

ILC-HiGrade

1st Scientific and Annual Meeting

E.Elsen



ILC-HiGrade – Brief Account of Activities



- Start of project Feb 1, 2008
- Kick-off meeting, Aug 29, 2008
- End of First Reporting Period: Jan 31, 2009
 - Annual reports are due within 60 days
March 31st, 2009

ILC-HiGrade – what is it anyway?



- ILC-HiGrade is the Preparatory Phase project of the European Commission to work towards the realization of the **International Linear Collider**.
- The project is one of 30+ projects on the ESFRI list (via C.E.R.N. Council strategy) technically mature to be constructed.
- It addresses
 - a key technical component that affects the cost, i.e. SRF gradient with a goal of running the ILC at 31.5 MV/m
 - the formation of governance and financial structures in Europe that enable the realization of the project. The European Commission recognizes that this is a process with global implications

ILC-HiGrade Work Packages



- WP1: Management of the Consortium
- WP2: Integration and optimisation of the European contribution within the global GDE organisation as the ILC project moves through the GDE Engineering Design Phase
- WP3: Ensure that the characteristics and importance of the ILC, and its place within the world of science and research, is widely disseminated to the peoples of the European Union, and their governments
- WP4: Investigate features and develop possible schemes of governance for the ILC, exploiting expertise of CERN (LHC) and DESY (HERA) in international projects
- WP5: Prepare and investigate possible European sites for ILC construction
- WP6: Investigate and monitor the production process that yields high-gradient cavities with high yield. Establish the process in industry
- WP7: Optimization of the coupler conditioning at reduced cost
- WP8: Demonstrate suitability of tuner design in tests. Establish a cost-effective tuner production

ILC-HiGrade and EC interest

- Preparatory Phase of a project refers to "preparing its realization"
- The EC is encouraging stakeholders to participate and held a series of meetings
 - ECRI Conference on RI
 - ILC-HiGrade represented in poster session
 - HEP prevalent



Program at a glance [Day 1]

TUESDAY 9TH DECEMBER 2008

Schedule	Session	Room	Thema	Title	Speaker	Chair	
[09:00 - 10:00] Welcome coffee							
10:00 10:20	Richelleu Room	Welcome	Welcome to ECRI 2008		Gilles Bloch, General Director for Research and Innovation at MESR and Robert-Jan Smits, Director at DG RTD-EC		
			Welcome to Versailles City		François de Mazières, Mayor of Versailles City		
			Welcome in the Ile-de-France Region		Marc Lipinski, Vice-chairman of the Ile-de-France Regional Council		
10:20 12:30	Richelleu Room	Opening	Towards a European policy on research infrastructures		Valérie Pécresse, French Minister for High Education and Research	Gilles Bloch, General Director for Research and Innovation at MESR	
			New Strategies for International Research Infrastructures		Annette Schavan, German Federal Research Minister		
