

Welcome to the European Grid Initiative in Lyon, France



France offers to host the EGI.Org headquarters in the city of Lyon, on the ICT campus of the University Lyon 1. This bid allies a strategic location, Lyon being at the heart of one of Europe's most dynamic regions, and a strong scientific relevance, with a long standing experience in grid operations and grid research.

1 Background

France has always been a very active player in all Grid projects. It was one of the 6 founding members of DATAGRID in 2000 where the production grid concept was proved to be feasible and a key participant in its implementation through the EGEE, EGEE-2, EGEE-3 projects. CNRS, the main French actor, has been successfully responsible of key work packages, especially of the Applications area and is proud of its achievements since the number of scientific domains using the Grid grew under its leadership from 2 to more than a dozen, encompassing now all scientific domains. In addition, France hosts Grid'5000, a unique instrument dedicated to research on grids.

To further encourage grid developments, CNRS created in September 2007 "l'Institut des Grilles" ("Grids Institute"), a virtual structure federating all Grids related work in CNRS and a formal structure in particular in charge of CNRS participation in European projects. The CNRS Grid Institute is currently leading the French JRU in the EGEE-III project.

The French National Grid Initiative (NGI) is currently based on a Memorandum of Understanding (MoU) signed during the fall 2008 by the French Ministry of Research and the largest research organisms and Universities in France (CNRS, CEA, INRIA, INRA, RENATER, CPU). The deciding body of the French NGI is the steering committee where all partners are represented at high level. On Dec 15, 2008, the French NGI steering committee took unanimously three important decisions:

- To propose a site in France to host EGI.org
- To select Lyon as the site of choice
- To entrust CNRS Grid Institute as responsible of the bid and all follow-up actions

This shows the full commitment of the steering committee members and in particular of French Ministry of Research, to the EGI initiative.

This proposal is therefore a very solid offer to host the EGI.Org headquarters and a strong guarantee of its success, since it capitalizes on the unique technical experience and the strategical importance France has accumulated on the production grids and especially in Lyon, on a very strong local support, and on high level political backing. The recent approval by the French government of Lyon "Plan campus", a ~500 M€plan to revamp Lyon Campus is of course a great opportunity to host EGI.org in a very modern and dynamic environment. The scientific environment which is proposed in Lyon is also extremely stimulating with the presence of the EGEE grid French Regional Operating Center in CC_IN2P3 just across the street (ensuring top level networking) computing science labs with several teams very active in the Grid world and many grid users labs, especially in the BioMed and HEP sectors. Lyon as a city, the second largest in France, is also very pleasant and well connected. France in addition can offer a very convenient legal framework (Société Civile) which has been proved



successful for several European projects such as the European Synchrotron Radiation Facility (ESRF) located in Grenoble. It is therefore with great enthusiasm and full confidence that we propose Lyon as the future site of EGI.org.

2 Accommodation and facilities

The EGI office will be located in the Nautibus building of the Université Claude Bernard Lyon 1 (UCBL) in Lyon, France (Figure 1). This building welcomes the Research and Education Unit in Informatics of the University. Thanks to this location, EGI office will be integrated in the ICT Quarter of the "Lyon Cite Campus" and will take benefit of all the synergies of this campus recently accredited (May 2008) by the French government national campus program.

At the second floor of this recent building, 600 m^2 will be dedicated to the EGI office. As part of the ICT quarter of the Doua site of the "Lyon Cite campus", EGI office will have access to all the facilities of the quarter (Agora, show room, conference rooms ...) and all the equipments of the campus (staff restaurant, faculty house, sports equipments, library ...).

As part of the university, this building is equipped in air-conditioned, high speed network and wifi connections. This localization takes benefit of all the university general services (cleaning, postal mail, technical services including electricity, heating ...). It has its own parking with restricted access.



Figure 1: Nautibus building of the Université Claude Bernard Lyon1. 600 m2 at the second floor will be dedicated to the EGI office.

The university staff restaurant is located only 50 meters away. The tramway station is located 100 meters away and it gives access in less than 20 minutes to Lyon city centre and to the Part-Dieu train station as well as to the international airport shuttle that reaches the airport in 40 minutes. The campus is directly connected to the Lyon ring freeway offering an easy access for those coming by car from one of the three highways (Paris, Geneva, Marseille).





