



DANTE STRATEGY 2012-15: MORE FOR ALL

Connecting
NRENs

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DANTE Today

About DANTE Ltd

Established in 1993, DANTE (Delivery of Advanced Network Technology to Europe) is owned by a group of 15 European National Research and Education Networks (NRENs), which are responsible for providing data communications networking facilities to the research and education community on a national basis. DANTE is a limited liability company and a not-for-profit organisation.

DANTE's Role

European NRENs need an efficient and cost-effective vehicle to co-ordinate pan-European research networking on their behalf, and to ensure that project results are delivered on time, within budget and with high levels of reliability. DANTE was created to meet this need. Due to the essential role the European NRENs play in enabling and supporting research activities, Europe's research and education networking backbone has been co-funded by the European Commission within the EU's Research and Development Framework Programmes. The NRENs and DANTE are project partners in the pan-European research and education networking projects, with DANTE as the co-ordinating partner. This organisational model has proven to be a very successful way of operating research and education networking at a European level, and is being emulated by other world regions.

DANTE's overall purpose to date has been to plan, build and operate leading edge, pan-European research networks. Since its formation, DANTE has played a pivotal role in four generations of a pan-European research network: EuropaNET, TEN-34, TEN-155 and now GÉANT.

DANTE is also involved in other EU-funded projects related to research networking, sometimes, but not always, as the managing partner or project co-ordinator.

DANTE's core competencies include:

- Project management of the GÉANT project (GN3) with the main emphasis on build and operation of the GÉANT network, research and services development
- Project management of international research and education (R&E) projects.
- Data communications infrastructure development.
- Project feasibility assessment.
- Procurement.
- Network service development and provision.
- Customer support.

European recruitment has always been at the fore of DANTE's organisational development. Our diverse, multilingual staff represent many nationalities and operate throughout Europe.

DANTE currently has an annual turnover of approximately EUR50 million, of which around half comes from European Commission project funding. The other half comes from the European NRENs.

GÉANT and DANTE

DANTE is responsible for the overall operation, co-ordination and management of the GÉANT network on behalf of 32 NRENs across Europe. GÉANT partners also include Trans-European Research and Education Networking Association (TERENA), plus an additional four Associate NRENs. GÉANT is co-funded by the European Commission under the 7th Framework Programme.

In terms of network coverage, GÉANT is one of the world's largest research and education networks, comprising 25 European POPs, 12,000km of dark fibre on 18 routes, and 50,000km network infrastructure on 44 routes.

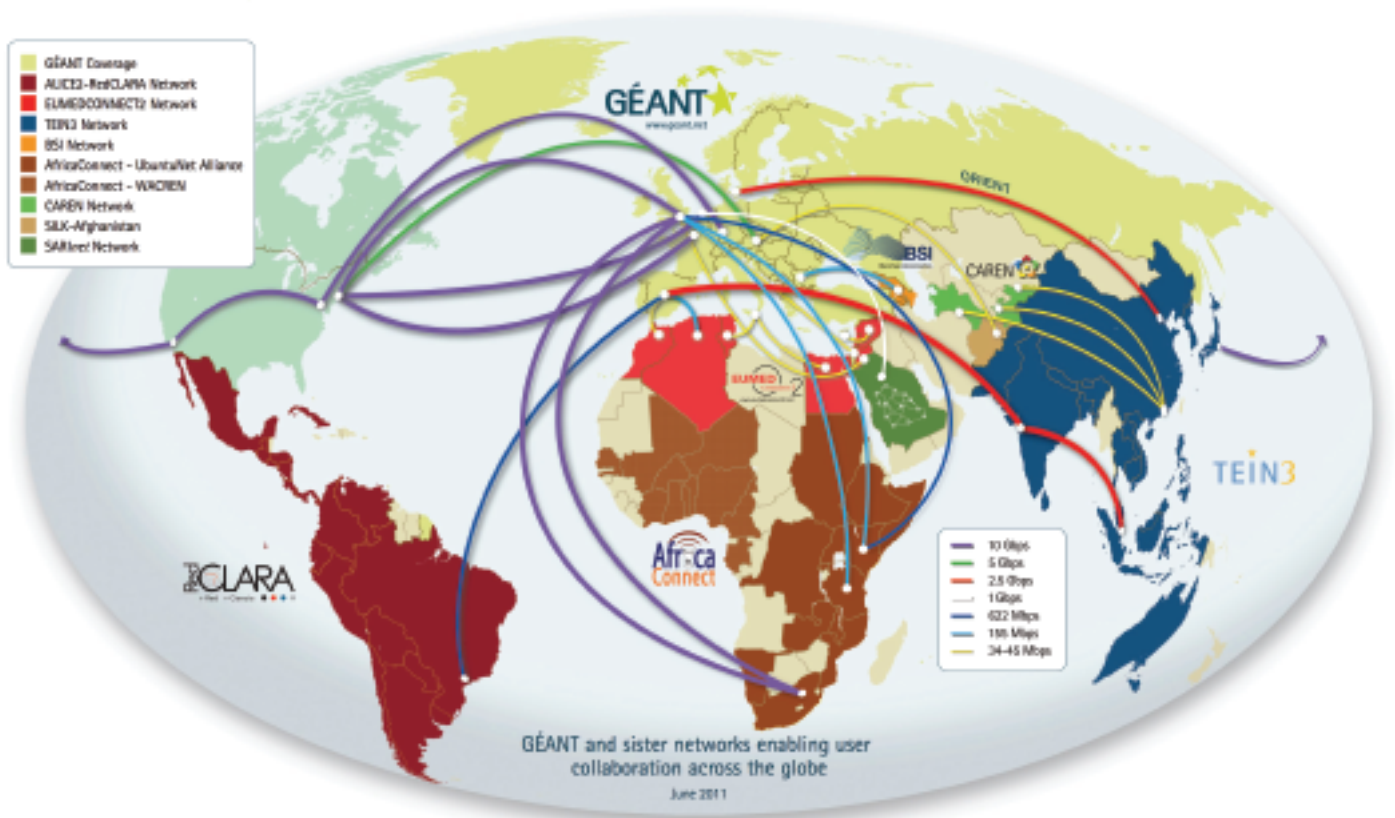
GÉANT also has an incredibly diverse international footprint, serving 40 million end-users, in more than 8,000 institutions, across 40 European countries. Network availability is proven "better than carrier class", with an availability rate up to 99.999 %.



