Central European Research
Infrastructure Consortium

Report 2014

ERIC established by the European
Commission Implementing
Decision 2014/392/EU

Index

Executive Summary

This is the first annual report of CERIC-ERIC, the Central European Research Infrastructure Consortium set up in June 2014 by the European Commission (EC) implementing the Council Regulation (EC) 723/2009. The founding members are the Governments of Austria, the Czech Republic, Italy, Romania, Serbia and Slovenia, while Croatia, Hungary and Poland participate as Observers, pending their formal entry.

The technical/scientific scope and the statutory structure have been designed in the preparatory phase by a Working Group set up in 2011 by the participating Governments.

Italy has been chosen as the hosting Country and its financial support has allowed to reach full operation from the beginning of 2014, before the EC's official decision.

Figure 1 - The former European Commissioner for Research, Education and Science - Máire Geoghegan-Quinn, the Italian Minister for Education, University and Research - Stefania Giannini, and the Chair of CERIC General Assembly - Carlo Rizzuto, at the handing over ceremony of the CERIC-ERIC official plate by the EC Commissioner in Milan, July 2014.

The formal activity period in 2014 would be only a semester, but this report covers the whole year of full operation, as well as some relevant aspects of the preparatory phase and of the first months of 2015.

The support from the Countries participating in the Consortium is provided through one Representing Entity (RE) each, having the capability to ensure the ordinary activity of one excellent Partner Facility (PF) including its free access for external users selected solely on their quality.

The resources for the operation of the PFs are accounted for as in-kind contributions by the member Countries to CERIC-ERIC (CERIC in the following). Also the financial contribution of the host Country (Italy) has been provided through its RE (Elettra).

Each PF, which shall act as the entry-point for the whole national community, is accepted by international evaluation of its quality and effective complementarity to the other PFs. Most PFs were evaluated, set-up and ready to enter into operation in 2013. Two of them are in advanced construction or design phase and will enter operation in the next years.

The mission of CERIC is to integrate the PFs into a unique excellent single-access facility, and to drive quality in science, socioeconomic returns and education by exposing the facilities and the national communities to international competition and collaboration through the external users.

The Governing Bodies of CERIC are the General Assembly of the Members' Representatives (GA), the Executive Director (ED) and the Board of the Directors of the Partner Facilities (BoD). All these bodies, as well as the International Scientific and Technical Advisory Committee (ISTAC) have operated since 2013 in the preparatory phase and were formally set up in the first meeting of the GA in July 2014, with a smooth hand over and start of formal operation of the new ERIC.

Scientific activities

CERIC has been designed to offer single access to a wide array of microscopic probes for analytical and modification techniques of materials, nowhere else accessible in a single facility. These probes are the base for techniques used for preparation and characterization, structural investigations, imaging and sample preparation on materials of interest in Life Sciences, Nanoscience and Nanotechnology, Cultural Heritage, Environment and

9 countries, 7 facilities, over 400 research and technical staff, over 40 different techniques

Industrial Manufacturing.

The start of integration in the ordinary operation of the scientific and technical facilities, has allowed to offer high level international services. To ensure quality, evaluations of the ISTAC and excellence-based selection have been the guiding principles of the GA and the BoD.

The scientific excellence of the PFs ensures attraction of excellent external users, and this helps to improve also the quality of Education and Technology. A good connection to the local environment is expected to contribute to speed-up the growth and the competitiveness of the Central European area.

In this first year, the PFs have allowed the use of over 40 different high quality techniques. Two international calls for users have received 74 proposals of access from over 15 EU and non-EU countries, including India and Japan. The users have required multiple techniques corresponding to over 170 accesses to single facilities; 32 proposals have been selected through international peer-review evaluation and accepted for free-open access (Figure 2). These users open a new and powerful integrated approach for over 1000 users now accessing the ordinary operation of the PF.

Over 100 requests by users from over 15 countries in the first year of operation

CERIC acts as an international agency supporting the best selected proposals, each access (and its value) being a contribution to the user's project.

The applicants have increased in each call with a trend confirmed in 2015. The proposed projects, now coming from over 25 countries, have focused on topics such as fuel cells, catalysts, energy storage materials, medical imaging and therapy, biosensors, graphene based materials, microelectronic devices, sustainable biomaterials, cultural heritage analysis and preservation, aerosol nano particles, peptide and protein structure, etc.

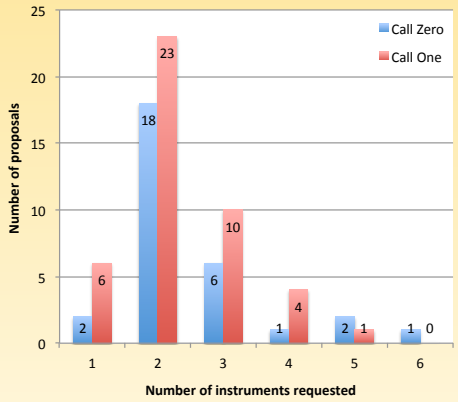
The first two calls have confirmed the high level of the Partner Facilities and indicated the most attractive facilities and the opportunity to further strengthen the scientific outreach by new projects and upgrades.

Four fellows with a strong scientific background have been hired to stimulate interactions between the PFs and develop common projects and the outreach to new users through meetings and workshops.

CERIC is by now an established centre of attraction at international level contributing to EU top-level research. This is complemented by an effort in technological development and demonstration programmes.

Number of proposals received in 2014 in the 1st test Call Zero and the 2nd call (Call One):

Calls for proposals	Call Zero	Call One
Number of proposals received	30	44
Equivalent of single proposals	76	103
Number of successful proposals	9	24
Number of single assignments	24	49



CERIC-ERIC proposals are multi-technique. The average request is of 2-3 instruments per proposal. Therefore, 30 proposals received in Call Zero are equivalent to 76 conventional (single instrument) proposals sent to single facilities. In Call One 44 proposals requested the use of 103 instruments.

Figure 2 - Overview of received and assigned CERIC proposals

Applied Activities

Applied and Industry-related activities are strategic to start a positive cycle between excellence in science and growth of socioeconomic opportunities.

This needs to be developed through different and complementary approaches as, e.g. Technology

Transfer (TT), Industrial Liaison (IL), co-development and pre-procurement, access to analytical facilities, training and communication activities, etc.

Four fellows with a previous experience in these aspects have been hired, two involved also in the science aspects. They have been involved in contacting and networking the PFs on these issues.

The first effort is to find synergies between existing TT activities in the PFs as a start towards building a distributed "TT+IL Facility".

CERIC's integrated facilities can offer analytical services to industry, for quality-control on manufacturing materials with complementary analytical techniques. To develop this, joint applications have been made to EU funded projects in collaboration with SMEs connected to CERIC PFs.

The internal rules and procedures have strongly underlined the opportunity to interact with the industries on the various approaches and in the pre-procurement and procurement phases, aiming at longer term collaborations.

The measurement of the socioeconomic aspects has also been addressed in contact with groups developing econometric methods, and will be further pursued.

Management

CERIC operates as a distributed infrastructure in nine countries, with an increasing number of instrumental facilities. The users' positive response indicates that it will be required to select and serve hundreds of users, with high-level evaluation on all science and technical aspects, and allows to transfer the positive effects to industries and society in general.

This requires capacity and quality to manage, account for, integrate and upgrade the different resources of the PFs, and focus them for optimal results, while acquiring new resources by winning projects in competitive programmes.

This challenge can be achieved only by a flexible and light distributed managerial approach driving the strategic aspects while leaving full autonomy to the PFs, and supporting their common efforts.

The choice is of building a distributed management and administration, connected with each PF and supporting a collaborative approach.

This is now designed in the internal regulations for administration, human resources, industrial and commercial services, communication, etc.

The staff will need to "be at home" in each PF, its mobility is therefore important. CERIC participates in setting-up the RESAVER integrating pension fund, also for the goal of a wider circulation in the area.

The development of an advanced ICT system and training to support the distributed management of Administration, Scientific Data, Communication, Human Resources, Administration, etc. is now under way.

CERIC has actively supported and shared these developments, in particular with other ERICs and Research Infrastructures, as a Member of the European Research Facilities' association (ERF) and organizing in 2014 two events in Trieste dedicated to policy aspects (the ELRI Conference of the Italian presidency and an ERIC network workshop).

Accounting for activities in 2015

The detailed annual account and the independent Auditor's Report for 2014 are in annex 6.

The 2014 resources used for the scientific/ technical activities and for the statutory seat and distributed institutional activities, must be evaluated and accounted in a transparent and effective way, and submitted to the independent Auditors. CERIC's administrative rules conform to the International Accounting Standards (IAS). Two Auditors (from Czech Republic and from Italy) have been appointed by the GA upon nominations by the delegates, and follow the International Standards on Audits (ISA).

The values of resources used have been collected by a network of administrative contacts in the PFs supported by a staff of three hired by CERIC.

The different accounting rules and traditions in the different PFs have posed a difficult challenge in collecting homogeneous and complete data.

The development of a coherent approach requires further detailed agreement and training on several

aspects as, e.g. the values of equipment, the amortization or technical depreciation rates, the content and amount of overheads, the costs of personnel, etc.

For this reason and due to time and recording constraints, data collected are not yet complete and homogeneous. In all cases values collected can be referred to local audits but have not yet been subjected to detailed verification by the CERIC independent Auditors.

The GA, in approving the Annual Account, has agreed to develop a common accounting system and submit it to the EC for approval, to use it in formulating next annual accounts and budgets by an approved procedure.

The *resources for the ordinary and user-related scientific/technical activities* in 2014 are all contributed in-kind. For the capital investment the values collected (when available) are both the initial investments and the present values of instrumentation and spaces. For the operation costs, the recurrent costs (personnel, consumables, maintenance) are added, when available, to the amortization/depreciation. All values are reported in detail in the Annex 6.

The total accounted so far is of about 30 million euro of initial investments, with a present value of about 3 million euro for equipment and spaces: this last value will need to be reassessed on the basis of the effective technical values.

The operation/recurrent costs amount to about 23,066 million euro.

The drafting of Framework and Specific Agreements between CERIC-ERIC and the REs/PFs is now in progress and will help to collect and describe in detail the endowment and operation values of each PF, on a firm contractual basis.

The *resources used for the statutory seat and for the distributed institutional activities* in 2014 have been in total 458.901 euro, with a limited part (50.000 euro) managed as a direct CERIC funding, while most institutional activities have been developed as in-kind contributions by the Italian RE (Elettra). This has allowed the gradual build-up of a distributed management. Direct funding was used only for formal actions requiring direct expenditure (setting-up the bank account, registration, stationery, etc.). The in-kind support has included the stipends of the fellows hired full time for CERIC activities, pending formal requirements for a direct hiring.

A smaller part of institutional activities is the expense to host and participate to the meetings of CERIC bodies, accounted for as in-kind contributions of non-host members as provided for in the Statute, for a total of 32.341 euro.

2014 account and 2015 budget on host Member contribution

The support by the host country has been of 6,5 and 5,41 million euro, respectively in 2014 and 2015. As indicated in the EC decision, this is for the establishment and strengthening of the CERIC-ERIC integrated operations, as well for its upgrading and operation, including training, technology transfer and communication.

In 2014, the expenditure has been of 5.050.716 euro covering both the institutional activities and the strengthening of the scientific/technical operations towards central east Europe, including training and technology transfer. A sum of 1.449.284 euro has been carried over to the 2015 budget, which adds up to a total of 6.990.465 euro dedicated to the institutional and scientific/ technical activities as detailed in the report.

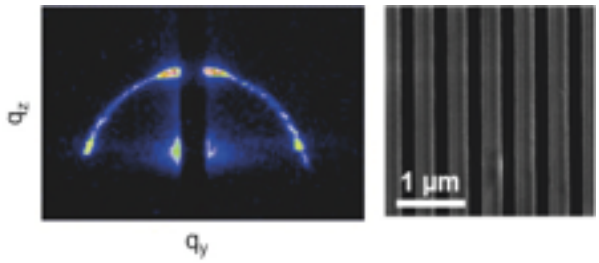


Figure 3 - Fabrication and characterization of new energy materials for photovoltaic applications - SAXS beamline of the TU Graz, Austria

Conclusion

The activity of CERIC in 2014 and in the beginning of 2015 have effectively started the scientific and the institutional aspects, and we can confidently look at a fully operational Central European Research infrastructure in the coming years.

1. Scientific activities

- Setting up the International S&T Advisory Committees (ISTAC) and defining its activities.
- Definition and evaluation of the Partner Facilities by the ISTAC. Define their open access and integrated operation. Nomination of the Directors and setting-up of the BoD.
- Setting-up of the single access point and the proposals' review panel and defining the criteria for the evaluation of multi-technique and multidisciplinary proposals.
- Opening of 2 calls for users (call Zero and call One): successful and increasing response for a total of 74 applications from 15 countries asking for over 170 single instruments accesses; first call performed; second call in evaluation phase at the end of 2015; further calls programmed in 2015.
- Acquiring new scientific resources: selection and hiring of a 1st set of CERIC fellows with strong scientific background.
- Definition of possible needs for upgrades and opportunities to develop the network of scientific and technical personnel.
- Starting the exchange and pooling of equipment and staff between PFs, and defining possible joint projects and funding sources.
- Organization of workshops and specific actions to attract and instruct users responding to users' needs.
- Communication of the CERIC-ERIC activities in conferences and perspective Members/ Observers/ Collaborating Institutions.