Figure 2: Lyon is very easy to reach by airplane. This map represents all cities having direct flights to Lyon, many of them with low cost companies. Lyon can also be reached by TGV fast trains from Paris, London, Brussels, Amsterdam, Köln, Marseille, Barcelona,...





Figure 3: Located on the Doua Campus, EGI is directly connected by the T1 tramway line to the Part-Dieu main railway station (20 min) and to downtown (City Hall – Hotel de ville) by tramway and metro A line (20 min).





Figure 4: Doua Campus map.

2.1 The IN2P3 Computing Centre – CC-IN2P3

The Nautibus building is separated by one street from the CNRS computing centre CC-IN2P3. This centre is a Tier-1 for the four CERN LHC experiments.





Figure 3: The CNRS - IN2P3 Computing Centre

It will provide close supports to the EGI office as well as specific services like multi-sites video-conferencing, EGI.org archive system, etc. Medium or large scale EGI.org computing equipment can also be conveniently housed in CC-IN2P3 if needed.

CC-IN2P3 owns a 800 m² computer room fully equipped with air and water cooling and redundant UPS. The electrical system is currently able to provide up to 1.5 MW of power. The building of a second 800 m² computer room is funded and will be available by the end of 2010. This new room will be able to provide up to 3.5 MW of extra electrical power.

CC-IN2P3 manpower amounts to 75 people, 49 of them are high level computing engineers working on system administration, network, storage systems, operation, support and development. The EGEE grid services are fully integrated within the CC-IN2P3 computing infrastructure.

CC-IN2P3 is hosting one of the most important point of presence of the French NREN: Renater. This guarantees to EGI.org an efficient and easy access to the Research and Academic network.

CC-IN2P3 is operating a brand new operator class videoconferencing system CODIAN MSE8000 which will be made available for EGI.org.

Finally CC-IN2P3 also owns several meeting rooms and an 80 seat amphitheatre fully equipped for multimedia and video conferencing.

3 Environment

Welcoming EGI office in Lyon, one of the most attractive European cities, within a European campus, offers a unique environment in grid activities, in research and education as well as in city life.

3.1 Grid activities: From production to applications

Since the beginning of the European grid projects, Lyon welcomes **many important actors in production grids**. Moreover, part of the research activities of the Lyon Cite Campus laboratories is of importance for grid computing.

• The CNRS computing centre CC-IN2P3 assumes many important operations for the EGEE project and about 20 EGEE-III members are working in the CC-INP3. The CC-IN2P3 is the French Regional Operating Centre and also a Tier 1 centre for the CERN LHC experiments. The contributions of the French Regional Operations Centre to the overall operation of EGEE have been recognized as decisive for the improvement of all sites' reliability in this large grid project. CC-IN2P3 in addition runs many distributed applications in different fields (Biology, Nuclear Physics, Cogniscience ...) for several



research laboratories of the Lyon university. CC_IN2P3 is one of a few European sites in charge by rotation of the central grid control and is providing key software to that effect as well as the coordination effort on the project level for this task.

- The laboratories CREATIS, LIP and IBCP are highly involved in grid application porting in the fields of biomedical imaging and bioinformatics. These application fields represent the main activity on the EGEE grid after Physics.
- Three research laboratories (LIP, LIRIS, CITI) are conducting research on grid computing and distributed computing.
- The Rhône-Alpes Complex Systems Institute (IXXI) develops research in complex systems modelling in silico that represents an important new application field for production grid.
- Many research laboratories affiliated to several national research centres (CEMAGREF, CNRS, INRA, INRIA, INSERM) are good candidates for pushing research applications to the grid.

3.2 Research and education: EGI within a European campus

By the proposed location, **EGI has the opportunity to join a European campus**: "Lyon Cite Campus", a campus in motion for the future thanks to its recent accreditation¹ within the French government Campus program.

UNIVERSITE DE LYON

In few numbers, Lyon University represents:

- 20 schools,
- 120 000 students including 5 000 PhD students and 13 000 foreign students,
- 11 500 researchers,
- 550 research laboratories,
- 1000 PhD theses defended per year.