Networks

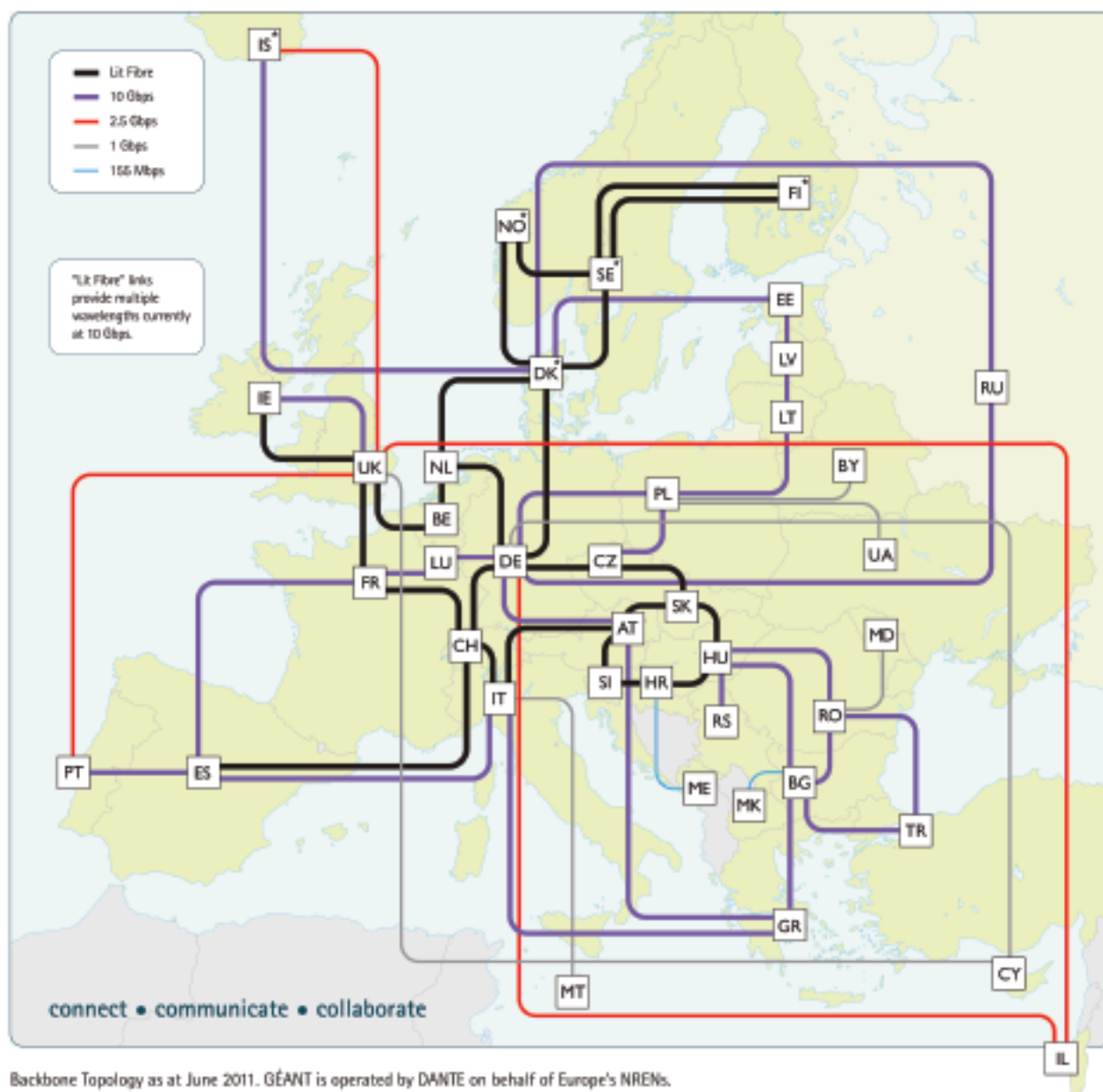
GÉANT At the Heart of Global Research Networking