The mission of CERIC is to integrate the national Partner Facilities into a unique facility performing excellent scientific and technical activities, driving quality in science as well as in technology and education, by attracting high quality international users and thus exposing the facilities and the national communities to international competition and collaboration.

The scientific activities have started well ahead the official beginning of CERIC under the drive of the Working Group (WG) set-up in 2011 (Annex 1). Within 2012, the Partner Facilities (PFs) proposed by the future Members have been evaluated by the International S&T Committee (ISTAC, Annex 2, EvCO in the preparatory phase) and accepted by the WG acting as General Assembly (GA). The Directors of the PFs have operated as a Board of Directors (BoD) since the end of 2012.

The confirmation of the GA and the BoD in the first meeting of July 2014 has ensured continuity with a composition largely the same as in the preparatory phase (see Annex 2). Croatia, Hungary and Poland, who had participated in the preparatory phase, have been accepted as Observers, and continue to participate in the scientific activities, pending their formal entry as members.

The preparatory phase has been very fruitful also in terms of new bilateral and multilateral collaborations, enriching the overall outlook for CERIC, and further strenghtening the synergies.

The GA has recognized the important executive role of the BoD and has invited the Directors to participate in its meetings in a consultative capacity.

The BoD has defined the choice of infrastructures and equipment best suited for external users - also on the basis of the evaluation by the ISTAC.

In December 2012, a first "Science @ CERIC workshop" was organized in Trieste as the effective start of the scientific activities of CERIC for external users.

In more detail, the activities that have been developed are the following:

— International evaluation and selection of the scientific programs and resources.

The International Scientific and Technical evaluation is a systematic and qualifying aspect of CERIC. The PFs are proposed by the Members through their REs and, before acceptance, submitted by the GA to international scientific evaluation of both their research quality and their potential for international service in an integrated approach. The International Scientific and Technical Committee (ISTAC) (Annex 2) and its rules have been based on the previous experience in the preparatory phase.

Prof. Michel Van Der Rest has accepted to chair the ISTAC ensuring continuity with the Committee operating in the previous phase. In 2014 the PF proposed by Croatia has been evaluated positively by the ISTAC and accepted by the GA.

This 2014 report has been evaluated and approved by the GA in June 2015, after positive evaluation by the ISTAC, while a first version of the 2015/2016 program and a three years outlook will be further developed for discussion by the ISTAC in the second half of 2015. This will involve also the evaluation of project proposals developed in the first full year of operation.

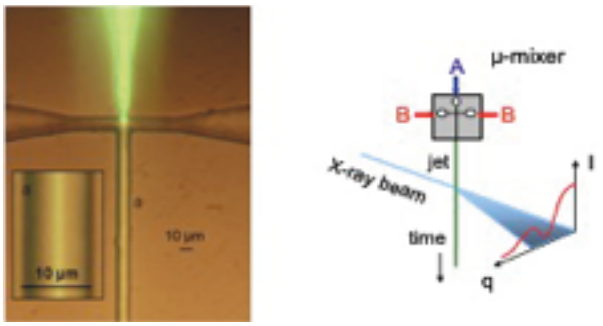


Figure 4 - Understanding the self-assembly of nanomaterials for pharmacy, medicine and energy materials - SAXS beamline, TU Graz, Austria

— Start of the activities for external users: the Board of Directors and the first two international calls. Single entry point and review panel.

The preparatory work of the BoD has allowed the start of the service to users from the beginning of 2014, with the first two calls launched in the same year (Test call Zero, deadline April 15th, and call One, deadline September 22nd). These calls and

Figure 5 - Ornela De Giacomo
CERIC-ERIC Deputy Executive Director

the user's response have allowed to test and consolidate the selection of the instruments proposed for external access, adjusting to users' requirements, with a significant evolution between the two calls. In the second call, the ion accelerator facility in Zagreb has been added to the offer and has attracted more users. The results are reported in Fig. 2.

To ensure continuity in the support to users and in the quality control, Ornela De Giacomo (Fig. 5) has been nominated Deputy Executive Director with the specific responsibility to ensure the development of the service to users, the evaluation system and the support to the ISTAC.

The implementation of a single entry point with a uniform proposal format for a distributed facility, with such a wide range of different techniques, has required an important harmonization effort. The solid collaboration between the PFs has helped to develop a common proposal format with a unique evaluation procedure. This is supported by an integrated IT platform inspired by the ones already available at the PFs, and developed to address the needs of CERIC users.

The extensive experience in most of the PFs has allowed the timely setting-up of the evaluation and selection of the proposals involving independent experts.

However, the evaluation of these multi-technique proposals, adding to the over 1000 proposals evaluated each year in the ordinary operations, poses some new questions and problems to be specifically addressed. Excellent single technique proposals include cutting edge problems to be approached by one cutting-edge technique, and their prioritization is more straightforward. Instead, excellent proposals requiring a multi-technique approach may need to integrate some cutting-edge techniques with more standard ones. In such cases, evaluators face the specific difficulties met whenever a multidisciplinary aspect is present. This requires a new approach to balance different disciplinary evaluations into a single one, and giving the overall innovative value of the proposal while assessing the technical aspects of an integrated access. Recognizing these new interesting problems, the BoD has decided that, starting from Call Three, all proposals will go through a two-step evaluation. This will consist in a pre-submission and first evaluation with direct involvement of the technical staff of the facilities who can suggest technical improvements. The final submission after a two weeks interval allows the proposer to improve the content prior to the scientific evaluation process. This approach allows different experts to evaluate both the technical challenges and the scientific potential.

In some cases the availability of more “standard” techniques as a complement to cutting edge ones will allow to better accomplish the requirements of the users. This approach could help to develop industry-friendly services.

The technical support for users in each PF is typically focused on a single technique, and the first two calls have indicated a requirement to share and integrate different approaches and technical support of different PFs. Meetings and exchanges of the technical and research personnel will be organized to respond to this.

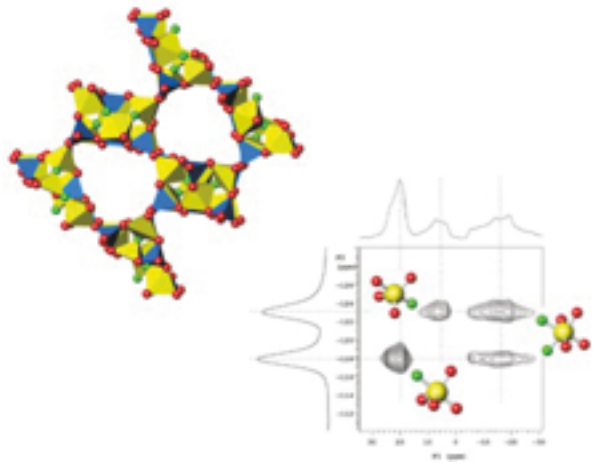


Figure 6 - Structure of porous material (fluorinated aluminophosphate), investigated by solid state NMR at the Slo NMR in Ljubljana, Slovenia.

— Acquiring new resources: the Fellowships and their scope

In the first half of 2014 the BoD has evaluated and selected a first set of six CERIC fellows, who have applied through an international call. They have been hired by Elettra on the budget available for the CERIC institutional activities, pending the setting-up of hiring procedures by CERIC. The selection has, as far as possible, aimed at staff with a scientific background also when their activities will address other aspects as, e.g. Communication or Technology Transfer. This is a choice aiming at having easier cross-cultural interactions.

Figure 7 - CERIC Fellows with Margit Fábián and Rózsa Baranyai in the control room of the research reactor at the Budapest Neutron Centre, Hungary

The Fellows (Fig. 7) are now effectively building a common CERIC environment by actively interacting with the staff of the various PFs on various aspects. Four of them, with strong scientific background,

are required to operate both in the scientific and in the technological aspects and are actively pursuing the development of multi-technique approaches. One task is to prepare outreach activities for new users, including a yearly workshop. In-house research activities involving the fellows in collaboration with staff of the PFs, or collaborations with other groups but focused on strengthening the multi-technique capabilities are now considered.

— Responding to users: definition of possible improvements

The multi-technique approach of CERIC is completely new and its potential needs to be efficiently communicated and developed with potential users in various fields. Communication and access mode must be based on effective experiences and the appropriate technical details clarified and detailed, to allow potential users to develop and propose successful projects. Building a base of expertise, will help to attract further users and generate valuable research results.

One specific action will be based on workshops involving both junior and experienced researchers/ user helping also to improve the equipment and the procedures for selection and access, these workshops shall be a recurrent effort.

Figure 8 - New 600 MHz Agilent DD2 spectrometer at the Slo NMR facility in Lubiana, Slovenia

Responding to difficulties experienced by some new users, CERIC has organized a specific seminar in the Romanian PF (Annex 5) taking into account the large potential of new users in that country and in the area in general. It was an excellent opportunity for exchanging suggestions with the users, to network and to identify the most common difficulties that users experience in writing successful proposals.

The first two calls have already reached oversubscription in some of the techniques. This indicates that their availability should be expanded. Some other techniques are not yet required to the level at which they have been made available. This indicates the possible need to balance single and multi-technique service in the various PFs with a more flexible approach. The possibility to admit some “single technique” but highly significant users through the CERIC entry point is also being evaluated.

— Defining possible upgrades and joint projects, exchange and pooling of resources.

Requirements by the users and discussions within the BoD and involving the staff of the PF’s have indicated the opportunity to upgrade and/or

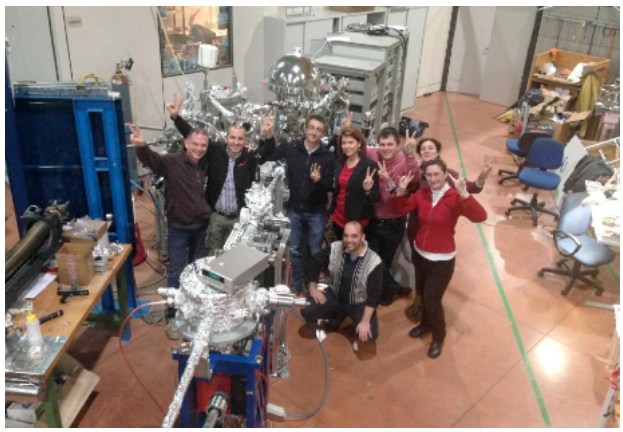


Figure 9 - Romanian team of scientists at SuperESCA beamline at Elettra in Trieste, Italy

duplicate some of the techniques and instruments. This could take place by projects designed to upgrade existing facilities or by acquiring new instruments within the CERIC remit.

The exchange of staff and equipment should be part of this effort.

The previous successful collaborations between the Austrian, Czech, Slovenian and Italian facilities, has allowed the proposal to set up CERIC and is a good basis for further developments. This is

already happening with new direct agreements between the researchers of Romania and Italy. New contacts are being developed between Slovenia, Austria and Italy, and between the Czech PF and Poland. More ideas are maturing, with a growing understanding and collaboration between researchers of the various PFs.

— Communication of the CERIC-ERIC activities and perspective new collaborations

During the preparatory phase and in the context of various international meetings (e.g. the CEI), contacts have been started by Governments and Research Institutions for possible collaborations and/or entry in CERIC. A non-exhaustive list of countries includes Bulgaria, India, Slovakia, Ukraine and Greece.

Also the PFs have been actively spreading the information on the new Infrastructure and its capabilities both as national entry points and in international meetings.

A specific approach is required to ensure that any step in the direction of new memberships or agreements brings to the increase of high quality scientific capabilities.

As a specific example, the University of Sarajevo expressed its interest in getting a deeper knowledge of the CERIC-ERIC scientific activities and of the Consortium in general. A delegation visited that University to discuss future joint projects, and common scientific aspects (Annex 5).

In this context Fabio Mazzolini (Fig. 10), who has also participated in the preparatory phase, has been tasked to act as a Deputy Director for EU and International relations and a specific procedure has been set-up to select and define longer-term collaborations.

Figure 10 - Fabio Mazzolini, CERIC-ERIC Deputy Director for European and International Relations, at the CERIC meeting at the University of Sarajevo

External PIXE beamline at the Ruđer Bošković Institute in Zagreb - Croatia

- Selection and hiring of fellows with experience in Industrial Liaison and Technology Transfer (IL&TT).
- Definition of contact points for IL&TT in the PFs and REs and start of networking activities between IL&TT contact points.
- Sharing of knowledge on methods and approaches developed within the PFs and in other institutions.
- First definition of possible methods and instruments based on the CERIC integration of several techniques for the support of the PFs' industrial users.
- Development of a shared list of industries already connected to the PFs, and development of joint EU proposal applications with PFs and industries in the network.
- Initial activities for the definition of the possible impacts and socioeconomic returns and their measurement/evaluation.
- Developing internal rules on IP and industry relations coordinated with the activities of the PF.
- Developing industry collaboration approaches based on procurement and pre-procurement.