The EGI office will be welcomed within the ICT quarter of "Lyon Cite Campus" of the Doua site. This quarter is one of the major French pole for higher education in ICT. It is structured through four main research fields (Imaging, Data bases, distributed systems, networks and telecoms)



applied to five domains (digital leisure, health and biology, goods and services production systems, culture and heritage, ambient intelligence). Four other quarters (Physic, Chemical, Biology and Engineering) complete the campus synergy in research and education.

By its integration in the ICT quarter of the campus, EGI will be able to build bridges towards all the other fields of research and their application.

Located within the University of Lyon, EGI will **benefit of all the university infrastructures and services** including facilities to welcome meetings, workshop and conferences of up to 500 attendees. These University conference facilities are completed by the Lyon Convention Centre. This Centre offers a new 3000-seat amphitheatre, 2 auditoriums of 900 and 300 seats, an exhibition space of 8400 m². In 2007, 14 events hosted between 1000 and 9000 participants.

¹ In May 2008, "Lyon Cite Campus" has been one of the six French campus over 46 accredited by the French Government Campus Program. In November 2008, it is one of the 2 campus recognized 'operational' at this time by this program.



3.3 Lyon: One of the Europe's most attractive metropolitan area

Lyon city: 468 300 inhabitants

Lyon metropolitan area: 2.6 million inhabitants Rhône-Alpes region: 6.005 million inhabitants (Source: Insee, 2004) France's top region for international companies: 900 firms with foreign capital France's 2nd-ranking region for initial public offerings (IPO)

By deciding to set up EGI.org office in the Lyon area, EGI is choosing one of Europe's most attractive metropolitan areas. A competitive location and gateway to the world, Lyon attracts more and more companies and talent every year.

When setting up EGI.org office in the heart of the Rhône-Alpes region, EGI is choosing one of the European Union's largest, wealthiest regions. The Rhône-Alpes region's GDP is ranked 6th among the Union's 204 regions. Strategically located in **the heart of Europe**, Lyon offers an ideal localisation to **welcome the EGI.org office and to make it accessible and visible**.

3.3.1 Lyon: Attracting world leaders

As a competitive and cosmopolitan destination, Lyon attracts a growing number of companies and new talents. With 900 foreign-owned companies and 82 headquarters and administrative offices of companies with over 1000 employees, the Lyon region now boasts a density of decision centres higher than that of Barcelona and Manchester! The Part-Dieu area is France's second-largest business district after La Défense in Paris.

- 1500 decision centers, including Sanofi Aventis, bioMérieux, Groupe Seb, Renault Trucks, Club Med, Euronews (world headquarters), Bayer Cropscience, JTEKT and Scotts International (European headquarters), to name a few.
- International institutions: Interpol, International Agency for Research on Cancer, WHO, the only Bio-safety level 4 lab in Europe, 70 consulates and others.
- A vast and competitive pool of sub-contracting industries: mechanical industries, textiles, equipment makers and more, for a total of over 6500 companies, 166,000 jobs, and 20% of the total national production, all based in the Rhône-Alpes region.

The Lyon area boasts **France's second-largest job pool**. Such an economic environment will ease professional relocation for the spouses of EGI.org staff and will offer nice career opportunities to them.

3.3.2 Lyon: Widely envied quality of life

Lyon offers an exceptionally pleasant living environment, with a convenient public transport system, clean streets, low crime rate, low levels of pollution and other advantages. In 2007, the metropolitan area was ranked as the healthiest French city by the magazine "Impact Médecine". In 2008, Lyon is ranked third French city (after Nantes and Toulouse) for quality of life by the French magazine Le Point.

- In 1998, Lyon was named a UNESCO World Heritage site. Former capital of Gaul, the city has preserved its 2000 years of history, with buildings and monuments from every era. This extraordinary heritage continues to grow, thanks to the work of top contemporary architects (Renzo Piano, Jean Nouvel, Santiago Calatrava, and others).
- Unique cultural events attract international audiences: Festival of Lights (4 million visitors), Biennial Festival of Dance, Biennial Festival of Contemporary Art, "Nuits



sonores" electronic music festival, Nuits de Fourvière summer festival of performing arts.

- The capital of French gastronomy, Lyon offers a tempting choice of "bouchon" bistros and famed restaurants where excellence and inventiveness are served up every day, led by such great chefs as Paul Bocuse and Nicolas Le Bec.
- Along with:
 - * One of Europe's largest city parks: Tête d'Or Park,
 - * Velo'V: 4000 self-service bicycles available all over the city,
 - * Olympique Lyonnais football Club: 7 consecutive titles as French champion.