			Role of the EU in developing European RIs		Janez Potočnik, European Commissioner for Research		
			RIs as tools for growth		Vlastimil Růžička, Czech Vice-Minister for Education, Youth and Sports		
			ICT based Infrastructures for a new scientific renaissance (recorded presentation)		Viviane Reding, European Commissioner for Information Society		
			Infrastructures for the Biomedical Sciences		Ferruccio Fazio, Italian State Undersecretary for Health		
		Presentation	Presentation of the ESFRI roadmap update	Carlo Rizuto, ESFRI Chairman			
[12:30 - 14:00] Lunch-cocktail in the Exhibition Area - [12:30 - 13:15] Press Conference (Condé room)							
14:00 16:00	1 st Plenary	Richelleu Room	Impact of RIs on Capacity Building	Introduction of the afternoon plenary session		John Wood, Professor at Imperial College, Member of ERAB	John Wood, Professor at Imperial College, Member of ERAB
				RIs as a generator of cross-cutting technologies		Dominique Vernay, Technical Director at Thalès	
				Role of RIs for education and training of top level students and future researchers		Karin Markides, Rector of the Chalmers University	
				Contribution of the RIs to a policy of sustainable development		Bernard Bigot, High-Commissioner for Atomic Energy	
				Combining virtual and real RIs: what evolution for e-infrastructures?		John Delaney, Professor at Washington University	
			The ESFRI process	The process of ESFRI	Beatrix Vierkorn-Rudolph, Deputy General-Director of BMBF, ESFRI Vice-Chairman		
				National roadmaps versus the ESFRI roadmap	Dany Vandromme, Head of RIs Unit at MESR, Director of RENATER		
[16:00 - 16:30] Coffe break							
16:30 18:00	1 st Parallel Sessions	Colbert Room	RIs for Society: competitiveness & societal needs	Which are the technological markets linked with RIs?		Peter Fletcher, Head of Department at STFC	Catherine Bréchnac, CNRS Chairman
				RIs for the nanoworld		Helmut Dosch, Director of MPI Stuttgart	
				RIs and competitive clusters		Maurice Robin, Executive Director of Digiteo	
		Condé Room	Networked & e-RIs: an emerging landscape?	Increasing need in e-infrastructures		Leif Laaksonen, Collaboration Director at CSC, Chairman of e-IRG	Mario Campolargo, Director at DG INFSO-EC
				High Performance Computing in Europe		Achim Bachem, Director of FZ Juelich	
				Networking RIs: a crucial need for global earth observation		Riccardo Valentini, Professor at Tuschia University	
		Richelleu Room	RIs' challenges : governance and organisation	A new legal framework for pan-European RIs		Mila Bas-Sanchez, Legal Officer at DG RTD-EC	Norbert Kroo, Vice-President of the Hugarian Academy of Sciences
				The siting issue for RIs: the ESS Neutron Sources case		Paul Zinsli, Swiss Deputy-State Secretary for Research	
				Global governance: the case of ITER		Carlos Alejandre, Deputy Director General of ITER Organisation	
[18:00 - 19:00] Break							
[19:00 - 22:30] Social event: Equestrian exhibition at the Equestrian Academy of Versailles + cocktail dinner							