Applied and Industry-related activities are strategic and CERIC is expected to contribute to strengthen industry opportunities by feeding a positive cycle between excellence in science and applications.
Several PFs and REs have previous experience in developing Industrial Liaison and Technology Transfer (IL & TT). The diversity in these experiences is an asset which, if properly integrated and further developed, may bring to better and more effective results. To support the growth of a common understanding and to formulate common projects in TT and industry relations, CERIC has hired two fellows with both a strong scientific and TT background and dedicated them to help developing a network between all PFs on these aspects, the aim being that of building a distributed TT/ILO “facility” alongside the Research infrastructure.

The following actions have been brought forward in 2013-2014:

— TT contact points and TT Fellows

During the preparatory phase, various PFs described their experiences in applied activities, and showed how these could be networked and further strengthened in the CERIC context. This mutual information has built the base for designing a common action, starting from diverse experiences existing in the PFs and the REs.

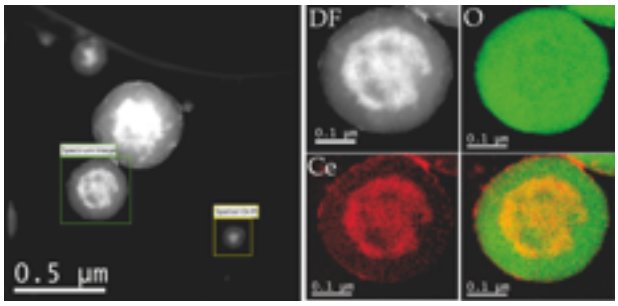


Figure 11 - Example of CERIC-ERIC research at the National institute of Material Physics in Magurele - Romania: STEM EELS Spectrum Imaging from SiO2 - CeO2 core-shell structures.

Two Fellows hired for the CERIC institutional activities have a direct interest and previous experience in TT. A third person, hired by Elettra in the context of the CERIC start-up, has previous experience in marketing in an industrial environment. This group of people has been involved in visiting the various PFs, to contact and build a network of the people taking care of the industrial (and related administrative) aspects, and help to start an activity to strengthen the capabilities by developing synergies between the PFs.

— Methods and approaches for the interaction with industry, and first initiatives for joint programs

The industrial impact of Research Infrastructures (RIs) is very important but is still referred to in a non-systematic way and without a specific frame of economic studies.

The opportunity for CERIC is to take stock of the experience, developed by the REs and the PFs, spanning on different institutions, countries and techniques, and based on different methods to interact with different industrial environments. The networking now started by CERIC aims at better defining and understanding these different experiences, and derives stronger and clearer policies and best practices for stronger industrial and socioeconomic returns.

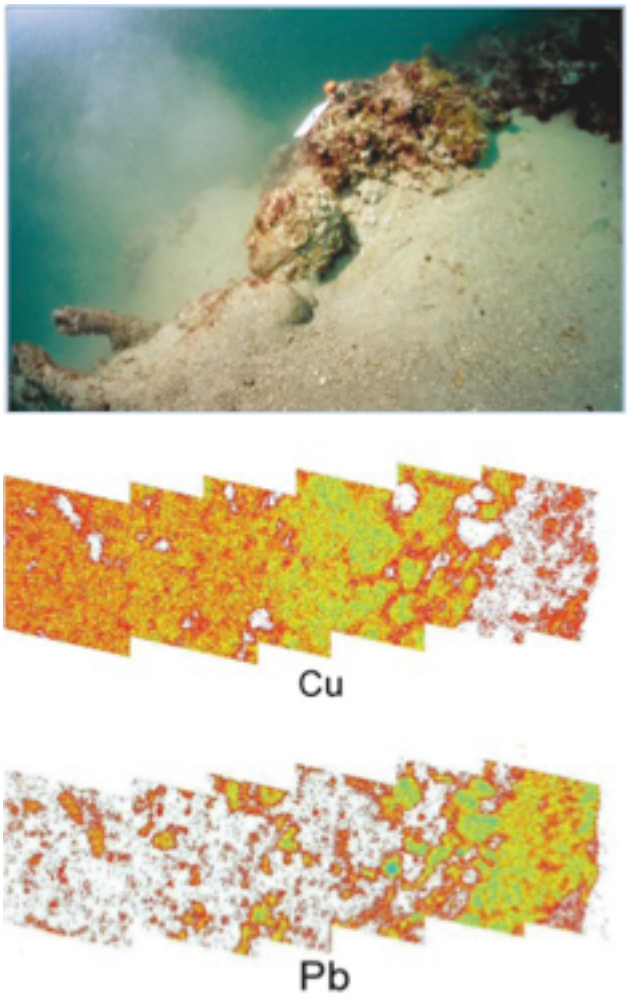


Figure 12 - Example of research at the Ruđer Bošković Institute in Zagreb, Croatia: composite micro-PIXE image of the cross section of an alloy taken from the bronze statue of an athlete (known as Apoxiomenos) raised from the north Adriatic Sea in 1999. The right side of the alloy has been exposed to the seawater, which resulted in Cu being leached away and Pb being over concentrated.
According to the quantitative analysis of alloy samples by PIXE and XRF, data obtained by C-14 dating using Accelerator Mass Spectrometry (AMS), and Pb isotope ratio measurements obtained by the Multi Collector Inductively Coupled Plasma Mass Spectrometry (MC-ICP-MS), a provenance of the statue could be determined. The results lead to the conclusion that the statue is not of a Greek origin, but most probable it is a Roman copy of the Greek original.

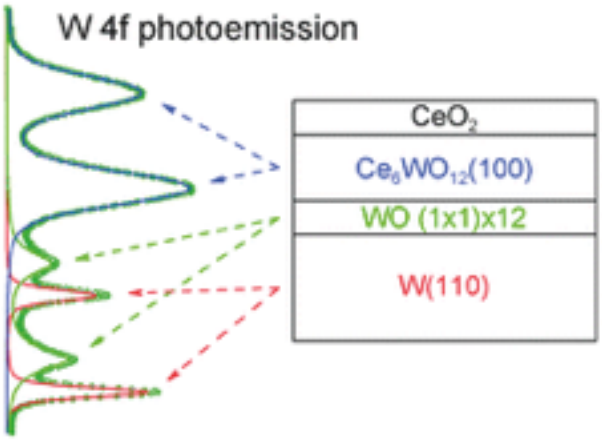


Figure 13 - Epitaxial cerium tungstate thin films studied at the Material Science beamline of the Surface Physics Laboratory from the Charles University Prague, Czech Republic: metal oxide catalysts are widely used in industrial processes in energy and environmental applications. The materials are rather complex, but a very versatile oxide, Cerium oxide, is often able under reaction conditions to gain or lose oxygen, acting as an oxygen storage material.

As a first approach, it has been decided to target SMEs with a more local character, to offer them the help to enter into a wider multinational perspective also by participating in EU funded programs together with CERIC. In this context, an application within Horizon 2020 has been submitted early in 2015. Other possible programs have been considered both in Horizon 2020 and in Structural Funds. Within this approach, the exchange between the different TT contact points will also focus on the possibility to create spin-offs as a specific instrument to improve the economic returns to the host countries.

— Attraction and support of industrial users

The use of RIs by the industry is often referred to (also in the EU programs) as a main scope and possible indicator of the connection between RIs and industry. However, with few exceptions, the "direct" industrial use is a small percentage of the total use (between 2 and 5%) while a deeper

analysis indicates a stronger "indirect" industrial use through the industry-academy collaborations hidden within the "free open access". This indirect industrial use has been estimated even up to ten times the direct access (around 20%). This has several explanations: from the cost and difficulty of having highly trained personnel in industry, to the need of having "standard and certified" instead of "cutting edge" analytical methods and results (in particular when industrial litigations are involved).

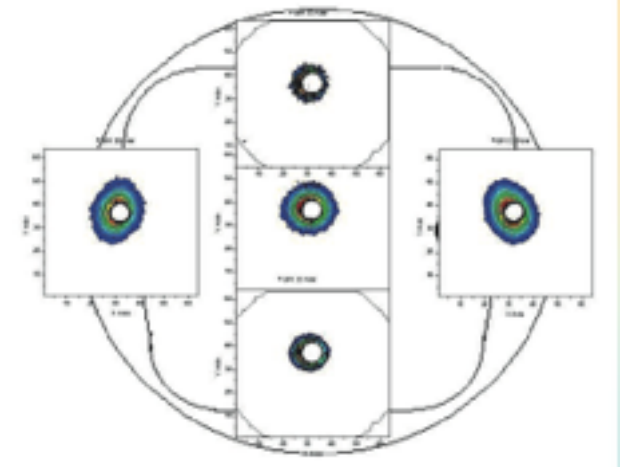


Figure 14 - Life-time investigation of Ferrari engine pistons at the Budapest Neutron Centre - Hungary: small angle neutron scattering study of the nanoscale defect structure in A1-alloy pistons at different stages of usage. Anisotropic distribution and highly geometry dependent growth of precipitates was revealed.

The multi-technique approach made available by CERIC is potentially of stronger industrial interest, and in view of making this approach more directly accessible by the industries, e.g. by integrating "standard" with "cutting edge" analytical methods, the diverse experiences in the CERIC PFs are being assessed and will be taken as an expertise base. To overcome some of the difficulties of the direct industrial access, the training and eventual further hiring of personnel specifically dedicated to support the service to industry is being considered.

— Specific initiatives to increase the capability to interact with industry and define the socioeconomic outcomes

The possibility to interact with groups of economists developing studies on the measurement of the socioeconomic returns is being considered, also in view of an expressed interest by the European Investment Bank.

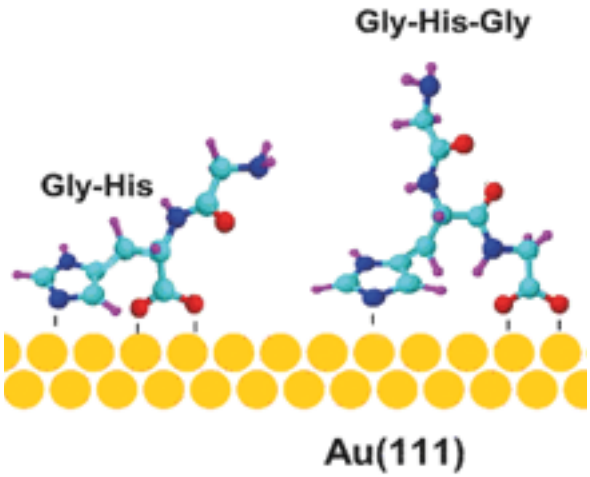


Figure 15 - Absorption of Histidine and Histidine-containing Peptides on Au(111) at the Materials Science Beamline of the Surface Physics Laboratory from the Charles University Prague, Czech Republic: a series of small biomolecules were studied by absorption in vacuum and/or from the liquid phase on gold single crystal.

The definition of internal rules, responding to the statutory requirement of defining the IP aspects, and allowing a shared approach towards increasing the impact of the activities in the PFs by linking them through CERIC is being pursued in the context of the development of the Internal regulations and of the Agreements between CERIC and the REs.

Research Reactor at the Budapest Neutron Centre - Hungary

3. Management

- Definition of the legal frame for the newly funded ERIC and acquisition of the basic instruments (registrations at EU and local level, bank account, etc).
- Set up and start of the governing bodies, define the framework for the Audits.
- Entry of the Observers and actions for their entry as Members and contacts with other countries/institutions for new perspective collaborations.
- Development of an initial set of Internal Regulations, drafting of the agreements for setting-up and operating the Partner Facilities and for accounting their in-kind resources.
- Acquiring new resources: selection and hiring of Fellows dedicated to science, administration, technology transfer and communication; definition of the HR frame, and enter the RESAVER pension scheme.
- Start building the communication and administration network and definition of a distributed management structure and approach.
- First definition of Mission & Vision; setting-up of the basic communication instruments (website, logo, stationery, communication strategy, presentation, newsletter).
- Support to governmental and policy-making activities (Competitivity Council in Milano, ELRI and ERIC network meetings in Trieste); membership of ERF.
- Acquisition of high level consulting capabilities for Tax, HR & Administrative aspects.

The setting-up of a new institution poses the challenge of defining as early as possible its internal "culture". A challenge is, for example, to develop a non-bureaucratic, inclusive, attractive and user-friendly approach. In the case of CERIC, this challenge is compounded by the need to operate in nine different Countries, while helping different traditions and cultures to collaborate in an integrating and synergic approach.