3.3.3 Lyon: A welcoming city

Lyon's **moderate cost of living** puts it ahead of other large cities around the world (Figure 6). For an **excellent quality of life**, a family budget in Lyon is 30% less than in Paris. In addition, the cost of tuition at international schools is among the lowest in European capitals, as little as one sixth the cost of Paris!



Figure 5: Comparison of living costs between Lyon and other European cities. The index is calculated according to 10 criteria : The market basket, alcohol and Tobacco, household products, cosmetics, clothing, home-based services, energy, restaurants, transportation, sports and leisure (Source : Mercer Human Resource Consulting)

Rental prices in Lyon are extremely competitive $(9,98 \notin m^2)$ compared to other large cities. A family renting an unfurnished two-bedroom apartment should count on an average budget of $\notin 750$ a month, not including any additional charges. If one wishes to invest in real estate, a previously owned apartment or house can be bought for an average price of 2 662 $\notin m^2$.

From nursery school to higher education, Lyon features **several schools with international curricula** for foreign, dual-citizenship and bilingual children. The two best-known international schools in Lyon are the Cité Scolaire Internationale, with 6 foreign-language sections (English, German, Spanish, Japanese, Italian and Polish), the International School of Lyon and the Ombrosa School, which offer an international baccalauréat diploma. There are ten other schools with international programs in the Lyon area.

3.3.4 Lyon: Land of innovation

The Lyon metropolitan area has emerged as a driving force for growth and innovation. Lyon has 5 recognized competitiveness clusters:

- Lyonbiopôle: a world-level cluster for virology, immunology and diagnostics. As France's No. 1 "bio-region," the Lyon area aims to join the Top 5 European bioclusters.
- Axelera: a world-level cluster for chemicals and the environment, already ranked in the European Top 10 in the sector. By building on its expertise in key technologies, it aims for a place among the Top 5 in Europe within 10 years.



- Lyon Urban Truck & Bus: a national-level cluster for urban transport systems. Backed by 3500 people in R&D, this cluster works to design the industrial vehicles of the future and to make the Lyon region the world leader in urban transport of goods and passengers.
- Imaginove: a national-level cluster for digital entertainment. Lyon is the European capital of digital imagery, video games and interactive entertainment.
- Techtera: a national-level cluster for technical and functional textiles. All the links in the industry chain are present here, from fibres to design, from customization to mass market, making Lyon the leading European centre for technical and functional textiles.

Along with:

- Université de Lyon represents: 11 500 researchers, 120 000 students, 1000 PhD thesis/year, 550 research laboratories.
- One of Europe's highest concentrations in the scientific and clinical sectors
- Exceptional infrastructures (Bio-safety level 4 lab, the European Centre for Humanitarian Health ...)
- Communicable Disease Surveillance and Response centre (WHO)
- Merial, the world No. 1 for human and animal vaccines
- Sanofi pasteur, the world No. 1 for bacteriological diagnostics
- Biomérieux, the world No. 1 for in vitro diagnostics

With 10,000 new businesses started in 2006, local policies encouraging entrepreneurship and providing support to 20,000 new business projects every year, along with thriving startups in fields such as biotechnology, chemicals/environment, and digital applications, Lyon is the most enterprising city in France.

3.3.5 EGI @ Lyon: Europe at your doorstep

Lyon puts **EGI at the heart of the global village**. Located on the main north-south axis of Europe, Lyon benefits from a highly developed and efficient transport system.

Destination	Flight time		
London	1 hour 40 min		
Brussels	1 hour 25 min		
Manchester	1 hour 55 min		
Dublin	2 hours 10 min		
Barcelona	1 hour 20 min		
Milan	1 hour		
Copenhagen	2 hours 10 min		
Vienna	1 hour 45 min		
Amsterdam	1 hour 25 min		
Munich	1 hour 20 min		
Zurich	1 hour 10 min		

Figure 6: Flight time (Source : St Exupery airport 2008). You can make a round trip to any one of Europe's main business destinations in a single day.

Lyon is connected to 112 European and French cities via Lyon-Saint Exupéry Airport which is one of Europe's rare multi-modal hubs (plane-train-freeway).