Global Connectivity Map, June 2011



GÉANT The Pan-European Research and Education Network

Network Topology Map, June 2011



Backbone Topology as at June 2011. GÉANT is operated by DANTE on behalf of Europe's NRENs.



The partner countries and NRENs that GÉANT serves are as diverse in their make-up and organisational structures as our users. They include: Austria (ACONet), Belgium (BELnet), Bulgaria (BREN), Croatia (CARnet), Cyprus (CYNET), Czech Republic (CESNET), Estonia (EENet), France (RENATER), Germany (DFN), Greece (GRNET), Hungary (NIIF), Ireland (HEAnet), Israel (IUCC), Italy (GARR), Latvia (SigmaNet), Lithuania (LITNET), Luxembourg (RESTENA), Macedonia (MARNet), Malta (University of Malta), Montenegro (MRnet), Netherlands (SURFnet), Nordic region (includes Sweden, Finland, Denmark, Norway and Iceland) (NORDUnet), Poland (PSNC), Portugal (FCCN), Romania (RoEduNet), Serbia (AMRES), Slovakia (SANET), Slovenia (ARNES), Spain (Rediris), Switzerland (SWITCH), Turkey (ULAKBIM), and the UK (JANET).

A Word from the Chair

The delivery of world-leading broadband services to the research and education community across Europe is universally acknowledged as an outstanding success story of the last two decades. It has succeeded not only in the services delivered and research and education enabled, but also in the collaborative approach taken by more than 30 NRENs, working through DANTE and TERENA as well as within their individual countries and partnerships. This collaboration has taken place both at the technical level and by developing the relationships, policies and management structures that are essential to continued technical progress.

The rapidly evolving research environment now poses new challenges. The use of ever-greater quantities of data and computational power in conducting research across a wide range of disciplines will not only require ever more powerful networks but also a more coherent approach to integrating these with data storage and computational resources. New service paradigms, such as those envisioned in cloud technologies, will become increasingly important. The continued globalisation of higher education – where research is already a global business – will also require new approaches to the delivery of services. And we must all remember that these demands will need to be delivered against a backdrop of economic uncertainty. Indeed, the continued growth of Europe's research and education sectors will be crucial to restoring economic growth, and all NRENs have their own part to play in this essential task.

Although it has maintained successful operations for eighteen years, DANTE has not previously had an overall strategy to guide it and to inform all its stakeholders as to what they may expect from the company in the coming years. The Board and General Managers have together developed the strategy presented here to provide that sense of direction. It is an evolutionary strategy, building on present capabilities, particularly the skills and expertise of DANTE's primary asset, its own staff. But it does propose that much more can be achieved, always in collaboration with its NREN and other partners.

The strategy has the tagline 'More for All'. How much more can be achieved will be clear from what is set out in this document. It is also important to remember that DANTE exists to serve all NRENs in the most appropriate ways. As Chairman, I am always aware that at present, DANTE, for historical reasons, is owned by less than half in number of the NRENs it serves. A governance structure that is more inclusive of all NREN stakeholders would, in my view, strengthen both DANTE and the overall collaboration it represents. Governance cannot be a matter for the DANTE Board and shareholders alone to determine. Nevertheless, this will remain under consideration by the Board as it oversees the unfolding of this strategy, alongside the development of the next generation of the GÉANT network that underpins so much of what we accomplish together.



Bob Day, Chair, DANTE

Bob Day is Chief Technology Officer and an executive director of JANET, the UK's education and research network. He has served on the DANTE Board since 2008, and as Chair since July 2011.