The choice is to avoid a "central" structure, but to evolve, as much as possible and with the advanced use of ICT and mobility, a light and distributed management in all different aspects, involving and connecting the existing human resources, while adding resources specifically addressed to increasing the collaborations.

The GA (and previously the Working Group in the preparatory phase) has supported this choice also avoiding to define rigid rules which could be theoretically attractive and safeguarding but, at the same time, excessively tight in the longer term.

Some decisions on the rules of procedure have been adopted as a "framework-template" approach, allowing a test period, while respecting the specific indications of the Statute or the legal framework. All rules have been written while underlying the distributed nature of CERIC and its mission towards integration.

One way to ensure that the internal "culture" is flexible and "young" is to have, from the beginning, a group of junior people as the "owners" of the Institution and this has been pursued by hiring junior "Fellows" not only for science, but also for administration, communication and technology transfer, to ensure that their training, while developing a new environment, were going hand-in-hand.

As a first challenge the junior Fellows have been involved in defining in a compact form the CERIC's Mission and Vision and propose this to the BoD and the GA (Annex 4). This formulation is now in use and will be reviewed in the second year of operation of CERIC.

In reference to the need to acquire a young and mobile staff, as well as to support a wider mobility of scientific and technical staff, CERIC has entered into the preparation of the RESAVER pension scheme, which allows to integrate the national pension schemes and is expected to contribute to a larger mobility of staff in Europe.

— The General Assembly (GA)

The GA met three times in 2014. The first time was during the EU Competitiveness Council under the Italian presidency, in Milano in July 2014, after which the Italian Minister and the EU Commissioner for Research have inaugurated CERIC's activities.

In its first meeting GA has nominated its Chair and empowered him with the task of Executive Director (ED) for a first start-up period, with the mandate to set-up and start the basic functions and reach the full operation of the Consortium.

In the same meeting, the Countries who had participated in the preparatory phase, and are collaborating in the scientific/technical activities have been accepted as Observers and since then they participate fully in CERIC, pending their formal entry as Members.

The first GA has nominated Ileana Gimmillaro as Secretary. In this function and before she has very effectively participated in drafting, as legal expert, the statute and the proposals for internal rules and procedures. She is also the author of the CERIC logo, selected in a competition between the staff of all the PFs in 2012.

Figure 16 - CERIC-ERIC Partner Facilities and countries

The Directors of the PFs, nominated by the REs since 2013, have been meeting as the Board of Directors (BoD) of the PF and have smoothly taken over the formal role provided for in the statute. (Annex 2). The GA has recognized the strategic and executive role of the BoD and invited the Directors (who are not already delegates of the Members) to participate in the GA in a consultative capacity. The "modus operandi" and relationship between GA, ED and BoD has thus been defined and tested.

As it has already been reported in the Scientific Activities, contacts with new perspective Members or Observers are being closely pursued.

— Development of the Internal Rules and Procedures (Regulations), and start of strategic activities

The Statute makes several references to internal rules and procedures. The effective activity of CERIC, as well as its "culture", will strongly depend on how these are defined and implemented. The list of regulations/rules deriving from the indications in the Statute is reported (in Annex 3), indicating which ones have already been defined and approved, by the GA. The understanding is that they will undergo a test period, and can be amended by written procedure when necessary, in particular in the first full year of operation.

The excellent understanding and trust built within the delegates in the GA, the ED and the Directors of the PFs has allowed to start the strategic activities of CERIC, notably the international scientific service to users, joint project proposals, development of a technology transfer network, joint communication, support to policy making, and the selection and hiring of staff, even before all the formal agreements and rules were in place.

A first draft of a Data Policy and Access procedure and regulation has been developed and has been finalized in the first half of 2015.

Finally, to give a firm basis to the setting-up of the PFs and define the mutual exchanges and obligations between CERIC, the REs and the PFs, a standard Framework and specific Agreements have been developed and submitted for approval to the REs.

— Initial set of administrative and legal instruments

Most basic requirements to start formal operation of the statutory seat and of the legal body have been fulfilled, e.g. registrations at EU level (in the register for Horizon 2020 applications and in the transparency register of the interest-representing institutions - Figure 17) and at local level (fiscal register and bank account). In this context, a question has arisen (also in other ERICs) about the appropriate Authority that should keep a Registry of the ERICs at EU level. This should be followed-up. We believe that the European Commission should respond to this requirement, which could be relevant in the relationship to third parties, the ERICs being set-up and dissolved by EC decision.

A number of other detailed issues are also arising in the context of the participation of an ERIC to EU funded programs (in Horizon 2020 and in the various forms of Structural and Social funds), and are being addressed in contact with relevant EC Directorates.

Figure 17 - Horizon 2020 participant portal

— Building the Institutional Distributed Communication, and Data management

To support open and correct information to the various stakeholders, as well as direct contact and access for perspective users, a website has been set-up (www.ceric-eric.eu). It contains both a public part and a section accessible to the Members and PFs for internal communications and documentation.

The GA has defined which internal communications should be public and what should be for internal use only. The appropriate recording and keeping of the basic documents (Minutes of the Bodies, Actions and Deliberations, etc.) has also been set-up.

One aspect discussed and now further assessed, is the construction of a more complete ICT and Data Base system to allow the correct data recording and use, to support the overall management and administration as well as evaluation and impact assessment of all CERIC's activities. This will be a major effort which may be developed also in a wider collaboration (e.g. with ELI-DC and/or other distributed facilities)

One junior Fellow has expertise in Communication and has been charged to develop a Communication Strategy and a Communication network involving all Partners. Based on the Logo selected in the preparatory phase, a corporate design for stationery and presentations has been developed and put in use (Figure 18). A first issue of a newsletter has been drafted and circulated internally in the end of the year, and has become regular in 2015.

Figure 18 - CERIC-ERIC poster

— Designing and setting-up a distributed Administration, the Auditing and developing the Tax exemption aspects

The GA has approved that the administration should be built in a distributed approach, with only a light but expert support by the statutory seat. To this effect, three Fellows with administrative expertise and having direct experience of different Member Countries have been hired (one in 2015) and charged to travel and visit the PFs and, with the help of the Directors, define appropriate "contact persons" who could be motivated, trained and involved in an effective distributed administrative capability.

A senior Administrative Officer has been detached full-time from Elettra, and two external Experts with EU auditing expertise have collaborated in all details of the development of the administrative rules, as well as in the detailed procedures, including the collection of the data from the PFs for the annual budgets and accounts.

The administrative rules have been developed ensuring that they are applicable in a distributed approach and that a supporting ICT system could be planned.

In particular, these rules envisage that each PF will host a "Centre of Responsibility" (CoR) ensuring the coordinated and coherent application of the same administrative criteria (ensuring the accounting of the in-kind contributions, the appropriate approach to procurement and tax exemption aspects and the correct reporting to the ED, the GA, the Auditors, etc.).

The procurement of an adequate software support has been assessed and the same software currently used at Elettra has been chosen, which has the potential to be flexibly developed for both the administrative and the database activities in a distributed and multinational environment.

CERIC has two Auditing Bodies outlined in Articles 16 and 17 of the Statute. The first Body, the IAEC (International Audit and Expert Committee) has been introduced to ensure that procurement made by REs in tax exemption complies with the rules and limits set out in Article 7 (5). The second one is the body certifying that the CERIC accounts and budgets are correct and the values of the in-kind contributions are correctly evaluated.

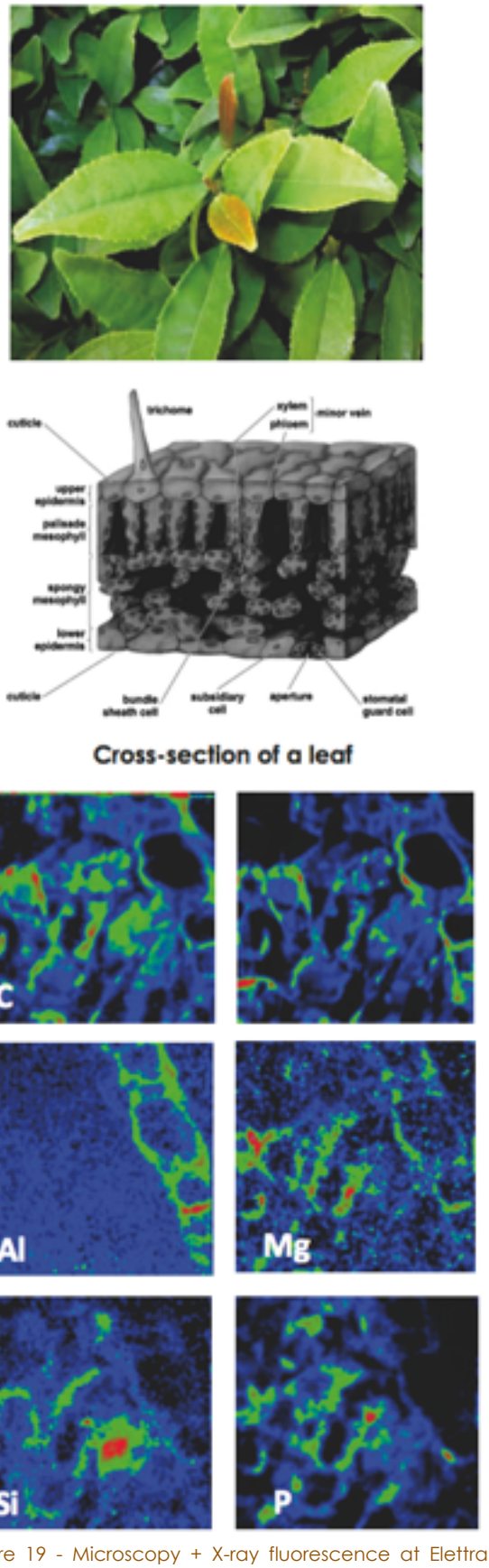


Figure 19 - Microscopy + X-ray fluorescence at Elettra Sincrotrone Trieste, Italy: functionality and toxicity of Al and Si in tea leaves analyzed on sub-cellular level.

The first Body has not yet been set-up, due to the very limited application, so far, of the direct exemptions to CERIC procurements provided for in the Statute and pending the definition of the procedures for procurements through the REs, which are not yet implemented.
Two Independent Auditors, as referred to in the Article 17, have been nominated in May 2015, and have analyzed the present Report (annex 6).

Networking and support to policy making, develop impact assessment

The task of helping a faster quality growth and the catch-up of Central Eastern Europe is connected to the more general task of contributing ideas and knowledge to policy makers at EU and governmental level in the relevant areas.
In 2014 CERIC supported and/or directly organized three initiatives: the support to the preparation of the informal Competitiveness Council dedicated to Research infrastructures, held in Milano in July; the ELRI Conference ("The Evolving Landscape of Research Infrastructures in Europe", Annex 5), held in Trieste in September within the Italian presidency of the EU; a Workshop, of the network of all the ERICs now active or being set-up in the EU, held in Trieste in December (Annex 5).

Figure 20 - The CERIC-ERIC team at the ELRI Conference held in Trieste in September 2014

According to the feedbacks obtained, all three events have been very successful and have helped to bring forward a shared knowledge useful for the construction of the ERA.

CERIC has also entered as a Member in the European association for Research Facilities (ERF) which has been very actively supporting policy making at EU level.
The Statute and the present policy-making at national and international level require the development of an appropriate "impact assessment" which, in turn, requires to define and collect significant data on the "results", both direct and indirect, of the activities developed by employing the available resources.
As anticipated in the Chapter on Management, CERIC has started, based also on previous experience, to interact with a group of economists developing a frame for criteria and parameters dedicated to the definition and, as much as possible, of a formally agreed measurement of the impacts.

— Dealing with regulatory issues and acquiring high level consulting capabilities

Several other issues, still to be fully defined but ongoing are: the definition, with the tax authorities, of the procedures to apply tax exemptions (VAT and Excise Duties) through the REs, as well as the definition of an appropriate framework for hired and seconded personnel operating in the distributed Infrastructure. In both cases, the need is to define a EU-oriented and multinational approach with the help of international level consultants.
Further aspects addressed are the procurement rules and the correct application of tax exemptions applicable at CERIC level or, in the future, to the REs on behalf of the Members for procurements performed for the scope and exclusive use of CERIC.
A specific question and proposal for procedure has been prepared in collaboration with the Italian Ministry of Research and presented to the Income Tax Agency, to define limits and procedures for the application of tax exemptions through the RE. Preliminary contacts have been taken with the other Agency dealing with Excise Duties, and a similar procedure will be followed.

— Activities to acquire resources from grants and other supports, and/or from commercial activities

This brief period of institutional activity in the first year of operation has not allowed to complete the procedures to acquire specific resources through projects submitted to funding agencies or dedicated commercial activities.

However, this activity has been initiated and CERIC has developed, with the involvement of the junior staff, some projects presented or to be presented to the EC within Horizon 2020, or to implementing Agencies within central EU Structural Funds.