With its three high-speed TGV train stations (Part-Dieu, Perrache and Airport), Lyon quickly serves downtown Paris (1 hour 55 min. -37 round trips a day), the Paris-Charles de Gaulle Airport (1 hour 54 min.), London (4 hours), Brussels (3 hours 45 min.) as well as Marseille (1 hour 37 min.).



The Lyon-Turin Transalpine railway project, scheduled for completion in 2015, is a vital link in the rail line connecting Eastern and Western Europe. Upon completion, Lyon and Turin will be only 2 hours apart, enabling the rapid transport of 7 million passengers and 50 million tons of freight per year between the two cities. In the longer term, Lyon will be linked to Milan, Barcelona and Frankfurt by high-speed TGV rail lines.

By freeway, 180 million Europeans can reach Lyon in just one day.

4 Cost linked to accommodation

The annual renting cost for the 600 m2 of the EGI office is 60 k \in (It would amount to 120k \in in the private sector). This includes all the infrastructure costs, the fluids (water, electricity, heating), access to wire network and wifi and cleaning services.

In order to support the welcoming of EGI in France, the French NGI will fully cover this cost.

EGI.org will just have to pay its functional costs mainly linked to phone and postal usage. In the case EGI.org would host significant computing equipment, it will have to pay for the related electricity and water consumption. The computing equipment itself can be installed within the CC-IN2P3 computer room in order to benefit from the cooling, redundant UPS and 24x7 operation services. The area to host up to 5 42 U racks in the computer room will be provided for free by CC-IN2P3.

EGI.org will have to cover the equipments to be installed in its offices, besides the basic one which will be provided (chair, desk, phone).

5 Fiscal Environment

Given the proposed framework of "Société Civile" for EGI.org, all personnel employed by EGI.org will be hired under private status and therefore will be submitted to normal fiscal environment in France. (The taxes usually represent 10% to 15% of the salary depending on the family income, number of children, etc..).

The personnel working in EGI.org but paid by their home institution will pay their tax either in their home country or in France depending on the fiscal agreement between France and their home country.

For EGI.org itself, no tax will be paid since its status is not-for-profit. Partial VTA exemption might be granted, through negotiations with French Ministry of Finances.

6 Employment condition

Given the proposed framework of "Société Civile" for EGI.org (see Annex II), personnel is hired with private sector rules according to the French "Code du Travail". Permanent staff (full or part time) can be hired, as well as limited or unlimited contracts. EGI.org can also welcome people detached from their home institutes with its full or partial support.

Weekly hour worktime will be 35 hours with potential adaptation (ie work 38.5 hours and get extra off-days). Salaries can be fixed freely, except that the miminum salary cannot be lower than the "SMIC" which is fixed by law.





7 Additional benefits

7.1 For EGI.org personnel

EGI.org personnel being employed under normal private law sector will benefit of the full normal benefits granted by the French legislation: health coverage, pension, etc ...

Lyon-Cite Campus will help the personnel spouses wishing to work to get a job in the Lyon area and will provide useful help and tips for housing.

7.2 For EGI.org

Welcoming EGI office within the Lyon Cite Campus has several additional benefits that can be summarize as follows:

- The French community has been very pro-active in grid projects for many years. The Lyon area gathers many important French actors in grid as well as numerous research laboratories that will have interest in joining the European production Grid to conduct part of their research.
- Welcoming EGI within a European campus guarantees to EGI a very good visibility in the university and its students. EGI.org will thus have an easy access to a large number of well trained students of various levels and will be able to participate to their formation. The insertion of grids into the student curriculum will have a very positive long term effect for all parties.
- Because "Lyon Cite Campus" has been accredited by the French government campus program, it will benefit of a multiannual funding plan that will boost its infrastructures and attractiveness.





ANNEX II – Legal form

Name of the legal entity:

Société civile (SC)

Legal entity reference texts:

Articles 1845 to 1870 from the French civil code

Object and nature of the legal entity:

The SC is a private company and has a non for profit status. SC allows for operational as well as coordination activities and infrastructure management.

Commercial activity has to be accessory and limited to 10%.

Autonomy:

Being a legal entity, SC has a large autonomy.