A Word from the General Managers

This is the first strategy for DANTE in its long, successful history of expansion. This strategy was created through close co-operation between the DANTE Board and the General Managers. The DANTE Board has its remit in outlining the strategic directions for the company; whereas our remit as the General Managers is to implement this plan.

We acted as facilitators and contributors to the strategy development. This included providing the opportunity for DANTE staff to express their opinions, through a one-day strategy workshop, which captured their expertise, experience and vision.

The findings, ideas and propositions were collated for presentation and discussion by the Board in a series of executive workshops, enabling the Board to take informed decisions about the strategic directions for DANTE. The result is set out in this document.

'More for All' is intended to be a strong commitment by DANTE to all NRENs, both in Europe and beyond, to drive forward collaborations for the common good. The commitment means that during the strategy period, DANTE will do its best to include all the widely diversified NRENs in order to create more for all. We will strive to do that because there is a lot more to be achieved in the field of European and International Research and Education networking. Therefore, all positive initiatives working for the better good of all are indeed needed. We as the General Managers will work to make this possible.

We welcome the fact that, with the approval of the Board, we can take the organisation forward with the implementation of this strategy. By knowing clearly where we are heading, we have the best platform from which to secure further success of DANTE's activities for the benefit of the European NRENs.

Successful implementation, however, relies on co-operation with many stakeholders. As General Managers, we can do very little if this is not present. We would therefore like to encourage all to embrace the initiatives laid out in this strategy.

Strategy planning is here to stay at DANTE. The strategy will be revisited every year and look four-to-five years ahead, so we as General Managers, always have an up-to-date strategy as a steer.



Matthew Scott and Niels Hersoug, Joint General Managers

Appointed General Manager of DANTE in January 2010, Matthew Scott joined the company in June 1996, as Commercial Manager responsible for the financial operation of DANTE, and in February 2003, he became Chief Financial Officer. He has considerable experience in procurement and commercial negotiations, having been involved in the procurements for the last three, pan-European networks that DANTE has implemented, and has extensive knowledge of the international telecoms carrier market. Matthew is a qualified Chartered Accountant and has an Engineering degree from the University of Newcastle upon Tyne.

Niels Hersoug joined DANTE as General Manager in 2011. A Certified Project Manager and Master of Science Electrical Engineering and Business Administration, Niels is highly experienced in management and technology. Prior to DANTE, Niels has worked in a number of senior management roles in a range of technology-driven companies, primarily within the telecommunications industry.

Setting the Scene

The ability of Europe's citizens to exchange information, and to collaborate on world-leading research and education, relies increasingly on their ability to effectively communicate, using the most powerful computer and communications technologies available, irrespective of location.

This reliance on communication is increasing, as the world of research undergoes a radical shift from a model with locally stored data where sharing is difficult, to a collaborative model with centralised information and wide spread computing power for all. Given the ever-increasing amounts of data, this makes international high speed network capacity critical to research success in projects as varied as high energy physics, medical research, radio astronomy and extreme weather prediction.

Diversified Needs

NRENs across Europe have many things in common, as can be clearly seen through the history of GÉANT and DANTE. When it comes to international relations, connectivity, and other services, NRENs' needs and operational models are greatly diversified.

To date, pan-European and international research and education networks can be broadly categorised as following either a central or federated approach.

A **central** approach utilises a common infrastructure, typically with centrally defined routing and connecting rules, whereas a **federated** approach combines the resources of individual NRENs, which requires a looser central coordination role. Both approaches have their own strengths and weaknesses.

A central approach facilitates reliable end-to-end networking, harvesting economies of scale and creating robust network operation, always with a focus on the providing equality of opportunity to the European R&E community. This focus plays to the European Commission's key objective to bridge the Digital Divide between Eastern and Western Europe.

The **federated model** facilitates NRENs with more resources to innovate for their own requirements and to lead by example, primarily focusing on the benefit for individual NRENs, but with the possibility of wider uptake. This model fosters swift responsiveness, with the common good for the European NREN community not excluded, but seen as a lower priority.

Other Influencing Factors

Commercial telecoms operators are developing their ability to deliver advanced connectivity across a greater geographical reach. These operators are increasingly able to offer viable solutions to large pan European end users need for bandwidth. These developments will need to be taken into account when developing future operational models for R&E networks and services, and can ultimately be seen as another way of providing the GÉANT infrastructure.

The European Commission's GÉANT Expert Group has put forward the vision that GÉANT should evolve into a future European Communications Commons, and has given advice on how this journey should continue. DANTE, with its partners, will carefully study the advice from the group, and take full account of this work in shaping future services, their operation and their governance.

