

Integrated Infrastructure Initiative for Neutron Scattering and Muon Spectroscopy



Minutes of the 1st Meeting, 4-5 March 2004, Hotel Giò, Perugia, Italy.

Present (NMI3 General Assembly):

Organisation	Name
CCLRC	R L McGreevy
CCLRC	J Bellingham
FZJ	A Claver
ILL	H Schober
CEA	C Fermon
CCLRC	U Steigenberger
CCLRC	P King
GKSS	R Willumeit
UU	A Rennie
FZJ	R Zorn
PSI	P Allenspach
PSI	D Herlach
BNC-AEKI	R Baranyai
CEA	F Bourée
TUM	J Neuhaus
NPI	P Mikula
HMI	R Michaelsen
HMI	B Gebauer
ILL	B Guerard
TUM	G Borchert (replacing P Boeni)
ILL	E Lelièvre-Berna
FZJ	A Ioffe
Risø	K Lefmann
EMBL	
INFM	C Bucci
e-Verdi	C Andreani
ILL	C Vettier
INFM	F Sacchetti
	J Gomez Sal
ENSA	F Barocchi
ISMS-E	
User representative	A van Well
User representative	K Mortensen
SNS	I Anderson
EU	S Fontana

The NMI3 meeting began at 14-30 hrs on 4th March with a joint ENSA / NMI3 General Assembly session, and was preceded by an ENSA meeting. NMI3 business continued on 5th March at 09-00 hrs with a General Assembly meeting followed by a brief Board Meeting at 12-30 hrs. The meeting closed with lunch at 13-00 hrs on 5th March.

1. Joint ENSA / NMI3 General Assembly Meeting

1.1. NMI3 status report (Robert McGreevy)

- The NMI3 contract was expected within the next week, and will be sent out for signatures, along with the Consortium Agreement, once it had arrived. The contract start date will be 1st January 2004.
- Julie Bellingham was introduced and welcomed as the new NMI3 project manager. She will be starting from 15th March 2004, based at ISIS, and will be dealing with the contract implementation details together with NMI3 public understanding of science.

1.2. ENSA representatives to NMI3 (Fabrizio Barocchi)

Ad van Well (IRI, TU Delft, The Netherlands) and Kell Mortensen (Risø, Denmark) had been elected as the ENSA user representatives to the NMI3 General Assembly.

1.3. Facility Reports

- *FRM-II (Juergen Neuhaus)*. The FRM-II reactor reached criticality on 2nd March 2004. Following low-power tests over coming weeks, the facility will reach 20 MW operation by the end of May, with neutron experiments from July onwards. An on-line proposal system was being set up with the first proposal round in summer 2004 for experiments in late summer / autumn. Congratulations were expressed to the Munich team for their achievements.
- *LLB (Françoise Bourée on behalf of Pierre Monceau)*. A brief description of the LLB reactor and a report on its FP5 access contract were given. The funding situation for the reactor was described. In particular, funding cuts from the CNRS have resulted in 114 days of running in 2004 compared with over 180 days per year historically. The future of the facility was presently the subject of two reviews. However, the CAP2010 instrument upgrade and development programme was proceeding. In discussion, it was noted that the LLB reviews could be useful to promote neutron science in general; published material from the reviews will be available on the LLB website.
- *ISIS TS2 (Uschi Steigenberger)*. An introduction to the ISIS Second Target Station project was given, together with the progress that had been made in earth-moving ready for the target building. First neutrons to target are expected in late 2007, with the experimental programme beginning in late 2008. The first seven instruments have been chosen in consultation with the user community. It is hoped that combined procedures for access to neutrons, muons, lasers and X-rays on the RAL site will be established eventually, although the DIAMOND synchrotron is being run by a separate company.
- *ILL (Christian Vettier)*. The replaced hot source has been working since the end of September 2003. The latest projects in the Millennium instrument development programme were described, together with difficulties that are being experienced with premature guide ageing on some beamlines. The reactor refit programme is continuing; it is hoped to return to 4.5 operating cycles per year in 2006 from the three presently available. The ILL may host ESS-I, the new ESS organisation. There will be a ceremony to mark the renewal of 5-year contracts with ILL partners in June; new partners are always welcome.
- *NPI (Pavol Mikula)*. NPI is a new participant in FP Access. A description of available instruments at the 10 MW NRI reactor was given; in addition, other neutron-based techniques also available through the Access contract were described, such as thermal neutron depth profiling and neutron activation analysis.