Requirements for the establishment and associated timeline:

The process of creation is easy and requires only a national registration. The SC statutes have to be signed between the members and few registrations have to be done (notice in a newspaper of legal announcement...)

Type of memberships and requirements regarding memberships:

All kinds of entity, either public or private, may be member of a SC. There is a minimum of two members without maximum.

The statutes may provide for two types of membership with different rights and duties: members, and associated members with whom bilateral agreements may be signed for the use of the facility.



Capital:

A capital is required but without any minimum needed. The contributions of the contracting members come in kind, cash and staff. The contribution shares and procedures are set in the statutes but the budget is decided on a yearly basis.

Share transmission:

All the share transmission requires the approval of all members.

Resources:

Resources from members in kind, cash, staff. The SC may receive loans and subsidies.

Liability:

The liability of the members is proportional to their contribution to the capital (one member can't be sued for the whole debt).

Management bodies

Great flexibility is allowed, and governance is to be defined in the statutes. However, general meetings and council representing each member are mandatory. Each member designates voting shareholders.

Nomination and removal of the director - powers of the director

The director appointment is defined by the statutes, a different act or a decision of the members.

The director has full of powers to third parties within the limits of the object of the company.

Between the members, few acts can be forbidden or subjected to authorization.



Liability of Management (director)

Civil and penal liability (violation of the statutes, faults of management...)

Human resources and procedure of employment

Being a legal entity, the SC allows for its own personnel recruitment (Permanent staff/ temporary staff).

The staff status is under private law (depends on general national labour rules)

Accounting control and Market procedure:

General accounting, cost controlling-multi-year plan

No adherence to public procurement regulations

Taxes :

VAT: SC is taxed according to French law.

Other professional taxes: each member pays taxes on its benefits according to its own status ("transparent taxation"). The SC is exempted of company taxes when the commercial benefits represent less than 10% of the resources of the company

Duration:

The duration is limited to 99 years according to the French legislation

Dissolution :

Expiration of its duration.

Early dissolution decided by the associates or by the court at the request of the associates for just motives (ex: disagreement between the associates, compulsory liquidation)



Advantages of this structure:

Open to public/private sector Open to a large of European and non European countries Large flexibility for newcomers to join Clear management and commitments (council representing each member) Legal entity and autonomy Possibility to recruit personnel (permanent and temporary staff) No minimum share capital Adapted to manage facility Liability for debts in proportion to shares Part of the legal framework of the country where the RI is established

Conclusion:

The SC is a non-profit making company which was chosen for the ESRF (European Synchrotron Radiation Facility), SOLEIL, IRAM, ILL, and which is successful.

This type of legal structure allows for a large flexibility for membership issues, as well as autonomy regarding budget and staff recruitment. It is adapted to public and private needs and to the management of a facility. This type of legal structure is easy to set up because this is a part of the legal framework of French country where the RI is established.

There is no such type of structure in the other European countries. Although some of them may present some similarities such as great flexibility, fiscal transparency or no minimum capital (*BGB Gesellschaft* in Germany, *Limited partnership* in the IK, *Societa simplice* in Italy or *Société de droit commun civile* belge), none of them has the legal personality.





Example of a Société civile: the ESRF (European Synchrotron Radiation Facility)

Missions of the ESRF:

The objectives of the ESRF are defined as follows:

- To construct, operate and develop a synchrotron radiation source and associated instruments
- To support the use of the facility
- To implement programmes of scientific research using synchrotron radiation
- To carry out R&D work in techniques using synchrotron radiation

The ESRF is operating a high-brillance synchrotron radiation source in the X-ray range and a large variety of beamlines, it supports basic and applied research in physics, chemistry, materials and life sciences.

Host country/ Location:

The ESRF is located in Grenoble (France) and has joint site and various joint services with Institut Laue-Langevin (ILL).

Legal issues:

- Two levels of agreements:
- First level: existence of governmental agreement

Governmental agreement concerning the construction and operation of a European synchrotron radiation facility, by which the **twelve signatory governments (= contracting Parties)** entrust the construction and operation of the facility to a Société civile, and set out the basic elements of management structure, schedule, funding, contribution rates, taxes, arrangements with other users, entry into force, accession of further Governments, duration.

