so valuable. And in this sense, even when the capacity to transmit lectures in real time via Google appears, there will still be a future for this project. It's not a matter of language. It's really a matter of addressing the question before the country today—the question of whether or not we will meet the demand for technology entrepreneurship education, an understanding of global markets and more. I want to congratulate Digital October, Rostelecom, and Russian Venture Company as you launch this project. Thank you very much.