1.4. ESFRI and Neutron Forums (Robert McGreevy)

High Level Neutron Forum (HLNF) meetings have been set up in the UK with the purpose of informing the UK science minister on the UK need for a future European neutron source. These meetings are not to review the ESS as a specific project, but to exchange information amongst ministerial representatives on how European countries see the need for a next generation source. The first meeting happened on 8/1/2004 and involved the UK, Germany, Spain, France and Italy; no minutes are available yet. The second meeting will take place on 26/3/2004, and the 25 countries represented at ESFRI have been

invited. It was suggested that an ENSA representative should attend this meeting; RLM said he will propose this (**Action: Robert McGreevy**).

1.5. GENNESYS (Helmut Schober)

- GENNESYS (Grand European Initiative on Nanoscience and Nanotechnology using Neutron and Synchrotron Sources) is a European project which aims to bridge the gap between the research needs and future challenges of the nanotechnology community, and the capabilities of neutron and X-ray techniques. It is led by Helmut Dosch from the Max Planck Institute in Germany. The aims of the project are ambitious, including formulation of a European research programme for 'Synchrotron Radiation and Neutrons for Nanomaterials Science and Technology'. The project aims to influence structures within Framework Programme 7. GENNESYS has attracted attention at high levels in Brussels and elsewhere, so its success is important for neutrons. Concern was expressed regarding the extent to which the project had extended more widely than just nanotechnology issues, and whether the nanotechnology community was fully represented. There were also questions regarding the organisation of the project.
- Present activity included the establishment of science task forces to contribute to a 'green book' setting out the science needs of the nanotechnology community. The green book will be produced in September 2004, when the neutron and X-ray communities will be asked to respond.
- A neutron task force has been set up, consisting of Helmut Schober/Christian Vettier (ILL), Peter Allenspach (PSI), Thomas Brückel (FZ-Jülich), Bill David (ISIS), Hans Graf (HMI), Gordon Kearley (TU-Delft), Frédéric Ott (LLB Saclay) and Andreas Schreyer (GKSS). There was a question regarding the relationship of this body, and the neutron response within GENNESYS in general, to the NMI3; the degree to which the NMI3 should be involved was discussed. Incorporation of the neutron side of this activity within NMI3 may make good sense, particularly if it encourages production of information regarding the capabilities of neutrons in Europe. Neutron involvement within GENNESYS is important to help shape the project's direction, and those on the neutron task force will be expected to commit time to the project.
- It was noted that in the United States of America, nanoscience centres were being established at national laboratories to provide a 'one-stop-shop' for access to large facilities.

1.6. European Neutron and Muon Portal (Ana Claver).

- The NMI3 information service is responsible for the neutron and muon web portal, advertisements in Neutron News and generation of information material regarding NMI3 activities.
- The European Neutron and Muon Portal can be found at www.neutron-eu.net or www.muon-eu.net. The portal contains much information on ENSA, and the question of whether it should be the official home for ENSA was raised; there is a similar question as to whether the European branch of the International Society for μ SR Spectroscopy should have its home in the portal.
- Recent developments on the portal have included updated muon information, an on-line proposal system for NMI3 networking activities, detailed lists of upcoming events and details of some JRAs. JRA co-ordinators are encouraged to develop their activity's pages in the portal – please contact Ana for instructions (**Action: JRA co-ordinators**). Similarly, Access co-ordinators are encouraged to submit information and news regarding their facilities. The list of appropriate people from the facilities to do this was presented and approved. (**Action: Access co-ordinators**). It was suggested that the portal could have links to useful databases of information relevant to neutrons and muons, teaching material, etc.
- Advertisements for Neutron News and Notiziario Neutroni e Luce di Sincrotrone are being prepared, as is a leaflet describing the NMI3. Further ideas to Ana for publicity material are welcome. The NMI3 information service should be seen as a general resource to publicise neutrons and muons in Europe.