The outlook for European economies continues to suggest low growth and therefore difficult conditions. NRENs, with their individual economic situations are already influenced by this, with some under severe financial pressure and others seeking to diversify their activities. At the same time, it is widely recognised that continued investment in the R&E base across Europe will be key to economic growth and recovery. This includes the infrastructure to support practitioners, both in academe and in industry.

These influences will have a knock-on effect for the direction and finances of GÉANT and also on DANTE. It will require innovative solutions delivering ever-better value for money, coupled with a clear recognition of the longer-term role that NRENs and DANTE must play in contributing to overall economic growth across Europe.

The Need for Change

In an environment where NRENs need to expand the services they supply (both in scope and in reach), bandwidth is becoming commoditised, and fiscal pressure is increasing, the NRENs' existing model needs to change. Change is also needed in order for DANTE and the European NRENs to continue to build on the past 18 years' success of developing, operating and optimising the network and services that they provided together.

More for All

When delivering a given service to an individual researcher, a campus, an NREN, or at European level, DANTE's activities will be offered based on the principles of subsidiarity, with a preference for offering the service to the NREN for its own further service wrap to its users. This will also be done by acknowledging that "one size fits all" is not relevant in the diversified landscape of European NRENs. DANTE will always be looking to add value to each individual NREN partner and to the community as a whole.

DANTE will seek to build on past successes and present capabilities by delivering more to all. A central approach to the provision of services will continue to be needed to bridge the digital divide and enable the free circulation of researchers, information and technology, thereby supporting the EU's so called "fifth freedom" – the free movement of knowledge – as ratified in the Lisbon Treaty, December 2009. A federal approach will be needed to enable innovative individual NRENs to lead the way. Appropriate matching of approach to situation will be key to the future development and governance of DANTE.

Throughout the 2012–15 strategy period, DANTE will maintain "More for All" as its constant and guiding principle. This principle enables the European research and education base, creates space for this base to develop, and will foster equality of opportunity, creativity and agility for the entire community.



DANTE Vision

DANTE's overall vision is to remain a highly valued and respected partner of Europe's research and education base, by enabling it to access and exploit world-class and innovative Information and Communications Technologies (ICT).

DANTE does this particularly in the area of very high performance networks and associated infrastructure, developed, procured and managed to meet the exacting needs of these sectors.

As a result of its contributions to Europe's ICT infrastructure, DANTE also seeks to maintain and develop the position and reputation of Europe as the leading world region in the use of ICT, in driving forward scientific knowledge and building human capital to the benefit of the European economy, culture and society. It is also a region where equality of opportunity is seen as fundamental, allowing all those engaged in research or education access to this infrastructure regardless of discipline, nationality or location. DANTE always works to uphold and put this principle into practice, seeking to overcome economic, regulatory or skills barriers to do so.

DANTE is justifiably proud of its achievements to date, working alongside European research and education networks (NRENs), in building this position via a number of pan-European network initiatives, culminating in the GÉANT network. The core of DANTE's vision over the period of this Strategy remains to enhance and further develop GÉANT to meet future challenges, and to provide even greater value both to existing and potential new users.

DANTE will achieve these aims by continuing to work with the widest range of partners. These embrace primarily the NRENs individually, in consortia such as those formed to deliver GÉANT, and in wider groupings such as that represented by TERENA. DANTE will also continue to work closely with the European Commission, both to coordinate and support individual initiatives, and to offer its expertise and advice.

DANTE's Board and general management believes that there are three key values the company must uphold and be recognised for when realising this vision:

- Its **ability** to deliver **innovative and reliable services** that meet user needs and deliver excellent value for money, by enabling the communities served by NRENs to deliver their respective agendas, and thereby strengthening Europe's research and education base;
- Its **willingness** to take a **flexible and responsive approach**, and build on the best ideas, capabilities, resources and opportunities available from its NREN partners and the commercial marketplace;
- Its **commitment** all times to work as a **partnership organisation**, whether in coordinating large-scale projects and initiatives carried out by Europe's NREN community, with its commercial suppliers, and in working with other public-sector organisations across Europe and beyond.

DANTE Strategy 2012-2015: More for All

The strategy for DANTE for the period 2012 – 2015 is described in the following pages and is organised around three strategic pillars: Positioning, Services and Key Proficiencies

Positioning

We will position DANTE as:

- An enabler for the NRENs.
- An impartial, trusted advisor, driven by knowledge, proficiencies and facts.
- A system integrator and operator for GÉANT and other international networks.
- A provider of other services to NRENs.
- A first-choice partner for NRENs to use as coordinator, facilitator and representative for GÉANT and other pan European and global e-infrastructure services and projects.
- A facilitator of co-operation with the European Commission.
- A guarantor for economic feasibility of the activities.