France	" decided to promote the construction and	Spain
Germany	operation of a European synchrotron radiation facility housing a high performance source of X-rays for the use of their scientific communities."	Switzerland
Italy		Denmark
U.Kingdom		Finland
Belgium		Norway
The Netherl.		Sweden



• Second level: Each contracting Parties designated **Members** which signed the statutes of the ESRF



The ESRF has made also bilateral agreements on its use with other countries/national organisations:

Scientific Associates:

ESRF has concluded bilateral arrangements providing the corresponding scientific communities with the same right of access to beam time and support services at the ESRF as provided to scientists from contracting Party countries

Collaborating research groups:

Various national research organisations from contracting party countries operating their own beamlines at the ESRF, based on specific five-year contracts concluded with the ESRF

Governance and structure of the ESRF:





The **Council** is made up of 8 delegations (few countries has formed two consortia BENESYNC and NORDSYNC). It acts as the assembly of the Members of the Société civile. It decides on important policy issues and the annual budget. The council appoints the director general (DG) and any further directors, and may issue instructions to the DG.

The **DG** is the chief executive of the ESRF and its legal representative. He is assisted by the directors (director of administration, two research directors, Machine director). Together, they form the **Management Board** of the ESRF.

The Council is assisted by an **Administrative and Finance Committee** and by a **Science Advisory Committee** (representing the various scientific areas covered by the ESRF).

Financial Issues

Total expenditure Budget:

In 2005: 77.8 M€ out of which 16.1 M€ Investments, 43.8 M€ personnel and 17.9 M€ reccurent

• Financial contributions for each partner (in-kind, cash, and other resources):

In 2005: 67.1 M€ from Members, 3.7 M€ from Scientific associates, 2.5 M€ from industrial and commercial activity, 4.5 M€ other income (EU grants…) = > all in cash

- ✤ Accounting rules:
- General accounting, multiyear plan
- Budget: ESRF internal Financial Rules
 - Cost controlling:
- External auditors, Audit Committee
- Internal Audit, self-regulation (internal competition for funding)
 - Taxes:

VAT and other taxes according to national rules but **no VAT on non-French** contributions, nevertheless right of the ESRF to recover VAT paid to suppliers

 Existence of faire return arrangements : there are two aspects: scientific use and contracts/purchases

=> Scientific use: The Council may decide measures to limit the use of the facility if there is a lasting and significant imbalance between the proportional use



by the scientific community of a contracting Party and the contribution of that Party's Members.

Contracts/purchases: The ESRF provide for a regular follow up purchases and the award of contracts by country. Under certain conditions there are posttender negotiations enabling suppliers from 'poorly balanced'' countries to align their offer to that of the best one (if it came from a non-contracting Party country or from a "well balanced" country.)

Market procedures

- ESRF specific (i.e. no adherence to public procurement regulations)

- Formal tender procedure for > 50 k€ with information of, and input from, national delegations

Staff policy

- French national rules (*Code du travail*) : permanent contracts, fixed-term for up to 18 months
- Affiliation: essentially ESRF staff, few seconded
- Salaries: **expatriation allowance** (~ 10% of average salary)

Access policy

- Access for scientists from
 - **Contracting Party** or **Scientific Associate** countries
 - other countries only with specific agreements
- Non-proprietary research: intellectual property ⇒ user

There is a large majority of academic users (of which nevertheless about 20% appear to be in contact with, or to receive support from industry), who obtain beam time through the bi-annual peer review procedure and publish the results obtained

 Proprietary research: Part of the beam time is sold for proprietary research, and occasionally specialised equipment is manufactured for third parties. In 2005, the income from such industrial and commercial activities made up almost 3% of the total budget.

=> Existence of the Industrial and commercial Unit (ICU), directly attached to the DG which is the contact point for industrial users. It is in charge of advice, reservation of beam time, invitation invoicing, and ensures rapid access and total confidentiality to industrial companies.



Conclusion:

This type of legal structure allows for a large flexibility for membership issues, as well as autonomy regarding budget and staff recruitment. The governance structure is found to be robust with a clear line of authority and responsibility covering scientific, technical and administrative aspects of the facility.

General approach taken for ESRF has proved to be successful: between 2000 and 2006, ESRF scientists and users have produced 242 Phys. Rev. Let. and 184 papers in Nature, Science & Cell. About 6000 users are coming every year (some come 2 or 3 times)