2. NMI3 General Assembly Meeting

2.1 Neutron and Muon Round Table Summary (Kurt Clausen)

- Kurt expressed the NMI3's thanks to Francesco Sacchetti and the other meeting organisers for their hospitality in Perugia.
- The two FP5 contracts – for the Neutron and Muon Round Table, and the ESS extension to this, were described. A brief history of Round Table meetings was given. The 36 events that the Round Table had supported (Schools, Technical Exchange and Workshops) were listed, and a summary given of the Round Table contract finances. The successful completion of the ESS contract goals was described, highlights from the ESS meetings and publications presented, and a summary of the contract's finances given.

2.2 NMI3 Organisation (Robert McGreevy)

- The NMI3 contract will run from January 2004 to June 2008. The 4½ years on the contract enable a soft start and a soft finish to the 4-year Access and JRA components in order to avoid having to look for contract extensions for incomplete activities.
- Access activities form the bulk of the NMI3 contract; 10 individual laboratories are represented by 12 Access contracts. There are also 8 JRA activities (Neutron Optics and Phase Space Transforms having been merged), and 4 Networking Activities.
- The **NMI3 Management Team** consists of:

Role	Name	Email
<i>Coordinator</i>	Robert McGreevy (ISIS)	r.l.mcgreevy@rl.ac.uk
<i>Manager</i>	Julie Bellingham (ISIS)	j.bellingham@rl.ac.uk
<i>Information Services</i>	Ana Claver (Julich)	a.claver@fz-juelich.de
<i>Networking Coordinator</i>	Helmut Schober (ILL)	schober@ill.fr
<i>JRA Exploitation Coordinator</i>	Claude Fermon (LLB)	fermon@drecam.saclay.cea.fr

- Organisation representatives will receive the NMI3 contract for signing soon, and are requested to return the signed copies as soon as possible (**Action: organisation representatives**).
- The **Consortium Agreement** will also be distributed with the contract for signing. It is recognised that certain elements of the Agreement are non-standard (such as the inclusion of user organisations who have no financial involvement, and the assumption that technical JRA information will be shared unless otherwise stated), but that the Agreement represents the way in which the NMI3 wishes to function as discussed at set-up meetings. Organisation representatives are therefore requested to arrange for the Agreement to be signed as soon as possible after receipt (**Action: organisation representatives**).
- The nature of the General Assembly and Board were described. It is anticipated that decisions within the NMI3 will be made by consensus within the General Assembly and ratified by the Board. Any decisions that cannot be made by consensus will be made by a vote of the board. The Board will meet immediately after General Assembly meetings, and all those on the Board will be expected to attend the General Assembly.
- It was hoped that NMI3 meetings will focus on future issues facing neutrons and muons in Europe, rather than discussions regarding the details of the NMI3 contract.
- RLM thanked the NMI3 **Science Advisory Committee (SAC)** for their help over recent months. The ongoing role of the SAC is to provide advice to the General Assembly regarding the progress made by JRAs. Its present members will continue in their roles (assuming they are willing) until the mid point of the contract. Two new members are required to bring the total to seven, and it was suggested that one of these should be a muon scientist. RLM will canvass opinion on possible candidates for the two posts (**Action: Robert McGreevy**). The SAC membership at present consists of: R. McGreevy (ISIS), D. Richter (FRZ, FRJ-2), A. Furrer (PSI, SINQ), L.-P. Regnault (CEA-Grenoble), F. Mezei (HMI-BENSC), F. Barocchi (Firenze).

- In case of any Intellectual Property Rights related disputes, an **IPR Council** will be set up consisting of three General Assembly members. Their role will be to give advice to the General Assembly.
- **Templates** will be provided for reporting on activities. **Audit certificates** are required for financial reports, and the advice given by Brussels is that, for public bodies (all NMI3 members), these should be signed by a competent public officer – the senior person who signs the annual accounts of the organisation. Robert McGreevy should be informed if there are any problems with this.
- **Further Meetings:** it is proposed to have a large meeting of the General Assembly and Board once per year, focusing on non-business items. In 2005, this meeting could include meetings of all JRA and their participants. In addition, a smaller, business meeting will be necessary around the time when reports to Brussels are due near the start of each year. The larger meeting could be coupled with an ENSA meeting. User meetings for Access contracts could be combined with science meetings already scheduled, such as the International Muon Conference to be held in the UK in 2005.
- **Collaboration with non-EU participants** is encouraged under FP6. There are strong links between the US and various NMI3 JRAs; more formal links with the NSF and DoE are being sought but are unlikely before FP7. There are also some JRA links with Russia and Australia; the Japanese are also keen to form links as their structures allow.