Proposals have been presented, e.g. a Marie Skłodowska-Curie action – ITN: "CERIC Network for Training Researchers", where CERIC is a Partner Organization and the PFs are involved as Beneficiaries/Coordinator; a FLAG-ERA Joint Transnational Call, Graphene Flagship: "Based biosensors for cancer cells markers detection", where CERIC is referred to; both were submitted in January 2015.

The structure and qualifications of CERIC should be an asset for its possible participation in particular in the Structural and in the Framework actions of the EU. A study of possible synergies in proposing projects to these two different types of actions has been developed already in the preparatory phase. During the preparatory period, the insertion of references to CERIC, or its fields of activity, has been proposed and achieved in some Smart Specialization Strategies in Member States and Regions.

The Statute allows industrial and commercial activities, provided these are marginal and do not interfere with the scientific access activities. A frame to allow and facilitate these activities has been designed in the Internal Regulations, and is being further defined in the Framework and specific agreements regulating the use of joint PFs and CERIC resources.

4. Activities, resources and their accounting

- Building a distributed Administration and defining its structure, rules and procedures for the management and accounting.
- Defining and evaluating the in-kind resources for the ordinary and users related activities of the PFs and for their upgrade.
- Defining and evaluating the resources for the CERIC distributed Institutional activities, based on the contributions of the host country and members.
- Initiatives to acquire additional resources through proposals and possible synergies between different EU funding programs. Reference rules to initiate industrial & commercial activities.
- Apply for extending the tax exemption (VAT + excise) to the REs on behalf of the Members.
- Developing the accounting and auditing standards, preparing the Impact Assessment and nomination of the General Auditors.
- Development of the financial and in-kind annual account for 2014 and first estimate of the auditable values to be included in the Annual CERIC Accounts.

As underlined in the previous chapters, the year 2014 has been a full year of operation, and there has not been a specific transition between the preparatory phase and the formal start of the ERIC. For this reason, the activities, resources and accounting presented in this Report cover the whole of the year 2014.
Only the limited direct contribution of 50.000 euro and related expenditure of the statutory seat refer to the semester July-December after the formal setting-up of the ERIC.

With reference to the wider activities considered for CERIC in the Statute, this first year has been limited to the ordinary and users related scientific/ technical activities in the PFs, and to the institutional management and training activities, as described in the previous chapters.
Specific joint projects, research and development or commercial activities have not been, as yet, developed to the point of generating revenues.
The resources used in 2014 have, therefore, been mainly the contributions in-kind by the members and observers through their representing entities, for the ordinary and users related activities in the PFs, and the host Member's contribution for the establishment and strengthening of the CERIC integrated operation, including training, technology transfer and communication.

Figure 21 - SANS Yellow Submarine at the Budapest Neutron Centre - Hungary

The in-kind contributions, including the support to the ordinary activities of the PFs, sharing and opening external access to facilities, specialised technical capacities and capabilities, and training, must be evaluated and accounted for in the annual Budget and in the annual Account, in order to credit their value as in-kind contributions to CERIC by the Members through their REs and PFs.
The annual report must also account for in kind and financial resources provided, by the host member and other members, for the management and the operation of the institutional activities of CERIC.

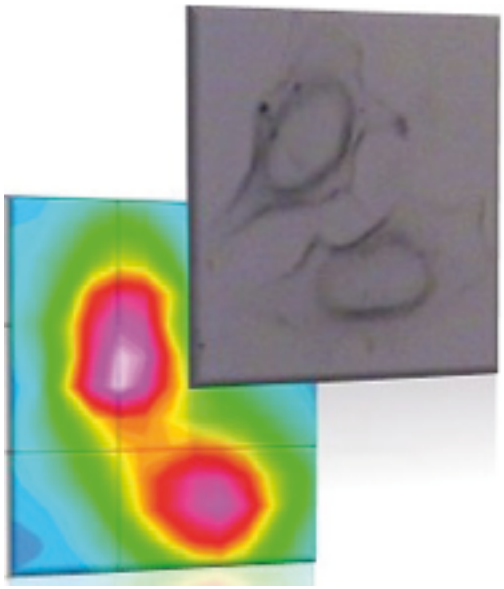


Figure 22 - imaging of living systems with chemical sensibility analyzed with infrared microscopy at Elettra Sincrotrone Trieste, Italy. The figure shows dividing liver cell: the optical image (gray scale) can be directly compared with the chemical map of Amide I protein band (color scale). Also if cells seem to be separated, the technique reveals that cell membranes are not completed divided yet and that proteic and genetic material is still migrating from the mother to the daughter.

— Collecting the data

The data have been collected using a standardized list of "account items" with the help of the growing administrative network composed initially by one senior administrative officer and one of the Fellows, and then strengthened with two more institutional staff and three local "contact points".

This overall team has been interacting and sharing the same approach on how to report on the data available in the Partner Facilities and on those related to the statutory activities in Elettra.

A specific effort has been made to ensure that the data could be referred to local auditing. In case of doubt, data were not reported, and, in some cases, this shows in the accounts as zero contributions.

— The accounting and auditing standards

The challenge proposed by the Founding Members to CERIC is that of increasing the effective value of existing and future national resources contributed in-kind, by exposing them to a competitive and international drive. This, in turn, requires developing a correct accounting of the values (and their variation) applicable to all resources (human, instrumental, financial) proposed and effectively used. This implies obtaining reliable and verifiable data to account for the expenditure (or more generally the use of resources) and for the results reached both in the "central" management and in the "distributed" scientific/technical activities.

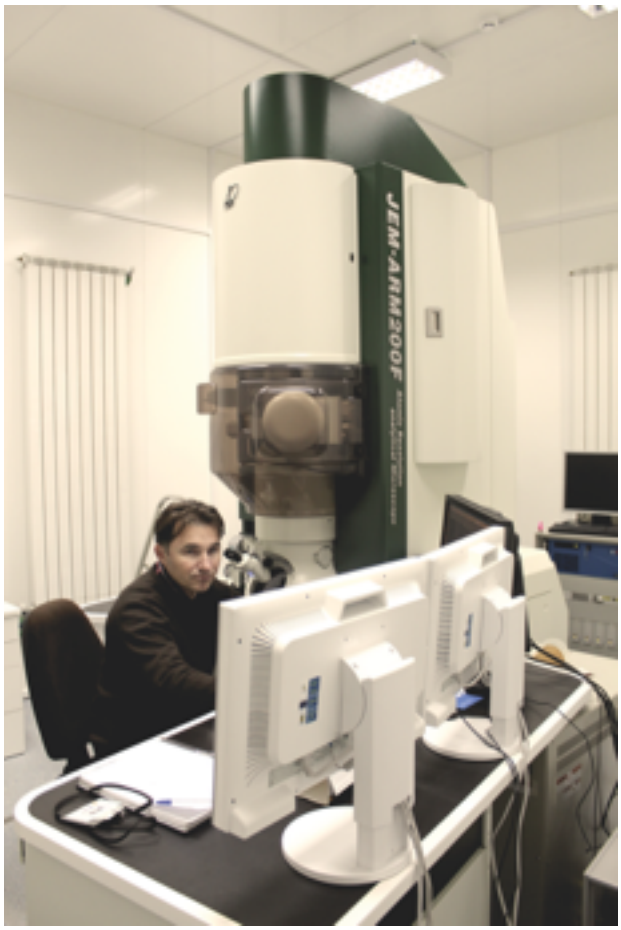


Figure 23 - Corneliu Ghica at the Transmission Electron Spectroscopy (TEM) of the National Institute of Material Physics (NIMP) in Magurele, Romania

The full and detailed accountability of these aspects within an institution based mainly on in-kind contributions is not a standard procedure, available and transferrable from other institutions, and needs to be developed in the most transparent and correct way.

The CERIC's start-up period has, therefore, presented a number of diverse challenges to define the appropriate set of rules and acquire the expert human resources, as well as the expert audit and advice.

The choice has been that of adopting, as much as possible, the International Accounting Standards (IAS) and, conversely, the International Standards for Audits (ISA) by the CERIC auditors.

Figure 24 - 1.0 MV HVE Tandetron accelerator at the Ruđer Bošković Institute in Zagreb, Croatia

The correct evaluation and representation of resources employed and the correct crediting of the values and revenues to either the PFs or the institutional CERIC budget and account is a main scope of the overall administrative activity.

The technical note in Annex 6 describes the approach and the rules which have been developed for this and for the future annual accounts, with reference to the International Accounting Standards (IAS) and the relevant EU Directives.

— The in-kind resources of the Partner Facilities for the ordinary and user-related scientific and technical activities

The evaluation of the ISTAC and the acceptance of the PFs has been based on the overall quality in their scientific production and available instruments and service to present users. This because the quality of the new service to users can only be guaranteed if the "ordinary" activity of the Facility is excellent. This implies also a high scientific and technical quality of the staff and of their scientific/technical capabilities.

Therefore all resources of each PF have to be considered, in order to collect the data to account for the in-kind contribution of each Member, in terms of instruments, personnel and recurrent expenditure for the ordinary and users related activities.

The data and evaluation of these resources need to be "auditable". This is possible and easier for the personnel and for recurrent expenditures, by acquiring data directly related to the cost of their procurement, but can be less immediate in the case of long-lived equipment, or equipment which has been assembled and upgraded over the years into a complex facility (as, e.g. a synchrotron or a neutron beamline and the central photon or neutron sources feeding each beamline).

Figure 25 - 6.0 MV EN Tandem Van de Graaff Accelerator at the Ruđer Bošković Institute in Zagreb, Croatia

Not all laboratories have introduced an "amortization" in their accounting (amortization being a concept more directly related to economic activities) nor a "technical devaluation" (a concept more connected to the scientific/technical use).

The option to refer to values estimated on a technical basis (as, e.g. replacement values or fair values) will need to be carefully considered. This will need to be connected to the programming of appropriate time frames for instruments upgrades to ensure renewal and to keep the competitiveness of the PFs and CERIC as a whole.

One aspect which will need to be further developed is the option to have a coherent evaluation of the resources which, for historical and local reasons, may have very different monetary values in the Members. This, in particular, applies to the cost/stipends of the personnel, which are still very different (for equal seniority and specialization) in some of the Members, while the value of their activity, in

scientific and technical terms, is comparable to the most advanced countries.

Figure 26 - Group of scientists at the XRD1 (X-Ray Diffraction) beamline at Elettra Sincrotrone Trieste - Italy

The use of standard values for the personnel of equal qualifications, referred to those applied in countries more aligned to the international EU standards could be an option. The costs of personnel are a large part of the operation costs, and the comparison of values calculated for the resources of all members should be improved, at least from a technical point of view.

As an added aspect, this would allow to calculate the price of any commercial activity ensuring comparability with international market values.

A further element is the need to account in a correct and accepted way towards funding Agencies, in particular the EU and the regional Managing Authorities.

This indicates the need to prepare a proposal of a procedure to be submitted and agreed with the EC.

— The financial and in-kind contributions for the CERIC institutional distributed activities

The Institutional activities in the statutory seat and those distributed in the Partner Facilities have been supported by both a financial contribution of the hosting Country and by in-kind contributions by the other Members, these last mainly related to the participation in the governing bodies and the hosting of their meetings.

The Italian Government, as the hosting Member of the Statutory Seat, has the commitment to contribute to the establishment and strengthening of the CERIC integrated operation, while considering further contributions to this end including training, technology transfer and communication.

This commitment has been met, already during the preparatory phase, with 6,5 million euro available in the years 2013/2014 and 5,541 million euro available in the year 2015, a similar amount is planned also for the next year.

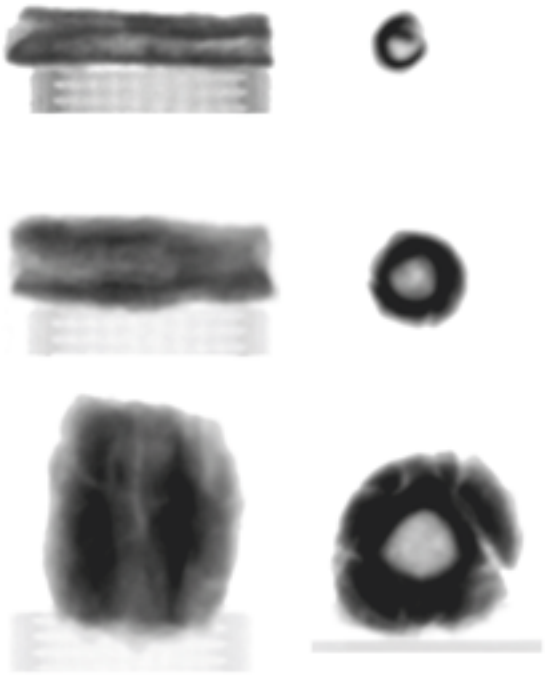


Figure 27 - Example of research at the Budapest Neutron Centre - Hungary: neutron images of three iron beads from Gerzeh, Lower Egypt, dated to circa 3200 BC. In side view (left) and perpendicular (right). UC10740, UC10739 and UC10738 (from top)

The financial support has been provided through the Italian RE (Elettra) and, in the absence of the ERIC legal frame until the Commission's decision, has been managed and provided for most part as an in-kind contribution, to support the operations, first of the working group and then, after the formal start, of the CERIC institutional activities, This has included, e.g. the hiring and training of dedicated staff.