Program at a glance [Day 2]

WEDNESDAY 10TH DECEMBER 2008

Schedule	Session	Room	Thema	Title	Speaker	Chair
[08:00 - 8:30] Welcome coffee						
8:30 10:00	2 nd Parallel Sessions	Condé Room	RIs for Society: health and ageing as a deep societal concern	RIs for life sciences: scientific, technological and organisational goals	André Syrota, General Director of INSERM Axel Boersch-Supan, Professor at Mannheim University Iain Mattaj, Director General of EMBL	Elzbieta H. Oleksy, Chair of the Department of Transatlantic and Media Studies, University of Lodz
				RIs for population ageing		
				Standardised access to facilities in the health domain		
		Colbert Room	Networked & e-RIs: data management and digital repositories	Institutional repositories and CRIS systems	Keith Jeffery, Director of Information Technology & International Strategy at STFC Jos Engelen, Deputy-Director for Science at CERN Dominique Marbouty, Director of ECMWF	
				The Worldwide LHC Computing GRID		
				On-time and massive data monitoring and processing		
		Richelieu Room	RIs' challenges: technological developments	Marine technologies for deep oceans exploration	Karin Lochte, Professor and Director of AWI Arnold Migus, General Director of CNRS A representative from EIRMA	
				Optical technologies for RIs		
				Technological RIs as an open tool for research and links with industry; examples		
[10:00 - 10:30] Coffe break						
10:30 12:00	3 rd Parallel Sessions	Amphi Richelieu	RIs for Society: the great scientific questions that RI should be able to solve in:	Astronomy and astroparticles	Stavros Katsanevas, Scientific Deputy-Director of CNRS-IN2P3 Adrian Stanica, Romanian Institute of Marine Geology and Geo-ecology Francesco Sette, Director of Research at ESRF	Marja Makarow, Chairman and Executive Officer of ESF
				What RIs for the environment in 2020?		
				Materials science		
		Salle Colbert	Networked & e-RIs: a vision on tomorrow RI networks	RIs and knowledge management	Juan José Moreno-Navarro, General Director at Ministry of Science & Innovation of Spain George Marmureanu, general Director of the National Institute for Earth Physics of Bucharest Vassilis Maglaris, Member of GEANT, Professor at the Technical University of Athens	
				Security : worldwide networks for seismicity risk		
				What worldwide GEANT-like RI for tomorrow? A vision for opening European e-infrastructures to the world		
		Salle Condé	RIs' challenges: lifecycle considerations	What management for RIs during their whole lifetime?	Roberto Gilmozzi, Head of the Telescope Division, ESO Jürgen Mlynec, Chairman of the Helmholtz Association Lars Börjesson, General Secretary of RIs at Swedish Research Council	
				Re-orienting research with large infrastructures		
				Public consultation for large RIs		
[12:00 - 14:00] Cocktail in the Exhibition Area						
14:00 15:30	Parallel Session's Synthesis	Richelieu Room	RI for Society	Report on parallel sessions - [14:00-14:50]	Campbell Warden, General Secretary of Canary Islands Observatory Marie-Christine Sawley, Responsible for LHC-CMS Outreach & Computing - ETH Zurich Eva Dugstad, Executive Director of IFE Achileas Mitsos, former EC General Director for Research / Ionel Andrei, Director General of National Authority for Scientific Research / Jean Moulin, Belgian Federal Science Policy, Member of the ESFRI Executive Board / Leif Laaksonen, Collaboration Director at CSC, Chairman of e-IRG / Thomas Barrett, Director European Investment Bank	Laure Reinhart, OSEO General Associate-Director for Innovation
			Networked&e-RIs			
			RIs' challenges			
Findings from parallel sessions - [14:50-15:30]						
[15:30 - 16:00] Coffee break						
16:00 18:00	Last Plenary Closing Round Table	Richelieu Room	Global Ris [16:00-17:00]	Global astronomical projects	Catherine Cesarsky, President of the International Astronomical Union (IUA) Hermann-Friedrich Wagner, Chairman of Global Science Forum (OECD) Wenlong Zhan, Vice-President of Chinese Academy of Sciences Phil Mjwara, General Director of the South African Department of Science and Technology Michal Kleiber, Member of the ERC Scientific Council / Ivan Wilhelm, Plenipotentiary of the Czech Ministry of Education, Youth and Sports / Mario Campolargo, Director at DG INFSO-EC / Philippe Busquin, Member of the European Parliament and STOA Chairman, member of the ITRE Commission Pierre Lasbordes, French Parliament, Vice-Chairman of the Parliamentary Office for the Evaluation of Scientific and Technological Choices OPECST	Beatrix Vierkorn-Rudolph, Deputy General-Director at BMBF, ESFRI Vice-Chairman
				Experience from the OECD Global Science Forum		
				RIs and the international dimension		
RIs for a new crucial triangle: health, food and environment				Robert-Jan Smits, Director at DG RTD-EC		
Key messages for the future of Research Infrastructures - [17:00-17:45]						
CLOSURE OF THE CONFERENCE - [17:45-18:00]						
[19:30 - 22:30] Social event: Baroque Music Concert at the Theatre Montansier of Versailles + cocktail						



BRIEF CONCLUSIONS

The fifth European conference on Research Infrastructures organised under the French Presidency of the European Union:

- Recognised the importance of high quality, internationally open, Research Infrastructures (RIs) to extend the frontiers of knowledge, carry out top quality research, train the next generation of top researchers and support industrial innovation.
- Highlighted the importance of supporting the use, the construction and the upgrade of RIs in the frame of the current socio-economic situation, as an engine for economic recovery and development of the knowledge economy.
- Recognized the ESFRI work, as well as the very positive and continuing developments in this field since the first conference in Strasbourg 2000, reflected in Trieste 2003, Nottingham 2005 and Hamburg 2007.
- Recognised the importance of the ESFRI roadmap as well as of national roadmaps to develop joint, medium to long term, visions and to support prioritisation of actions. In this context, the ESFRI 2008 update of the European roadmap was presented and its contribution to the balanced and integrated development of ERA was recognised as a key aspect.
- Reiterated that Member States - as well as the European Union acting as catalyser - are key actors today for the emergence and strengthening of strategic pan-European research infrastructures. Long term commitments of Member States and sound management, as well as favourable fiscal and legal conditions were considered to be key sustainability factors.
- Noted the need to develop multidisciplinary approaches within and through RIs, meaning also the need to develop revolutionary approaches in science activities (in particular with the adoption of the e-infrastructures), and to efficiently manage human capacities (RIs are the place where young scientists - the future European experts - meet).
- Noted the importance of intensively using and better coordinating current Research Infrastructures to widen the transnational access and to develop links between RIs and high-tech industries, RIs and competitive clusters, RIs and society (e.g. related to ageing, health issues, environment) as well as the needs for improving these links (including education of citizens, better links with industry, contact with decision makers in other fields than research).
- Highlighted the increasing importance of e-infrastructures (Grids, GEANT, HPC, scientific

data repositories). The management of data as well as the long term preservation of and access to scientific data is also a growing concern; noted that education and human networking are key success factors for the efficient use of these infrastructures.

- Reminded the need to overcome the difficulties in the implementation of the ESFRI Roadmap. In particular, a "win-win" approach between the different stakeholders needs to be developed (following the so-called "broader" approach used for ITER, and involving also smaller and New Member Countries). In this perspective, the role of the EC and ESFRI should be strengthened for assuring a common and transparent framework for discussions and a balanced approach for political decisions, as well as for the longer term financial sustainability of the open-access attracting the best researchers in the world.
- Last but not least, concluded on the need to develop a favourable environment in Europe for the implementation of pan-European Research Infrastructures e.g. through VAT exemption as proposed, within the ERIC proposal.

EC and Research Infrastructures



- There is a working group trying to address the common issues for research infrastructure
- At the level of the ESFRI projects only
 - SKA = Square Kilometer Array has similar global issues

Work Packages



Work Package No	Work package title	Type of activity	Lead beneficiary	Person months	Start month	End month	Coordinator
WP1	Management	MGT	1	48	1	48	DESY
WP2	Coordination of European GDE Activity	COORD	6	74	1	48	Oxford
WP3	Dissemination and Outreach	COORD	6	88	1	48	Oxford
WP4	Governance	SUPP	6	87	1	48	Oxford
WP5	ILC Siting in Europe	SUPP	1	42	1	48	DESY
WP6	Cavities	RTD	1	148	1	48	DESY
WP7	Couplers	RTD	4	54	1	48	LAL
WP8	Tuners	RTD	5	30	1	48	Milan
	Total			571			