2.3 JRA Presentations

Summary presentations on the status of the following FP6 JRA / FP5 RTD projects were made:

DETNI	B Gebauer (HMI)
MILAND	B Guerard (ILL)
NO-PST	G Borchert (TUM, replacing P Boeni)
PNT	A Ioffe (FZJ)
NSF	E Lelièvre-Berna (ILL)
MCNSI	K Lefmann (Riso)
MUON-S	C Bucci (Parma)
e-VERDI	C Andreani (Rome)

There is a need to monitor uptake of JRA post-doctoral positions, as some networks have found difficulty in recruiting in the past. It was suggested that all post-doctoral positions be advertised centrally on a page on the web portal (**Action: JRA Co-ordinators, Ana Claver**).

2.4 US Update

Ian Anderson (SNS) gave an update on neutron developments in the US. The major US labs and associated neutron sources were shown, and a brief description of the funding mechanisms for the support technologies given. The main source of funding for the major user facilities and the support technologies is the DOE Basic Energy Sciences. US involvement in various FP6 JRAs was listed. Development projects relevant to neutrons and their participants within the US were then listed, for scintillator detector materials and systems, gas detector systems, semiconductor detectors, electronics, polarised neutrons and instrumentation.

2.5 Access Activity Presentations

Summaries of FP5 Access contracts, and the status of the new FP6 contracts, were given for the following facilities:

ISIS Muons	P. King (CCLRC)
PSI Muon	D. Herlach (PSI)
GKSS	R. Willumeit (GKSS)
NFL	A. Rennie (UU)
FRJ-2	R. Zorn (FZJ)
SINQ	P. Allenspach (PSI)
HMI-BENSC	R. Michaelsen (HMI)
BRR	R Baranyai (BNC-AEKI)

Standard forms for reporting on Access will be generated soon, and will include satisfaction forms for users. Users are required to acknowledge FP6 support in publications resulting from their experiments.

2.6 Networking Activities (Helmut Schober)

- Networking activities within NMI3 include provision for education and training relevant to neutrons and muons, for example through schools, workshops and human mobility.
- There will be calls for proposals in June and December each year. Proposals will be reviewed by a small group of experts, who will make a recommendation on funding to the General Assembly for approval.
- The total networking activity budget is €480k. This is equivalent to €60k per round, although the distribution of funds will follow the quality of the proposals and so may be uneven from round to round.
- The evaluation process will consider whether a proposal adds value to the NMI3 and to European neutron/muon science. The committee of experts presently consists of Peter Allenspach (PSI), Thomas Brückel (FZJ), Claude Fermon (LLB), Rainer Michaelsen (HMI), Francesco Sacchetti (INFM) and Uschi Steigenberger (ISIS). It is proposed that two members of the committee will be replaced at each NMI3 spring meeting.
- The first proposal deadline was 15th December 2003 and 25 proposals were received requesting a total of €222k.

<i>Activity</i>	<i>Number of proposals received and total request</i>	<i>Number of proposals funded and total given</i>
<i>Schools</i>	7 (€58k)	6 (€30k)
<i>Workshops</i>	11 (€92k)	4 (€18k)
<i>Foresight</i>	2 (€33k)	2 (€18k)
<i>Technology Transfer</i>	4 (€37.5)	0 (€0k)

It is still necessary to check that supported proposals are eligible under EC rules.