The support action has included the strengthening of the integrated operation of the scientific/ technical facilities, the development of joint technology transfer, training and communication, and in particular the support of users from Central-Eastern EU. The Annex 6c) details the use of the

contributions in the 2014 account and in the 2015 budget for the institutional activities.

The budget for 2015 reported in Annex 6c) reflects the growing direct activity of CERIC, while the in-kind support to the institutional activities decreases. The support to the integrated operation, which covers only a part of the Italian PF's ordinary and users related scientific/technical operation, is covered by the remaining part of the contribution.

Figure 28 - In an occasional co-operation with the Simón Bolívar University, Caracas, the Budapest Neutron Centre in Hungary has investigated pre-Columbian ceramics figurines found in Venezuela. Forty whole or fragmental figurines which originated from the coastal region of the Valencia Lake Basin and the Los Roques Archipellagio, Venezuela were measured. The main question was whether the occupants of the islands used local raw material for pottery production or if they imported it from the continent. Based on some significant element ratios and also on Principal Component Analysis (PCA) of the data, one can clearly distinguish between the objects of two different provenances.

The accounting of the financial support by Italy to its RE is reported in Annex 6c, both for the expenditure in the year 2014 and for the budget 2015.

A summary on the 2014 annual account

The Annual Account, reported in the technical note in Annex 6a) for 2014 consists almost completely of in-kind resources from the Partner Facilities and Elettra. The amount managed directly in 2014 is only marginal.

The main data (the in-kind contributions) are presented in Annex 6a) in the "additional Disclosure" annexed to the Technical Note, according to Directive 2013/34/EU.

Only the marginal part related to the direct financial account of CERIC, included in the first part of the Technical Note, has been subjected to a detailed analysis of the Auditors. The Technical Note, however, has been developed with the overall structure of the future annual accounts following the International Accounting Standards (IAS) and the indications of the EU directives (Annex 6a).

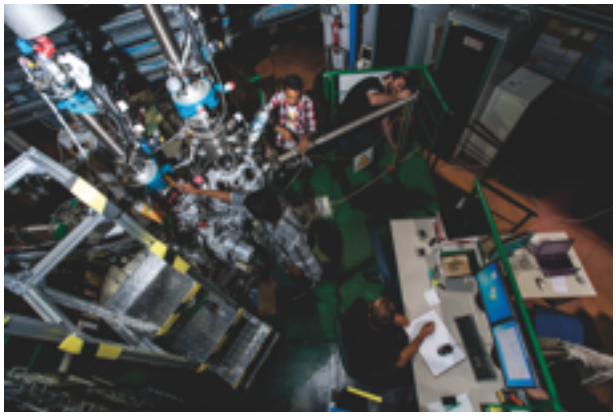


Figure 29 - Scientists at work at the Materials Science beamline at Elettra, from the Surface Physics Laboratory of the Charles university Prague

As anticipated, the data presented in the Additional Disclosure are not complete and will need to be further verified for their coherence in building the 2016 budget and the 2015 annual account.

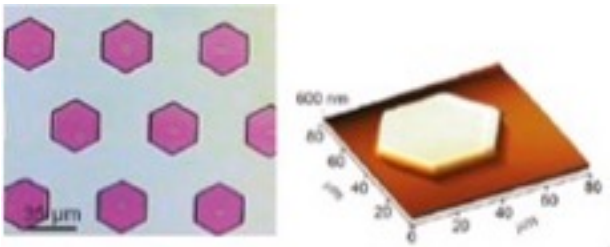


Figure 30 - Making new SEARS sensors for medical applications with Depp X-ray lithography - TU Graz, Austria

As already pointed out, the accounting and depreciation methods are not homogeneous in the various PFs and in some cases data on major instruments and expenditure were not available in time. Therefore the totals are, so far, only indicative of a lower limit of the in-kind values integrated into CERIC.

The data collected have a reasonable firm basis, because they can be referred to the Audits and Accounting standards of each RE, but a common standard will need to be developed and applied, and then submitted to a common audit.
The CERIC auditors are planning a series of meetings with the auditors of each RE/PF to reach a coherent representation.

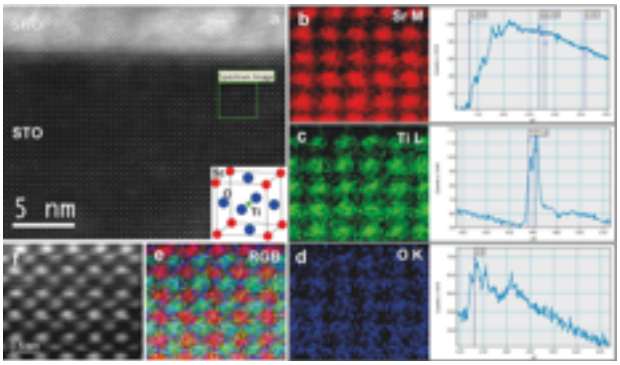


Figure 31 - Samples and results from NIMP, Magurele - Romania: **(a)** STEM image at the STO- SRO interface **(b)-(d)** atomic resolution EELS – SI maps and corresponding EELS spectra extracted from the EELS – SI showing the elemental distribution in the selected area marked Spectrum Image on the STEM image (a); **(e)** RGB composed image by overlapping the Sr, Ti and O elemental maps; **(f)** atomic resolution DF STEM image of the selected area.

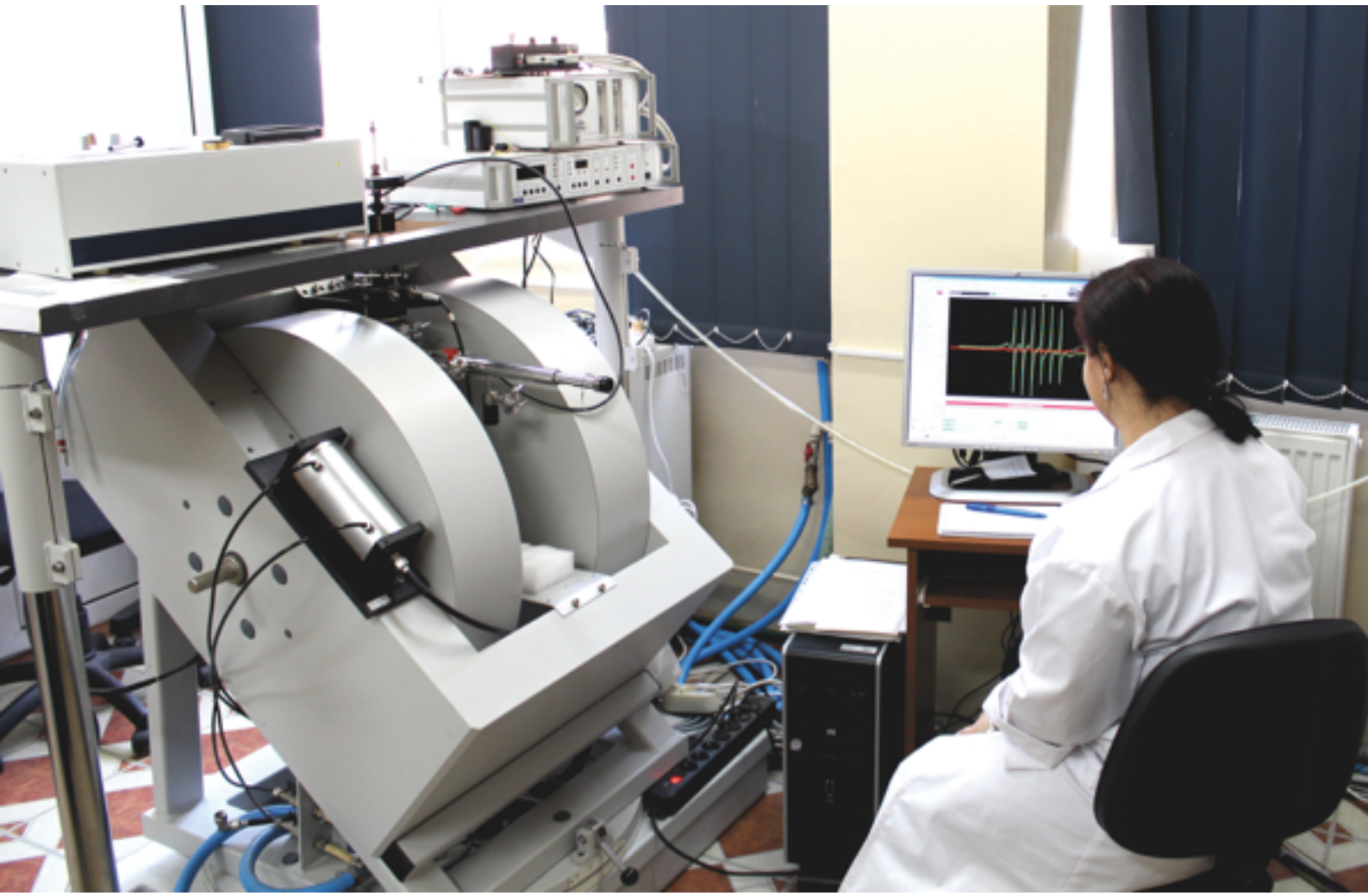
With reference to the "Additional Disclosure" in Annex 6a), the summary data with the largest impact on the CERIC results in 2014, are the following, in euro:

- In kind contributions for the ordinary and users related scientific/technical activities (Tab. 1a and 1b):
  - Operation/recurrent costs: 23.066.517,02
  - Procurement value of equipment/spaces: 30.649.210,00
  - Present estimated value of equipment: 3.003.217
- Institutional activities covered as in-kind contributions by the Members (Tab 2):
  - By the hosting Member: 376.561,00
  - By the other Members: 32.341

The initial part of the Technical note deals with the limited direct institutional activity developed with the direct cash contribution of 50.000 euro.

In conclusion:

The start-up of CERIC-ERIC is largely accomplished for the scientific part, is on its way for the industrial, communication, and administrative parts, and the perspective to accomplish a full operation within 2016 is a reliable estimate.



Electron Paramagnetic Resonance (EPR) at the National Institute of Material Physics in Magurele - Romania

Annexes

Summary of the activities performed by the CERIC-ERIC Working Group

15 February 2011 – 4 July 2014

The CERIC Working Group was based on the Memorandum of Understanding signed by Austria, Czech Republic, Hungary, Italy, Poland, Romania, Serbia and Slovenia in 2011.
Its mandate was to prepare all the adequate documentation for establishing CERIC, the European Research Infrastructure Consortium of Analytical Research Infrastructures, based on the Council Regulation n. 723/2009.
The Working Group met twelve times from 2011 to 2014, achieving these main results:

- Discussed and agreed on basic principles and their expression in iterating a sequence of Draft Statutes for the CERIC consortium, to be verified at Member's levels.
- Set-up the International Evaluation Committee, made by high level scientific experts, and evaluated the quality and complementarity of the Partner facilities proposed by Members.
- Discussed and agreed the required documentation for the ERIC Step1 procedure (Technical/Scientific document and advanced Draft1 of Statute).
- Discussed modifications and issues raised by the Commission on Draft1, introducing changes according to indications while respecting basic principles) including change of name from C-ERIC to CERIC-ERIC)
- Developed and distributed to Members the format for required documentation for the ERIC Step2 procedure, to allow formal proposal to the EC for the setting up of CERIC-ERIC, through the country hosting its seat.
- Call for proposals to staff of Members and Partner Facilities for a proposal of a CERIC Logo, and performed its selection.
- Prepared the selection procedure for choosing the country hosting the statutory seat and performed its selection, according to specific criteria related to statute's indications.
- Assisted the hosting country in the procedure to collect the indications of the other members and submit the "Step2" application to the EC (Completed on December 21st, 2012).
- Organized five meetings of the Board of Directors of the Partner Facilities to define first activities for CERIC.
- With Board of Directors:
    - Prepared and performed the "Call zero" for users, setting up selection procedure, and selecting 9 proposals out of 30 received.
    - Organized and performed the first " Call for Fellowships", receiving 14 applications, inviting 10 applicants for being interviewed and supporting the Board of Directors in the selection of the first 6 fellows (employees) of CERIC (these fellows are now starting service to CERIC-ERIC on Science, Communication, Technology Transfer and Administration) O
    - Organized the scientific workshop "Science@CERIC" on December 2012 in Trieste.
- After a negotiation with the EC (in particular DG TAXUD), achieved the tax exemption for purchases made by Members (not excluding through the Representing Entities) and transferred to the Consortium for its use as in-kind contribution.
- Final Statute accepted and EC Decision establishing CERIC-ERIC on 24th June 2014.
- Final meeting, discussed and proposed the draft agenda and the main documents for the first General Assembly.