Work Packages

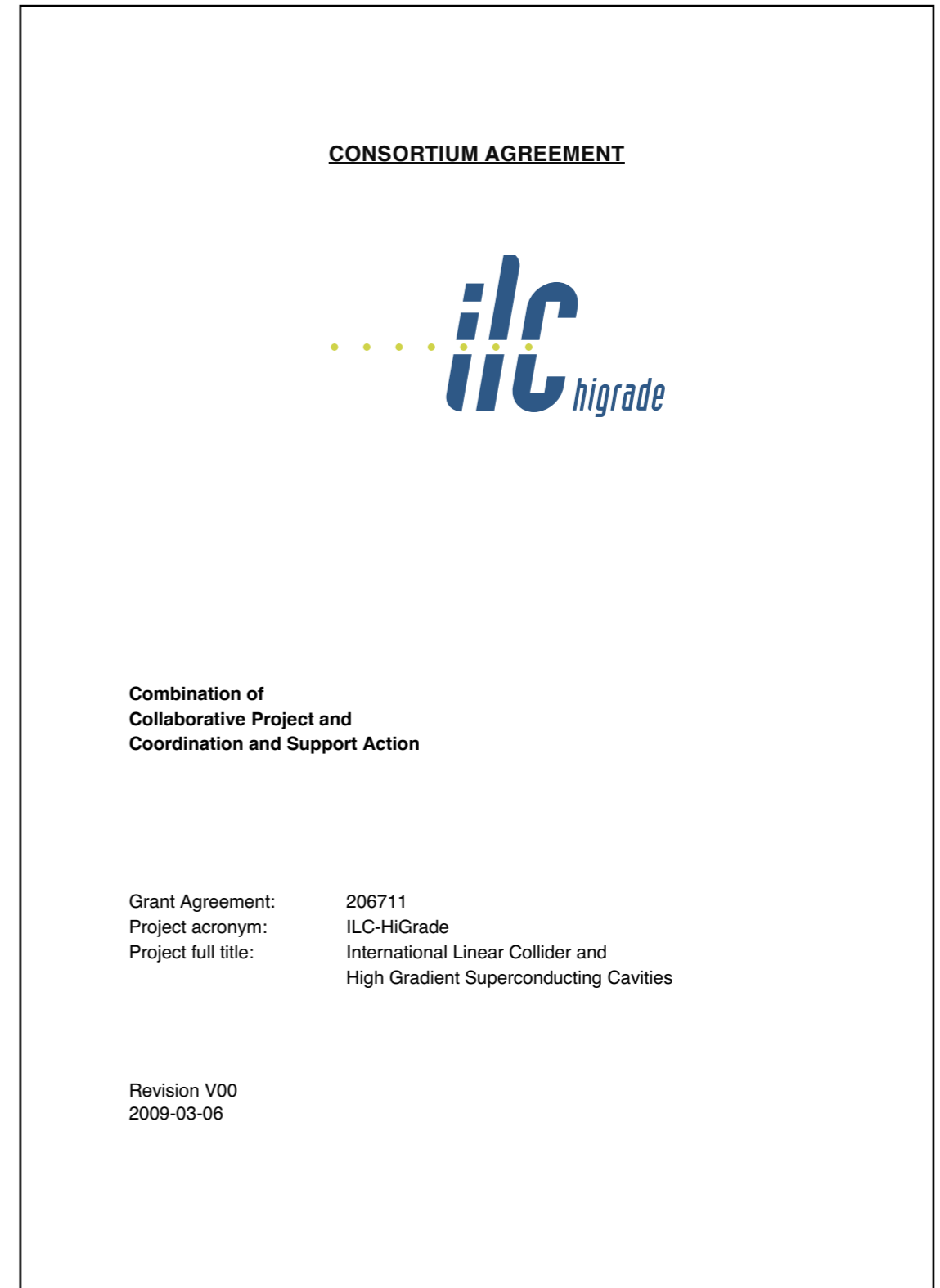


Work Package	Title	Coordinator	Lead Institute
WP1	Management	Elsen	DESY
WP2	GDE Coordination	Foster <i>N.Walker</i>	UOXF.DL
WP3	Dissemination	Foster <i>P.Royole-Dergieux. & B.Warmbein</i>	UOXF.DL
WP4	Governance	Foster	UOXF.DL
WP5	Siting	Bialowons	DESY
WP6	Cavities	Lilje	DESY
WP7	Couplers	Variola	LAL
WP8	Tuners	Pagani	INFN

Consortium Agreement



- We are contractually obliged to have one
 - even with six beneficiaries some issues need a formal settlement
- there is a draft
- based on the DESCAs model consortium agreement and that explanations to the DESCAs model are available at www.DESCA-FP7.eu.



Elements of Consortium Agreement



- Governing Board
 - member from each institute
 - names will have to be provided!
 - signatures from the institute representatives
- Work Package Coordinators
 - not part of the Consortium Agreement

ILC-HiGrade Consortium Agreement - Revision V00, 2009-03-06

Attachment 4 : Initial list of Members and other contact persons

Recipients for Notices in Accordance with Section 11 of this *Consortium Agreement*.

