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BELNET and eleven European partners sign MoU for more scientific co-operation

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Today at 11 o'clock representatives of the twelve participants to Sirene will sign an MoU at BELNET in the Wetenschapsstraat in Brussels. General manager Pierre Bruyère will sign on behalf of BELNET for the Belgian participation via BEgrid. The other countries are Austria, Denmark, Estonia, Finland, Ireland, Latvia, Lithuania, the Netherlands, Norway, Sweden and Switzerland. The head and deputy head of the research infrastructures department of the European Commission will also attend the signing.

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More Belgian grid useBELNET expects that Belgian institutes and researchers that do not yet use BEgrid, but who do benefit from international scientific collaboration, will be part of BEgrid and Sirene following the establishment of Sirene. Institutes that come into consideration include the Royal Military School, the Royal Meteorological Institute of Belgium (KMI), the Royal Observatory of Belgium and organisations active in aerospace technology.BEgrid and Sirene are interesting for exact and applied scientists as well as IT experts. And BELNET believes that the 600,000 users of the 160 BELNET clients --universities, colleges of non-university higher education, research centres and governments-- include many potential future users of BEgrid and Sirene. These grids allow research to be carried out in a wide range of disciplines such as astrophysics, biochemistry, biomathematics, meteorology, observation of the earth, the development of new medication and nuclear fusion.BEgrid, launched in 2003, has four hundred users at eight institutes: the Centre d'Excellence en Technologies de l'Information et de la Communication, the Facultés Polytechniques de Mons, the Katholieke Universiteit Leuven, the Universiteit Antwerpen, the Universiteit Gent, the Université Libre de Bruxelles, the Vlaams Instituut voor de Zee and the Vrije Universiteit

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Brussel.BEgrid has a computing power of 500 computer processors and a storage capacity of 4 terabyte. The BEgrid computers are connected via the high-speed BELNET computer network. Data exchange is 2.5 gigabit per second. At the end of this year this transmission speed will quadruple.Grid computingThe principle of a grid is as follows: connect a lot of computers anywhere in the world via a network and let them work as one huge, virtual computer. The unused storage capacity and computing power of the computers can be harnessed to automatically distribute a huge amount of data and very difficult calculations between the computers.The most powerful computer in the world, or one battery of computers, is no longer sufficient to store and process the amount of data that a medium-sized grid is able to handle. Another advantage of grid computing is that it is not horribly expensive. You don't have to invest in enormous and high-speed computers whose storage capacity and computing power are not always fully utilised.SireneThe reason behind Sirene, the new research grid of twelve smaller European countries, is that grids are becoming an increasingly important technological tool for science and research. Grids make an international advancement of science possible which before was unthinkable or much slower. Contrary to large countries, which spend a lot of money on the development of national grids and can leave their mark on European research policy much easier, international co-operation is vital for smaller countries.In Sirene BEgrid and the other eleven European participants share hardware, software, networks, data and people for scientific and research projects. The different parties take care of the installation, the maintenance and the development of the resources in the new grid. Future developments around BEgrid and the other computer infrastructures will occur in light of Sirene.Sirene is expected to be operational by the summer. After signing the collaboration agreement the twelve participants will decide how much computing power and storage capacity they will make available to scientists and researchers in the other countries. A website will tell them how many CPUs and terabytes they can use for their research.Representatives of the twelve participants will meet at least twice a year. Rosette Vandenbroucke, co-ordinator of BEgrid, will represent BELNET. An annual conference will be held. The Sirene presidency, for a term of two years, is currently in the hands of a Dutchman and a Swiss woman.The collaboration agreement signed today ends towards the end of 2008. The collaboration will be evaluated in the second half of next year. The participants aim at a long term collaboration around a grid to advance science and research. The group of twelve participants may well expand.Sirene takes into account the guidelines and advice of e-IRG (e-Infrastructures Reflection Group). This is a think tank for the development of a research infrastructure in which every European country has an official delegation. The participants in the new grid are also represented. They want to speak with one voice through Sirene within organisations that are working toward a European grid infrastructure in order to have more influence on the future of grid infrastructures for science and research in Europe."National boundaries should not be obstacles for science and grids," says Pierre Bruyère, General manager of BELNET. "Our mission is to provide the technological resources that allow Belgian academics and researchers to collaborate with researchers in other countries in order to advance science together. We are proud to offer current and future grid users in Belgium more possibilities via Sirene."More information about BEgrid and Sirene at http://www.begrid.be and http://sirene.eugrid.eu (website under development).About BELNET - "The network of knowledge"The government agency BELNET provides broadband Internet access to Belgian educational institutions, research centres and government departments. More than 550,000 end users have access to bandwidths of up to 2.5 gigabits per second; this is around one thousand times faster than the Internet access available to most consumers. References include all Belgian universities and most non-university higher education institutions, the computer network of the Federal Government departments (FedMAN), all federal scientific institutes, the larger public research centres and various government administrations. BELNET provides high-quality, secure Internet access via CERT (Computer Emergency Response Team) and a direct connection with worldwide research networks, including the American Internet2 and the European Géant. A pioneer on the internet, BELNET was founded in 1993 on the initiative of the Federal Research Policy. The network continues to further the cause of research, training and scientific co-operation.For more information, please go to http://www.belnet.be and http://cert.belnet.beSee also http://www.quadrantcommunications.be/downloads/belnetBELNETVeerle

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