Annex 2: Delegates and Meetings of CERIC bodies

General Assembly (GA)

Austria - Frank Uhlig, Heinz Amenitsch (vice Chair)
Czech Republic - Petr Ventluka, Vladimir Matolin
Italy - Salvatore La Rosa, Carlo Rizzuto (Chair)
Romania - Beatrice Paduroiu, Ionut Enculescu
Serbia - Viktor Nedovic
Slovenia - Albin Kralj, Mateja Bizilj Pogacar

Croatia (Observer) - Alan Hrvoje Pavletic, Tome Anticic
Hungary (Observer) - Tamás Belgya
Poland (Observer) - Marek J. Stankiewicz

Secretary - Ileana Gimmillaro

Meetings of the GA:

First GA meeting, Milan (Italy) - 22nd July 2014

Second GA meeting, Prague (Czech Republic) - 17th October 2014

Third GA meeting, Zagreb (Croatia) 17th November 2014

Executive Director (ED): Carlo Rizzuto

Deputy EDs: Ornela De Giacomo, Fabio Mazzolini

Board of Directors (BoD)

Austria - Heinz Amenitsch
Czech Republic - Vladimir Matolin (Chair)
Italy - Giovanni Comelli
Romania - Ionut Enculescu
Slovenia - Janez Plavec (vice Chair)
Croatia - Tome Anticic
Hungary - Tamás Belgya
Poland - Marek J. Stankiewicz

Secretary - Ornela De Giacomo

Auditors

Alessandro Pinto (IT)
Karolina Neuvirtova (CZ)

International Scientific and Technical Evaluation Committee (ISTAC)

- **Michel van der Rest**, former director of synchrotron SOLEIL and former chair of ERF (life sciences) **Chair**
- **Giorgio Paolucci**, Scientific Director of SESAME Synchrotron (synchrotrons) **Vice Chair**
- **Christian Vettier,** former scientific director of ILL and of ESS (neutrons)
- **Cécile Hébert,** from EPFL (microscopy)
- **Annalisa Pastore,** from MRC-UK (NMR)
- **Ingolf Lindau**, Stanford and Lund (synchrotrons)
- **Luis Fonseca**, CSIC in Barcelona (nanoscience and nanomaterials)
- **Jan Meijer**, Universitat Leipzig (ion accelerator methods)

Partner Facilities (PFs)

Austria - Light scattering at TU Graz and Elettra Sincrotrone Trieste

Croatia - Ion beams at Ruđer Bošković Institute Zagreb

Czech Republic - Surface analysis at Charles University Prague and Elettra Sincrotrone Trieste

Hungary - Neutrons at Budapest Neutron Centre

Italy - Synchrotron and FEL light at Elettra Sincrotrone Trieste

Poland - Synchrotron light at Solaris in Krakow

Romania - Electron microscopy and EPR at National Institute of Material Physics in Magurele

Slovenia - NMR at National Institute of Chemistry Ljubljana

Annex 3: List of Regulations

CERIC-ERIC – Internal Regulations

Status June 2015

List of Internal regulations: (X) approved; (P) in preparation

1. Statutory Seat (X)
2. Representing Entities and Partner Facilities (X)
3. New Members and Observers (X)
4. General Assembly, Chair and Vice Chair (X)
5. Executive Director (X)
6. Board of Directors (X)
7. International S&T Advisory Committee (ISTAC) (X)
8. Evaluations and Evaluation Criteria and Committees (Partner Facilities, statutory seat, CERIC…), Impact Assessment (P)
9. Independent Audit Expert Committee (IAEC) and Auditors (X)
10. Human Resources (X)
11. Data Policy (open data, confidential data), Preservation, Communication and Dissemination (P)
12. Users policy and Open access and review Panel (X)
13. Technology Transfer, Industrial Liaison, IPR, Industrial Access (X)
14. Procurement and Pre procurement (X)
15. Administration, Accounting, fiscal treatment and related principles and procedures for financial and in-kind aspects (X)
16. Risks and liabilities (X)

Annex 4 - CERIC Mission & Vision

CERIC's Vision

- Build an excellent and integrated multidisciplinary and multinational distributed research environment with a pan-European and worldwide quality and outreach.
- Contribute to the construction of the European Research Area by attracting researchers from all over the world with advanced instruments and techniques
- Support a faster European integration of the Central-Eastern European Area, sustaining economic and technological impact and benefit for society.

CERIC's Mission

- Provide competitive open access to integrated and excellent Research Infrastructure and Data to researchers, industry and the general public for advanced research and development in the fields of materials, biomaterials and nanotechnology.
- Stimulate and support interdisciplinary and international training and mobility of researchers and technicians, while developing an efficient technology transfer network.

Annex 5: CERIC events

- Science@CERIC workshop - December 11th -12th, 2012
  http://www.elettra.trieste.it/ScienceCERIC/

- The Evolving Landscape of Research Infrastructures in Europe, September 24th - 25th, 2014
  http://www.elettra.eu/ELRI2014/

- 2nd ERIC Network Meeting, December 10th - 11th, 2014
  https://www.ceric-eric.eu/index.php?n=News.Homepage-2ndERICmeeting

- CERIC meets the scientists of Bosnia and Herzegovina, December 17th, 2014
  https://www.ceric-eric.eu/index.php?n=News.Homepage-SarajevoMeeting

- New users workshop Romania, November 28th, 2014

- 1st CERIC internal workshop on Communication, 20th-21st April 2015
  https://www.ceric-eric.eu/index.php?n=Media.1stCommunicationWorkshop

- CERIC New Users Symposium @ Solaris, Poland, 24th - 25th June 2015
  http://www.ceric-eric.eu/events/NewUserSymposium/

Aerial view of the synchrotron lightsource and of the FEL Fermi at Elettra Sincrotrone Trieste - Italy

CENTRAL EUROPEAN RESEARCH INFRASTRUCTURE CONSORTIUM AS A EUROPEAN RESEARCH INFRASTRUCTURE CONSORTIUM (CERIC-ERIC)

CERIC-ERIC has its Statutory Seat in Trieste, Italy c/o Elettra Sincrotrone Trieste S.C.p.A.
S.S.14 - km 163,5 34012 Basovizza - Trieste, ITALY
Tax Code 90143090323

Notes to the financial statements as of 31 December 2014

Foreword

On 24 June 2014 the President of the European Commission, José Manuel Barroso, signed the European Commission´s decision that established CERIC-ERIC, the European Research Infrastructure Consortium of analysis and synthesis facilities for the life sciences and nanotechnology in Central Europe.

Members of the Consortium, together with Italy, are Austria, Czech Republic, Romania, Serbia and Slovenia. Croatia, Hungary and Poland will join soon, and have been accepted as Observers by the General Assembly, having activities already accepted by a scientific evaluation.

The registered Statutory Seat of the Consortium is in Trieste and is, at present, housed at the Research Centre Elettra Sincrotrone Trieste, in the AREA Science Park.

The Consortium is an ERIC (European Research Infrastructure Consortium) and is a distributed research infrastructure based on the Council Regulation (EC) No 723/2009 of 25 June 2009 on the Community legal framework for a European Research Infrastructure Consortium: this brings together, in a closely integrated institution, built to operate at the highest levels of quality and with the guarantee of an open access for external users selected on the basis of quality, the best specialized centres and laboratories of the participating countries.

This distributed research infrastructure, therefore, operates with active nodes in Austria, Czech Republic, Italy, Romania and Slovenia as well as in Hungary and Croatia and is open to other interested countries. Poland and Serbia are in the process of developing their facilities.

The specific scope of this ERIC concerns the operation of these nodes at the highest scientific level and the integration of their offer, as a unique service to external basic and applied researchers, of access to photon, electron, neutron and ion based techniques, notably for materials preparation and characterization, structural investigations and imaging in Life Sciences, Nanoscience and Nanotechnology, Cultural Heritage, Environment and Materials Sciences, and to their various technological and industrial outcomes, ranging from energy to biomedical and those of interest to most manufacturing industries.

CERIC's mission is to bring the integrated service to world-level quality, thus contributing to the attractiveness of the European Research Area and stimulating a beneficial impact on the scientific and economic development of the entire region, also helping to introduce a strong interchange between scientists and technicians and attraction of scientists from other regions.

Accounting criteria

The present annual financial statements have been compiled in conformity with the international accounting standards IAS/IFRS in force on 31 December 2013, issued by the International Accounting Standards Board (IASB) and adapted by the European Commission within the meaning of the Regulation (EC) No 1606/2002 of the European Parliament and of the Council of 19 July 2002 on the application of

international accounting standards, as well as with the related interpretations of the IFRS Interpretations Committee (IFRIC).

The objective of the annual financial statements is to provide information on the assets and liabilities, the profit or loss and changes in the financial structure of the Consortium useful to a wide range of users.

The financial statements have been compiled in accordance with the principles of clarity and transparency and provide a correct and exhaustive framework of information on property relations as well as economic and financial relations implemented by the Consortium carrying out its activities.

It has been compiled taking into account, where applicable, the international accounting standards.

The Consortium, among the various options allowed by the IAS 1, has chosen to present the layout of the balance sheet distinguishing between current and non-current items and the layout of the profit and loss account classifying the expenses by nature.

In the process of their compilation, the following principles have been observed:

- The items have been evaluated prudently taking into account the perspective of the continuity of the activities as well as the economic function of an asset or liability;
- Only the profits made at the end of the financial year have been stated;
- Only the incomes and expenditures related to the financial year have been accounted for, independently of the day of encashment or payment;
- The risks and losses related to the financial year have been accounted for, even if known after the end of the financial year;
- Heterogeneous elements included in the individual items have been accounted for separately.

These Notes have been compiled with the objective to clarify, complete and analyse the information contained in the balance sheet and in the profit and loss account, besides providing information on the applied evaluation criteria, on the movements having taken place, and the changes in various assets and liabilities.

They constitute an integral part of these financial statements and provide descriptive and schematic information with a particular reference to the property aspects as well as economic and financial aspects of the overall management of CERIC.

The financial statements comprise the following parts:

- Balance sheet;
- Profit and loss account;
- Summary of changes in the capital;
- Financial statement;
- Explanatory notes.

Evaluation criteria

The financial statements have been compiled in accordance with the principles of clarity and transparency and provide a correct and exhaustive framework of information on property relations as well as economic and financial relations implemented by the Consortium carrying out its activities. It has been compiled taking into account, where applicable, the international accounting standards.

Balance sheet

The items in the balance sheet are classified/distinguished into current/non-current.

Assets

The assets have been classified as current assets when:

- They have been realized during the normal operating cycle of the entity;

- They are held mainly for the annual activities or for a short-term and they are realized within twelve months after the balance sheet date;
- They are cash or equivalent reserve not restricted in its use.

The assets realizable within the operating cycle have been classified as current, regardless whether they have been actually realized within 12 months after the balance sheet date.
The non-current assets include the tangible assets (buildings, plants and machinery), the intangible assets (goodwill, licenses and trade marks), the financial assets (shares in affiliated entities) and, in general, all the assets not related to the operating cycle and realizable after 12 months after the balance sheet date.

Liabilities

The liabilities have been considered as current liabilities when:
a) They are expected to be settled within the normal operating cycle of the entity;
b) They are due to be settled within 12 months after the balance sheet date.
Other liabilities, i.e. those not related to the operating cycle and all other liabilities not due for supplies, are classified as current if they are due to be settled within 12 months after the balance sheet date.
Otherwise, they are recognized as the non-current liabilities.

Profit and loss account

The compilation of the profit and loss account is regulated by the IAS 1.

Turnovers

Turnovers are increases of the economic benefits related to the financial year, which manifest themselves by new assets or by an increased value of existing assets or by decreases of existing liabilities, which are realized as increases of the equity.

Costs/Expenses

Costs/expenses are decreases of the economic benefits of the financial year, which manifest themselves by cash outflows or by decreased values of the assets or by sustaining of liabilities, which are realized as decreases of the equity.
As required by the IAS 1, the analysis of the costs has been explained in the overview of profit and loss account using the classification based on their nature.

In-kind contributions

In-kind contributions have been distinguished (when realized) into:

i) Capital contributions (finalized to fixed assets), deferring the insertion of incomes stated in the profit and loss account following a coherence criterion proportional to the costs generated by the fixed assets whose use continues over time and that have been acquired or produced thanks to the contribution.
ii) Operating grants stated among incomes in the profit and loss account, strictly related to the cost of the production factors, to which the contribution is related.
iii) Contributions of non-monetary nature/"in-kind" stated in the financial statements based on the IAS 20 accounting standard, evaluating the asset or the cost and related contributions on the basis of the nominal value (a value which refers to a historical cost or actual cost related to the employed productive resources).

Assets

Non-current assets
No values entered into these items.