We will strive to position GÉANT as:

- A first-choice provider of world-class European connectivity and services.
- A first-choice international networking partner.
- A first-choice partner for other e-infrastructure projects.

Services

With a strong focus on our staff, we will maintain and strengthen existing core competencies and develop further key proficiencies in:

- Project and programme management.
- Procurement.
- Product lifecycle management.
- Product marketing.
- Product management.
- Quality assurance.

Key Proficiencies

- Continue to build on DANTE's current successful services portfolio.
- Enable the NRENs to expand their user base.
- Leverage the collective purchasing power of the network community for new aggregated services.
- Serve pan-European users by aggregating the collective NREN services in a one-stop-shop.
- Continue and expand buying international services from NRENs.
- Offer DANTE expertise to the NRENs as a professional service.
- Offer new services to NRENs following an opt-in model.
- Expand peering arrangements.
- Engage in Future Internet (FI-PPP) and FIRE programmes.
- Professionalise the coordination and operation of federated services.

Positioning

DANTE is positioned in relation to a number of partners and organisations. The most important being the European NRENs and the European Commission.

NREN Partnership

The most important partnerships that DANTE maintains are those with the NRENs that use and build the GÉANT network. The relationships are often multi-faceted as NRENs often simultaneously adopt the roles of customer, supplier, project partner, joint provider and political stakeholder.

The challenge for DANTE is to clearly position itself in its relationships with the NRENs in these different situations. In the past, DANTE has acted both as a leader and a follower. As a leader, developer and manager of large-scale research networks, DANTE has helped to forge a successful history over the past eighteen years.

DANTE is owned by some (but at present not all) European NRENs, and should act according to the wishes of its owners and the larger NREN community. This requirement can sometimes conflict with the leadership role it has been charged with undertaking. The nature of the GÉANT network governance has also on occasion created a conflict of purpose in this respect.

These multi-faceted NREN relationships and the ambiguity in role and governance models have exacerbated an already slow decision process which is severely limiting the potential of the activities collectively organised by European NRENs.

Clarity of purpose in DANTE's positioning is therefore a key element for DANTE and also for NREN stakeholders.

European NRENs

DANTE will be seen as an enabler for the NRENs in all aspects and a neutral and trusted advisor driven by knowledge, proficiencies and facts. DANTE will be seen as a natural first-choice partner for the NRENs to use.

DANTE will continue to increase its activities as a System Integrator, operator, co-ordinator and representative for GÉANT and other international networks.

DANTE World Service (DWS) provides connectivity to the wider Internet. This kind of activity will be maintained and supplemented by new opt-in services should opportunities arise.

DANTE will be seen as the first choice Partner for NRENs to use as co-ordinator and facilitator of other pan-European and global e-infrastructure services and projects.

The slow decision process will be changed by careful positioning of DANTE regarding risk taking and regarding DANTE's mandate to represent the European NRENs.

With the present company structure DANTE is able to take risks. This ability will be used to affirm agility and leadership and to increase the speed of decision making on NREN-related matters in Europe and internationally.

DANTE will seek to represent the common interests of European NRENs internationally by acting as coordinator, facilitator and envoy in respect of matters concerning inter-regional connectivity and inter-regional collaborations. This will be done by utilising a very open, inclusive and transparent process, giving full ability for the NRENs to closely follow developments. The open, inclusive and transparent process will give individual NRENs full ability to speak their own case, side by side with DANTE, should they want to do so.



The European Commission

Another immensely important partner for the DANTE and the GÉANT activities is the European Commission. The Commission provides significant financial support to the activities and has an increasingly stronger opinion about the future of the GÉANT network. This is because the network is seen as fundamental to realising the EU's 2020 vision for the European Research Area, and a key part of the Digital Agenda for Europe, a flagship initiative driving Europe 2020.

DANTE has a strong track record in making proposals for, and being awarded, grants from the funds of the European Commission. It is regarded very highly as a reliable and efficient manager of grant funded projects. In total DANTE has over the years applied for, and been granted, EC funds of EUR 311 million.

DANTE will continue to search for EC funds that are supporting the European NREN community, and will increase its activities as a facilitator of NREN co-operation with the European Commission. DANTE will aim to increase its presence at the Commission in order to be able to closely follow the development of NREN-relevant policy areas, and specifically to follow the development of the EC's Horizon 2020 initiative.

DANTE will be seen as a key facilitator of NREN cooperation with the European Commission. This activity will reach from information dissemination of NREN-relevant Commission activities, to facilitator of NRENs (in groups or individually), seeking EC funds for specific purposes.

Other Partnerships

DANTE's relation to the other actors on the European research and education network scene is an important factor in positioning the company.