STIFTUNG DEUTSCHES ELEKTRONEN-SYNCHROTRON

Member of the Governing Board:
Prof. Dr. Eckhard Elsen
Representative of the Coordinator
Tel. +49 40 8998 2565
Fax +49 40 8998 3093
E-mail: Eckhard.Elsen@desy.de
Notkestr. 85, 22607 Hamburg, Germany

COMMISSARIAT A L'ENERGIE ATOMIQUE

Member of the Governing Board:
Mr X
Position
Tel. +
Fax +
E-mail:
00000 City, Country,

EUROPEAN ORGANISATION FOR NUCLEAR RESEARCH

Member of the Governing Board:
Mr X
Position
Tel. +
Fax +
E-mail:
00000 City, Country,

CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE

Member of the Governing Board:
Mr X
Position
Tel. +
Fax +
E-mail:
00000 City, Country,

5.2. Limitations of contractual liability

No Party shall be responsible to any other Party for any indirect or consequential loss or similar damage such as, but not limited to, loss of profit, loss of revenue or loss of contracts, provided such damage was not caused by a wilful act or by a breach of confidentiality.

A Party's aggregate liability towards the other Parties collectively shall be limited to once the Party's share of the total costs of the Project as identified in Annex I of the EC-GA provided such damage was not caused by a wilful act or gross negligence.

The terms of this Consortium Agreement shall not be construed to amend or limit any Party's non-contractual liability.

5.3. Damage caused to third parties

Each Party shall be solely liable for any loss, damage or injury to third parties resulting from the performance of the said Party's obligations by it or on its behalf under this Consortium Agreement or from its use of Foreground or Background.

5.4. Force Majeure

No Party shall be considered to be in breach of this Consortium Agreement if such breach is caused by Force Majeure. Each Party will notify the competent Consortium Bodies of any Force Majeure as soon as possible. If the consequences of Force Majeure for the Project are not overcome within 6 weeks after such notification, the transfer of tasks - if any - shall be decided by the competent Consortium Bodies.

Section 6 : Governance structure

6.1. General structure

The Governing Board is the decision-making body of the Consortium.

The Coordinator is the legal entity acting as the intermediary between the Parties and the European Commission. The Coordinator shall, in addition to its responsibilities as a Party, perform the tasks assigned to it as described in the EC-GA and this Consortium Agreement.

6.2. Members

The Governing Board shall consist of one representative of each Party (hereinafter referred to as "Member").

Each Member shall be deemed to be duly authorised to deliberate, negotiate and decide on all matters listed in Article 6.3.6 of this Consortium Agreement.

The Coordinator shall chair all meetings of the Governing Board, unless decided otherwise by the Governing Board.

The Parties agree to abide by all decisions of the Governing Board. This does not prevent the Parties from submitting a dispute for resolution in accordance with the provisions of settlement of disputes in Article 11.8 of this Consortium Agreement.

6.3. Operational procedures for the Governing Board

6.3.1. Representation in meetings

Any Member:

- should be present or represented at any meeting;
- may appoint a substitute or a proxy to attend and vote at any meeting;
- and shall participate in a cooperative manner in the meetings.

6.3.2. Preparation and organisation of meetings

6.3.2.1. Convening meetings:

The chairperson shall convene ordinary meetings of the Governing Board at least once every twelve months and shall also convene extraordinary meetings at any time upon written request of any Member.

6.3.2.2. Notice of a meeting:

The chairperson shall give notice of a meeting to each Member as soon as possible and no later than 14 calendar days preceding an ordinary meeting and 7 calendar days preceding an extraordinary meeting.

6.3.2.3. Sending the agenda:

The chairperson shall send each Member an agenda no later than 14 calendar days preceding the meeting, or 7 calendar days before an extraordinary meeting.

6.3.2.4. Adding agenda items:

Any agenda item requiring a decision by the Members must be identified as such on the agenda.

Any Member may add an item to the original agenda by notification to all of the other Members no later than 7 calendar days preceding the meeting.

6.3.2.5.

During a meeting of the Governing Board the Members present or represented can unanimously agree to add a new item to the original agenda.

6.3.2.6.

Any decision may also be taken without a meeting if the chairperson circulates to all Members a document which is then agreed upon by the defined majority of Members (see Article 6.3.3 of this Consortium Agreement).

6.3.2.7.

Meetings of the Governing Board may also be held by teleconference or other telecommunication means.

6.3.2.8.

Decisions will only be binding once the relevant part of the minutes has been accepted according to Article 6.3.5 of this Consortium Agreement.