Currents assets

Cash and cash equivalents
This balance sheet item represents the cash at bank and in hands and the existence of cash and equivalents at the end of the financial year.

Cash equivalents	Balance at 31.12.2014
Description	
Bank balances	49.754
Total	**49.754**

In this context, the Consortium is in a credit position towards the Institute Unicredit, Agency of Trieste, where it has opened a current account for the financial management. A sum of € 50.000 has been credited on this account by the RE Elettra – Sincrotrone Trieste, as a financial contribution to support the Consortium' starting activities.

Prepayments and accrued income
No values entered into these items.

Equity and Liabilities

Equity
Capital and other permanent contributions from Members
Reserves
Accumulated profits
No values entered into these items.

Non-current liabilities
No values entered into these items.

Current liabilities

Other short-term debts and liabilities
The debts are evaluated at their normal value. The "Debts to suppliers" are stated net of eventual trade discounts.

Other short-term debts and liabilities	Balance at 31.12.2014
Description	
Debts to suppliers	1.377
Total	**1.377**

The item relates to short-term financial debts towards providers of a sum of € 1.377 related to a technical-administrative consultancy.

Deferred income and accrued expenses

These items are related to the period calculated on an accrual basis.

For the accounting of the contribution provided by Italy, the indirect method has been chosen and the stated amount is representative of the portion attributable to future financial years.

Deferred income and accrued expenses	Balance at 31.12.2014
Description	
Deferred income	48.376
Total	**48.376**

The balance sheet item "Deferred income" measures the portion of the contribution transferred by Elettra Sincrotrone Trieste and attributable to the next financial year for the Consortium's starting activities and which is expected to continue over subsequent years.

Income statement

Revenues

Revenue items identify only that portion of the contribution of 50.000,00 euro allocated for the financial year by Italy through the Representing Entity Sincrotrone Trieste S.c.p.a. for the Consortium's starting activities, used to cover the initial expenses of management.

Revenues	Balance at 31.12.2014
Description	
Grants and contributions national and international	1.624
Total	**1.624**

Costs

Costs	Balance at 31.12.2014
Description	
Costs for raw materials, supplies and goods	113
Costs for services	1.531
Total	**1.644**

Costs for the services in detail:	Balance at 31.12.2014
Description	
Professional fees	1.377
Bank charges	179
Total	**1.531**

The Consortium, in the context of the purchases realized and within the limits following from the Statute, may use the VAT exemptions granted on the basis of Article 143(1) (g) and Article 151(1)(b) of Council

Directive 2006/112/EC, and in accordance with Articles 50 and 51 of the Implementing Regulation (EU) No. 282/2011 of the Council, and on the basis of Article 12 of Directive 2008/118 /EC.

Financial costs and revenues

In the financial management, accrued interest income on the bank account of the Consortium, amounting to 20.00 euro, is stated as of 31 December 2014.

Financial costs and revenues	Balance at 31.12.2014
Description	
Financial revenues	20
Financial costs	0
Total	**20**

ADDITIONAL DISCLOSURES ON IN-KIND RESOURCES (WITH REFERENCE TO THE DIRECTIVE 2013/34/EU)

Regarding the in-kind contributions, which statutorily constitute a particularly significant element in terms of resources and organization, that can be used by the Consortium, it should be noted that as for the year of 2014, it was not possible to acquire all the accounting values according to the principles of consistency and auditability on the basis of criteria based on the principle of optimization of cost basis.

However, it needs to be reported that, even before the set-up of the Consortium, part of the concerned PFs manifested themselves through this particular mode of contribution, which then allowed the immediate and consistent start of the activities.

Their values were quantified, albeit with the limitations set forth above, by the various PFs and are shown in the tables below in order to provide supplementary information which enable to better understand the relevance of the total resources used by CERIC in the whole financial year of 2014.

Tab. 1a) TOTAL COSTS OF ORDINARY SCIENTIFIC/TECHNICAL ACTIVITIES OF PARTNER FACILITIES IN 2014

PARTNER FACILITY	RECURRENT COSTS							
	CONSUMABLES	PERSONNEL COSTS	SCIENTIFIC MEETINGS & PUBLICATIONS	TRAVEL & ACCOMODATION	EXTERNAL SERVICES	OVERHEAD	DEPRECIATION, OPERATION	TOTAL
PF Austria	75.000,00	389.682,17	0,00	0,00	0,00	339.023,48	175.030,96	978.736,61
PF Croatia	85.517,43	130.309,90	0,00	0,00	0,00	64.748,19	0,00	280.575,52
PF Czech Republic	106.873,00	109.718,00	0,00	40.874,00	44.364,00	64.110,00	74.325,00	440.264,00
PF Hungary	3.169,17	634.067,15	0,00	1.673,94	4.753,76	1.673,94	25.981,94	671.319,90
PF Italy	1.023.326,98	1.888.663,00	0,00	0,00	7.667.674,74	8.346.023,01	457.970,84	19.383.658,57
PF Romania	30.797,93	331.743,84	7.935,95	13.176,80	11.889,50	37.647,02	4.492,39	437.683,43
PF Slovenia	216.228,98	329.763,51	12.168,25	23.316,55	25.524,11	0,00	267.277,59	874.278,99
TOTAL COSTS	**1.540.913,49**	**3.813.947,57**	**20.104,20**	**79.041,29**	**7.754.206,11**	**8.853.225,64**	**1.005.078,72**	**23.066.517,02**

*the amount indicated as overhead for Italy indicates a share of the following general costs: spaces, taxes, depreciations of infrastructures, with particular regard to synchrotron light source and laboratory set-up, as well as the general staff of Elettra Sincrotrone Trieste.

Tab. 1b) TOTAL VALUE OF EQUIPMENT AND SPACES		
PARTNER FACILITY	**PRESENT ESTIMATED VALUE (equipment and spaces)**	**PROCUREMENT COST**
Partner Facility of Austria	not evaluated	239,000.00
Partner Facility of Croatia	not evaluated	not available
Partner Facility of Czech Republic	270.270,00	1,761,338.00
Partner Facility of Hungary	176.404,37	not available
Partner Facility of Italy	1.684.886,2	20,012,308.00
Partner Facility of Romania	41.560,17	3,929,376.00
Partner Facility of Slovenia	830.096,9	4,707,188.00
TOTAL	3.003.217,75	30,649,210.00

Tab. 2) TOTAL VALUES OF DISTRIBUTED INSTITUTIONAL ACTIVITIES IN 2014				
	IN-CASH			
Statutory Seat				**50.000,00**
	IN-KIND*			
COUNTRY	**EQUIPMENT**	**PERSONNEL COSTS**	**TRAVEL TO GA AND BoD**	**SUBTOTAL**
Austria	0,00	8.249,00	1.965,65	10.214,65
Croatia	0,00	0,00	0,00	0,00
Czech Republic	0,00	5.950,00	1.627,00	7.577,00
Hungary	0,00	1.213,01	0,00	1.213,01
Italy	0,00	376.561,00	0,00	376.561,00
Poland	0,00	0,00	0,00	0,00
Romania	0,00	2.116,70	2.140,53	4.257,23
Serbia	0,00	0,00	0,00	0,00
Slovenia	1.193,00	6.586,00	1.300,00	9.079,00
SUBTOTAL	**1.193,00**	**400.675,71**	**7.033,18**	**408.901,89**
TOTAL VALUE OF DISTRIBUTED INSTITUTIONAL ACTIVITIES IN 2014				**458.901,89**

Note: The zero values indicate that data were not recorded, or enclosed in other expenditures.

Tab 3) TOTAL FREE ACCESS TO EXTERNAL USERS SELECTED BY CERIC THROUGH PEER REVIEW IN 2014				
PARTNER FACILITY	**NUMBER OF USERS**	**INSTRUMENTS (hours)**	**PREPARATION LABORATORIES (hours)**	**OTHER SERVICES (hours)**
Partner Facility of Austria	3	488	0	0
Partner Facility of Croatia	0	0	0	0
Partner Facility of Czech Republic	2	264	0	0
Partner Facility of Hungary	1	48	0	0
Partner Facility of Italy	5	480	0	0
Partner Facility of Romania	4	464	40	30
Partner Facility of Slovenia	5	552	456	0
TOTAL	**20**	**2296**	**496**	**30**

Independent Auditor's Report

Entity:	**Central European Research Infrastructure Consortium (CERIC-ERIC)**
Consortium Members:	Czech Republic, the Italian Republic, the Republic of Austria, Romania, the Republic of Serbia and the Republic of Slovenia
Residence:	S.S. 14 km 163.5 in Area Science Park 341 49 Basovizza, Trieste, Italy
Identification Number:	90143090323
Balance sheet date:	31 December 2014
Area of activity:	Research and Technological Development and Demonstration programs and projects

We have audited the accompanying financial statements of Central European Research Infrastructure Consortium (CERIC-ERIC), which comprise balance sheet as at December 31,2014 and profit and loss account for the period of June 24,2014-December 31,2014 and Notes to the accounts summarizing significant accounting policies and other explanatory information giving outline of an in-kind contribution provided by Partner Facilities (together "financial statements").

Executive Director's Responsibility for the Financial Statement

Executive Director of Central European Research Infrastructure Consortium (CERIC-ERIC) is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards and Directive 2013/34/EU of the European Parliament and of the Council relevant to preparing such financial statements, and for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.
The General Assembly shall establish a common accounting system and rules for the acceptance of in kind-contributions, and estimates, cost evaluation and credit assessment thereof. The value of these in-kind contributions shall be part of the annual budget and included in the corresponding financial reports.

Auditor's responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Directive 2013/34/EU of the European Parliament and of the Council of 26 June 2013 as well as International Standards on Auditing. Those standards require that we comply with ethical

requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

According to Article 6 point 4 of Commission Implementing Decision of 24 June 2014 on setting – up the Central European Research Infrastructure Consortium (ERIC-CERIC), some Partner facilities have provided in-kind contribution including ordinary operation, continuous upgrading and access to instruments, seconded personnel, and any other type of resource. This in-kind contribution is listed in the Notes to the Accounts. Our opinion is not extended to the valuation of the listed in-kind contributions. Responsibility for the valuation remains with statutory auditors of each Partner facility.

The audit involves procedures to obtain audit evidence of the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. Our audit also includes evaluation the appropriateness of accounting policies used and the reasonableness of accounting estimates, if any, made by the management, as well as evaluation of the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Central European Research Infrastructure Consortium (CERIC-ERIC) as at December 31, 2014 in accordance with those requirements of the Financial Reporting Framework imposed by a Directive 2013/34/EU and in accordance with the financial reporting framework of CERIC-ERIC, considering the nature, the scope and specific characteristics of the Consortium.

Karolina Neuvirtová, Auditor
License No. 2176 (Chamber of Auditors of the Czech Republic)

Date: 22/06/2015

Alessandro Pinto, Auditor
License No. 46026 (Italian Ministry of Economy and Finance)

Date: 22/06/2015

Annex 6c: Host country contributions 2014 and 2015 (and their use)

Host Country Contribution and expenditure in the years 2014 and 2015:

The contribution available in the year 2014 has been of 6.5 million euro, used to cover costs in 2014 for a total of 5.050.716 euro, with a carry-over of 1.449.284 euro to the 2015 budget.
The contribution available in 2015 is of 5.541.181 euro.
The expenditure in 2014 has been of 376.561,00 euro for the support of institutional activities (Tab.2 in the technical note) and 4.674.155 euro to support partially the operation of the Italian PF in particular for the strengthening of the integrated operation towards the Central EU partners and users within the total cost of operation for the Italian PF (Table 1a) of the Technical Note.

AMOUNT AVAILABLE IN 2015: 5.541.181 + 1.449.284 CARRIED OVER FROM 2014	
2014 BUDGET on the Italian contribution	
CASH TO CERIC	609.500,00
IN-KIND PERSONNEL operating 100% for CERIC, hired by Elettra (being gradually hired by CERIC in 2015)	542.375,00
IN-KIND ELETTRA PERSONNEL: part-time support to institutional operations	165.000,00
SCIENTIFIC ACTIVITIES in the PF: partial support to integrated operation and upgrades	5.673.590,00
GENERAL TOTAL	**6.990.465,00**

Note: part of the sum indicated for the Scientific activities can be transferred to institutional activities if needed.

Light scattering at the TU Graz and at Elettra

http://portal.tugraz.at

Synchrotron and laser light at Elettra in Trieste

www.elettra.eu

Ion beams at the Ruđer Bošković Institute in Zagreb

http://www.irb.hr

Synchrotron light at Solaris in Krakow

http://www.synchrotron.uj.edu.pl

Surface analysis at the Charles University Prague and Elettra

http://physics.mff.cuni.cz

Electron microscopy and EPR at the National Institute of Material Physics in Magurele

http://lab50.infim.ro

Neutrons at the Budapest Neutron Centre

http://www.bnc.hu

NMR at the National Institute of Chemistry in Ljubljana

http://www.nmr.ki.si

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