TERENA

The Trans-European Research and Education Networking Association (TERENA) is a forum to collaborate and encourage the development of a high-quality computer networking infrastructure for the European research community. Although DANTE and TERENA's activities are separate, they are complementary to one another, and the two organisations often co-operate. DANTE will strive to secure the greatest possible tactical and strategic co-operation with TERENA, and to obtain a mutual understanding and agreement of their respective roles.

Other World Regions

It has always been key for Europe to maintain a close relationship with other world regions, especially with emerging network services. During this strategic period, it is anticipated that the US Government will deliver on its commitment to heavily invest in ICT, and that this momentum will inspire greater European investments in ICT as well.

DANTE will strive to secure a continued and close relationship to other world regions, including the North American R&E community. DANTE has also built excellent relationships with other research networks across the world, and has played an instrumental role in establishing many regional networks. DANTE will continue to position itself as a key partner for collaboration and facilitator for developing and cementing relationships with these other regional R&E networks. This will be done by utilising an open, inclusive and transparent process to enable NRENs with special interests in the region to closely follow developments. The open, inclusive and transparent process will give those individual NRENs the ability to speak their own case, side by side with DANTE, should they want to do so.

GÉANT as a First-Choice Provider of World-Class European Connectivity and Services

DANTE will strive to influence GÉANT to be the first choice provider of world class European connectivity and services for European research and education organisations. This is the present position for GÉANT but increased pace and decisiveness is needed in order for GÉANT to maintain this position going forward.

GÉANT as a First-Choice International Networking Partner

GÉANT is known worldwide as an exemplar for research and education networks and has acted as a focal point for connecting other world regions. DANTE has, together with the Europe AID grants from the European Commission, played a major role facilitating this prominent position for GÉANT. DANTE will strive to influence GÉANT to continue developing this global stronghold.

GÉANT as a First Choice Partner to Other e-Infrastructure Projects

There are many initiatives relating to e-Infrastructures in general. DANTE will strive to position GÉANT as the preferred partner to all e-Infrastructure projects in need of network and services.

Services

Operational Services

There are a number of services that DANTE makes available to NRENs on a subscription basis:

- **GÉANT IP, GÉANT Plus and GÉANT Lambda** services are the core services currently made available through the provision of the GÉANT Network.
- **Other GÉANT services** NSHARP is providing proactive risk reduction measures for computer security incidents, coordination and facilitation of many federated application services (Multi-Domain Service Desk, eduroam, eduPERT, eduGAIN and eduCONF)
- **DANTE World Service** provides connectivity to the wider Internet.

DANTE will expand these activities, and in general, engage in any service that is able to leverage the existing network, network authentication methods and services to serve NRENs, and will offer these to the NRENs primarily in an opt-in-model.

Expand the User base

DANTE will enable the NRENs to expand their user base. This will be done by identifying and engaging with other user bases, leveraging on the existing NREN and DANTE capabilities to provide advanced ubiquitous network services sourcing capacity services from within the community.

Leverage the Collective Purchasing Power of the Network Community

DANTE has a long history of performing complex procurements that utilise EU public procurement procedures, and knows how labour-intensive the tender response process can be. It realises that the larger the potential project, the greater the potential economies of scale.

DANTE will therefore establish a number of framework contracts that NRENs can make use of, according to their needs, with the effect that the specific NREN will be able to achieve significant savings in procurement effort and costs.

In general NRENs collectively represent a high level of purchasing power that has not yet been fully explored. DANTE will seek to leverage the collective purchasing power of the NRENs in all aspects where it can create business and service value for the NRENs.

Serve Pan-European Users in a “One-Stop-Shop”

GÉANT has a very fine-meshed European footprint and is therefore attractive to large, multi-national, pan-European research and education organisations. DANTE will make it possible for such large organisations to take advantage of the reach of the GÉANT network and wealth of services by offering these resources through a “one-stop-shop” under a single contract.

Leveraging on NREN Capacity

A number of European NRENs operate their own international links across borders to neighbouring NRENs or transcontinental links. DANTE will explore opportunities to acquire these services from within the community where economies can be made for the benefit of the NREN community.

Professional Services

DANTE will make it possible for NRENs to take advantage of the skills of DANTE staff and well developed proficiencies, by offering these as a professional, service, from a trusted peer. Again these will be made available for those NRENs that have the need.

The professional services include:

- Network architecture consultancy
- Network operations
 - Contract suite engagement (1st level) single point of contact
 - 2nd and 3rd-level monitoring and support
- Products
 - Operations database
 - Fault finding correlation /Dashboard
 - Other software application development
- Network security consultancy
- Cash-flow and financial engineering
- Cost-sharing models
- Procurement
- EU funding options

Peering Arrangements

In order to best serve the NREN community DANTE will expand and diversify the present peering arrangements with key content and ISP providers. DANTE will on a continued basis seek to leverage existing NREN expertise in this area.