- For supported schools, students funded will have to be known by name and will have to complete a feedback form on the school after attending. Travel costs and a per diem will be provided. Training must be relevant to facility access or facility usage, and not, for example, to attend a science meeting which just has some relevance to neutrons/muons.
- For foresight studies, a report on future implications for neutron scattering / muon spectroscopy will be required, and these will be collated at the end of the NMI3 contract. There is a question over whether lots of smaller foresight projects, or a few larger, co-ordinated ones, will be more beneficial.
- In discussion after the presentation, it was noted that, with regard to GENNESYS, whilst no funding from NMI3 networking activities had been given yet, neutron task force members could be funded in the future if required.
- Concern was raised regarding the decision not to support the Spanish User Meeting. It was noted that the aims of the Spanish meeting included encouragement of Spanish scientists to use European facilities through access agreements. Funding for facility representatives to attend in Spain could come from facility Access contracts, and RLM and JG-S will pursue this (**Action: Robert McGreevy, Jose Gomez Sal**).
- Links between the NMI3 and the ESF were discussed, and the possibility of the NMI3 applying to the ESF for funds noted.
- Proposals from JRAs to provide for networking activity funds will be dealt with on a case-by-case basis, but should be discussed before submission with Helmut Schober.
- It was proposed that the conditions for grants be given on the proposal application web page, together with instructions on how successful proposals could claim money (**Action: Helmut Schober / Ana Claver**). Feedback to unsuccessful proposers will be given. Muons should be included in the general descriptions of this activity.

- In cases where no other funding sources are available, ENSA representatives can still be funded to attend joint NMI3/ENSA meetings. Attendees with Access or JRA contracts will be expected to fund their participation in NMI3 meetings through their contracts.

2.7 The Future and FP7 (Robert McGreevy)

- National organisations have already started discussion regarding FP7, and the EC will be likely to put forward proposals for FP7 in 2005. The neutron and muon community can try to influence FP7 structures through both the NMI3 and through national funding agencies. The Commission will expect the NMI3 to be involved in this process, and FP7 should be a discussion topic at future NMI3 meetings.
- The NMI3 is encouraged to think more widely about how its members can work together for the benefit of the user community. Example issues include whether it is possible to know who neutron and muon users are through, for instance, issuing unique identification numbers; whether it is possible to formulate a common policy on data ownership and access; and how facilities and organisations can work together within NMI3 rather than competitively to engage in outreach and attract new users into the community.
- The next NMI3 meeting will focus on these larger issues rather than JRA/Access details. It will be held in the Autumn – dates will be decided before then end of March, and NMI3 participants are asked to inform Robert McGreevy or Julie Bellingham before then of undesirable dates; offers to host meetings are also welcome (**Action: NMI3 participants**).

3. NMI3 Board Meeting

Role	Organisation	Name
NMI3 Co-ordinator		R McGreevy
Party coordinating Access and Joint Research Activities	TUM	J Neuhaus
Party coordinating Access and Joint Research Activities	FZJ	R Zorn
Party coordinating Access and Joint Research Activities	CEA	L Laurent
Party coordinating Access and Joint Research Activities	HMI	F Mezei
Party coordinating Joint Research Activities	ILL	C Vettier
Party coordinating Joint Research Activity	Riso	K Lefmann
Party coordinating Joint Research Activity	EMBL	
Party coordinating Joint Research Activity (also Italian user representative)	INFN	F Sacchetti
Party coordinating Access Activities	CCLRC	U Steigenberger
Party coordinating Access Activities	PSI	K Clausen
Party coordinating Access Activity	GKSS	A Schreyer
Party coordinating Access Activity	UU	A Rennie
Party coordinating Access Activity	BNC	R Baranyai
Party coordinating Access Activity	NPI	P Mikula
(Neutron Source Project) (subject to existence of a formal organisation)	(ESS)	
Organisation representing European neutron scatterers	ENSA	F Barocchi
Organisation representing European muon spectroscopists	ISMS-E	
Spanish user representative		J Gomez Sal

3.1. Role of the Board (Robert McGreevy)

It is intended that discussion of NMI3 matters should take place openly within General Assembly meetings, and that the main function of the Board will be to make decisions in areas of dispute or if particular problems arise. Light-touch monitoring of JRAs and Access contracts is foreseen until the mid-term review when a more rigorous look will be needed; the possible exception to this may be if a JRA has difficulty in recruiting a post-doc, when re-allocation of funds may be required. With regard to Access contracts, there is a need to ensure that the overall Access programme being delivered by the NMI3 is satisfactory, and a monitoring scheme for Access contracts will be devised to ensure time is being delivered successfully.

3.2. Approval of Implementation Plan

The Board approved the Implementation Plan for the first year of the NMI3 contract together with the budget.

There was further discussion of GENNESYS, and the possible need for the NMI3 to contribute to the structure of the project was recognised.