DANTE will seek to increase the peering with other Research and Education networks and explore the opportunity to establish Europe as a Global Hub for NRENs.

Future Internet

Future Internet (FI) is very high on the EC agenda, and DANTE is engaged through INFINITY (FI-PPP).

DANTE will strive to position GÉANT to deliver more services to FI activities such as the FI-WARE (FI-PPP) foundation network infrastructure project, and will seek further and deeper collaboration on all FI areas where it will create value for the NREN community.

Federal Services

The NREN community is characterised by a number of services obtained using a federal approach. Such an approach enables quick response and fosters innovation in the early days of a service product lifecycle, but lacks the final step from successful service to fully operational status when a federated service becomes widely adopted. DANTE will seek to professionalise the coordination and operation of popular federated services, leveraging on DANTE proven network operations support and maintenance experience. A key element in this is the provision of a single point of contact for both operational and contractual purposes.

Key Proficiencies

DANTE fosters a unique working environment that attracts the best staff across a wide range of disciplines. DANTE's workforce is the organisation's biggest asset, enabling the creation, introduction and management of advanced networks and services across the globe.

The in-depth skills and experience of DANTE's staff are greatly valued by the community and often DANTE's innovations are adopted by NRENs as best practice. Equally, DANTE continually strives to absorb NREN best practice, via its collaborations and secondment of staff.

In addition to maintaining its current, wide-ranging existing skillset, DANTE will develop its expertise in the following key strategic areas.

Project and Programme Management

The key activity for DANTE is to provide project coordination for the GÉANT project. DANTE has demonstrated strong capability in project and programme management through the management of the GÉANT suite of projects. DANTE's project management skills are highly regarded, as shown by its successful management and coordination and on-going delivery of projects, such as: the GÉANT network and project, EUMEDCONNECT2, ORIENT, TEIN3, CAREN and AfricaConnect.

It is therefore natural that DANTE continues to focus on these skills in order to excel in this discipline.

Good project management capabilities give predictability, visibility and the ability to prioritise so that a clear focus is maintained. DANTE will develop a project and programme management structure and process that does not result in an ivory tower of bureaucracy, but rather, a lean and effective process.

The benefits of implementing these principles will be experienced at all levels of the projects that DANTE manages and will allow clearer, faster and better informed decision making, better management of resources, better ability to establish the interrelationships between project elements and to understand the impact of deviations from plan.

Procurement

DANTE has over the years successfully performed a number of infrastructure and equipment procurements following complex public procurement rules and regulations. Procurement is a commercial multifaceted discipline.

DANTE intends to further harness this capability in all its facets, and apply these commercial capabilities onto all NREN relevant areas. This includes crafting the procurements so they also can be made available for individual NRENs and further increase the capabilities to offer the procurement discipline as a professional service for the NRENs.

Product Lifecycle Management

The GÉANT project suite has shown a slow uptake of the delivered products and services, and an inability for the product developments to adapt to changing user needs. DANTE intends to change this by influencing GÉANT to use industry-standard Product Lifecycle management methods including Product Marketing and Product Management methodologies. This will also help to ensure a constant feedback loop between the end users and the GÉANT project, and will focus the resources on the relevant services, hereby enabling GÉANT to conclude the support of services no longer used by the community.

Product Marketing

The purpose of Product Marketing is to ensure that the customers' needs are understood. The idea is not just to deliver what the end users are asking for, but deliver to satisfy their needs, which, in turn, will maximise the duration of the customer relationship.

Product marketing is performed by senior talented people who know the capabilities of the GÉANT network. The GÉANT product marketers know the capabilities of the GÉANT network, as well as being able to understand the customer's point of view. A broad market/industry perspective is reflected when talking to NRENs, end users, equipment vendors and network operators.

Product Management

The purpose of the Product Managers is to formulate the roll-out plan for product features and functions, based on input from Product Marketing and functions.

Again, a typical Product Manager will know the capabilities of their GÉANT products and services from a customer perspective and as 'the business person' for the product, is able to discuss it knowledgeably with NRENs, end users, equipment vendors, and network operators. It is important to balance both the NREN's return on investment/user value with GÉANT's effort.

Quality Assurance

DANTE will review its existing business processes in order to ensure that these are meeting the standard that can be expected from an organisation like DANTE.



Throughout the 2012–15 strategy period, DANTE will maintain “More for All” as its constant and guiding principle. This principle enables the European research and education base, creates space for this base to develop, and will foster equality of opportunity, creativity and agility for the entire community.